

Women in Construction

Providing safety and health protection
for a diverse workplace

w w w . L H S F N A . o r g



Laborers' Health and Safety Fund of North America
and Laborers-AGC Education and Training Fund

Women in Construction

A Guidebook to Help Provide Equitable Safety and Health Protection and Opportunities for Success

Introduction

Since the 1960's, women have been the fastest growing demographic group entering the workforce. Projections are that they will comprise 56% of the labor force by the year 2006. Women are also the fastest growing component of the labor movement, now comprising 40% of all union membership. Studies conducted by the AFL-CIO show that women (and minorities) are more likely to vote in favor of unions than men.



In keeping with this trend, more and more women are entering the field of unionized construction. In particular, women are joining the ranks of LIUNA more so than any other trade. More women are becoming Laborers for a number of reasons, some of which are:

- The LIUNA apprenticeship programs are an inviting recruitment tool for women testing the waters in the field.
- Employers and unions are recognizing women as an untapped labor pool available to fill the void left by young men who are opting for other career opportunities. This is particularly crucial during times of low employment and economic expansion.
- The field of construction offers benefits to working women, many of whom are single mothers, that aren't available through their next best alternative employment options.

Guidebook Purpose

As LIUNA strives to increase market share, service their signatory employers and expand their membership, Laborers-AGC training centers will increasingly find themselves teaching classes of mixed gender. While delivering core training skills will always be a priority for training centers, and is, for the most part, gender neutral, this guidebook is intended to

provide Instructors with information that they might find useful in their approach to addressing diversity and including health and safety-related topics in their curriculum.

These materials are not intended to serve as a stand-alone curriculum. They are intended to serve as a resource on health and safety issues specific to women trainees. In addition to providing background information that can be included within lectures, this document includes sample workshop exercises to help guide the discussion of these issues.

For some topics, such as sexual harassment, conditioning, and health issues, the guidebook makes reference to stand alone programs that cover those topics more comprehensively.

Funding Source

These materials were developed with funding from the NIEHS as one of a series of training documents for the Laborers-AGC Minority Worker Training Program.

Feedback



This guidebook should be considered a “work in progress.” It will be periodically updated as new materials are obtained and new topics brought to attention. Consequently, the LHSFNA encourages users of this information to offer feedback. In particular, please feel free to suggest topics and contribute materials that can be used as additional exercises.

Contact:

Laborers’ Health and Safety Fund of North America
Division of Health Promotion
905 16th Street, NW, Third Floor
Washington, DC 20006
Ph: (202) 628-5465 Fax: (202) 628-2613

Women in Construction

10/1

Table of Contents

Section 1: New Member Orientation

- A. Member Perceptions of the Construction Industry
- B. Orientation to the Construction Industry
- C. Orientation to the Union
- D. Succeeding in Construction

Section 2: Health and Safety Concerns in Construction

- A. Access to Sanitary Facilities
- B. Personal Protective Equipment
- C. Reproductive Hazards

Section 3: Workplace Culture

- A. General Stereotyping and Workplace Dynamics
- B. Sexual Harassment

Section 4: Health and Conditioning

- A. Building Better Bodies
- B. Breast Cancer Awareness
- C. Fitness for Duty

Section 5: Appendix: Resource Documents

- LIUNA 22nd Convention Resolution on Membership Diversity
- Slides on female union membership and work issues.
- Slides on Health and Safety of Women in Construction (HASWIC) Workshop findings
- Slides on NIOSH Study: Northwest Laborers and Workplace Stressors
- ACCSH Recommendations for Construction Sanitation Standard
- Personal Protective Equipment: Women's Work web page, wolverine shoes for women (ad)
- Reproductive Hazards: Sensitive Periods for Effects on Fetus
- Reproductive Hazards: Known, Probable, Possible and Unlikely Reproductive Toxins
- Facts About Pregnancy Discrimination (EEOC)
- Elements of an Anti-Harassment Policy and Complaint Procedure

Section 1: New Member Orientation

Women increasingly make up a substantial portion of new membership. All members should be sufficiently oriented to the labor movement, the Laborers' International Union and the construction industry. New female members in particular may benefit from such orientation as they may be less familiar with the industry structure and work environment than their male counterparts. As important, some benefits of union membership (and the industry) may have particular appeal to women and should be emphasized in the course of orientation.

Following is an outline that Instructors can follow for new member orientation that could be particularly helpful for women.



A. Member Perceptions of the Construction Industry

- 1. Review the extent to which trainees are already familiar with the Construction Industry. Ask who has worked in the field before. Who has close family members in construction? What type of work was it? What was it like?*
- 2. What are some of the positive aspects of working construction? What are some of the negatives?*

The following are samples of what trainees may say in response. Make sure that the major areas from both columns are covered. Come back to the list later when addressing union benefits. The point is to make new members be realistic about what the work entails without losing sight that the pros outweigh the cons.

Pros

- * Wages
- * Benefits
 - Pension
 - Health and Welfare
 - Training
- Physical Exertion
- Seeing what you accomplish
- Sense of working “hard”
- Learn to do new things
- Variety of work
- * Transportable throughout the country
- Working outdoors
- For women in particular*
 - Doing something different
 - Don't have to dress up

Cons

- Cyclical work means down time
- Temperature extremes
- Injuries
- Noisy/dirty/conditions in general
- Hard/exhausting
- For women in particular*
 - Child care difficulties
 - Jealous boyfriends/husbands
 - Question femininity
 - Getting hassled/harassed



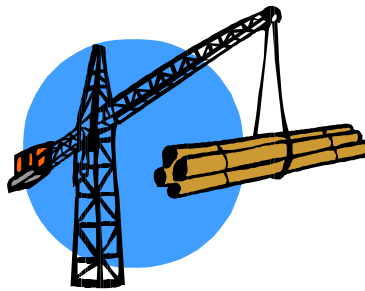
- * These are advantages common to working in *unionized* construction and are less likely to be realized in non-union settings.

B. Orientation to the Construction Industry

Review/explain the different types of construction that the trainees may eventually work in. While the local or training fund doing the recruiting may be only involved in one sector of construction work the trainees should be familiar with other types of specialized work they may have an opportunity to work in as a Laborer.

Different sectors of the construction industry
(cover the major segments in your area):

- Heavy and highway
- Building/commercial
- Pipeline
- Public works
- Utilities
- Pipeline
- Environmental
- Decommissioning
- Tunneling



Hierarchy (explain the role of each):

- Owner
- Contractor
- Project Manager
- Superintendent
- Foreman/Safety Officer

Note: Normally there is no “Personnel Office” or “Human Resource Department” that some trainees unfamiliar with construction may be more familiar with.



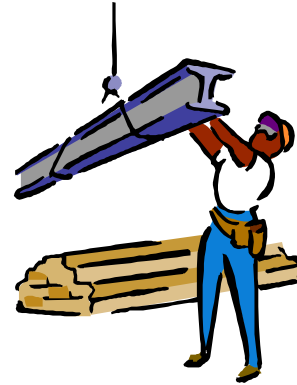
Explain other aspects of working in the unionized construction industry that distinguishes it from other employers:

- Contractor gets its workers through the union hall (or off the street)
- Sends workers back when no longer needs them, or no longer wants them. Don't necessarily need to give a reason.
- Workers often work for several different employers in the course of a year, unless working for a very large employer or working on a very large project
- Laborers tend other trades. Provides opportunity to test different tasks and specialties
- Minimum wage rates are set by the collective bargaining agreement. Wage rates on federal jobs and some state and local jobs are set at a minimum (*Davis Bacon*).



C. Orientation to the Union

Review the extent to which the trainees are familiar with labor unions. Who has belonged to a union before? Who has family members or close friends in a union? What do they know about unions from television or the press?



The following portion should be customized as much as possible to include specific information about the local or district council that the trainees are recruited for.

Union Hierarchy. *Briefly explain the role of each. Depending on time constraints, this can be done in conjunction with listing and explaining the different union bodies. Note those sections in bold would be of most immediate relevance to a trainee.*

Union Leader

- President
- General President and Secretary Treasurer
- Regional Manager
- District Council Business Manager
- **Local Union Business Manager**
- **Field Agents**
- **Shop Steward**

Union Body

- AFL-CIO
- International Union
- Regional Office
- District Council (area)
- Local Union**
- Local Union**
- Job Site**

What Does a Union Do? *(If time allows, pose this question to the class to see what they already know.)*

- Job referral
- Representation when things go wrong
- Negotiates wages, hours and working conditions
 - *Review terms of a CBA; pass one around*
 - *Review content/major summary of health plan (of particular interest to women trainees, especially those with children)*
 - *Review terms of pension plan*
 - *Discuss training schedule*

- Polices jurisdiction (*explain what that means for their benefit*)
- Active in local politics and legislation (*give examples, explain value of*)

What Does a Union NOT Do?

- Doesn't guarantee you work (provides opportunity)
- Doesn't protect you from incompetence (ensures due process)
- Doesn't dictate to the members (democratic processes)

Instructor should go back to the list of pros and cons of doing construction work and highlight the things on the “pros” list that the union can be thanked for: Better wages, training, health insurance, etc. that are unique to UNION construction. Similarly, go to the “con” list and identify those things that the union helps to mitigate: e.g., safer working conditions.

D. Succeeding in Construction



This portion can be used to address some work skills issues with trainees. Even if work skills are addressed in other portions of the program, it is important that these worker attributes be emphasized at every opportunity.

*Discuss with the trainees what they think defines a “good worker.” While these can be applicable to any employer, the Instructor should show how these are particularly important to **construction** employers. If time, ask them to rank in order of importance if **THEY** were a construction employer. Use “Recruitment Exercise.”*

Attributes of a good worker:

- Being to work on time (construction jobs start ON TIME)
- Being productive (may or may not mean being “strong”; work
- Having a good attitude
- Dependability
- Team player (no single players in construction)
- Able to follow instructions (mistakes can cost a fortune)
- Following safety rules (dangerous industry)
- Passing a drug test (highly “drug-tested” industry)

Note: the Instructor can relay personal information that he/she knows of regarding what contractors look for in a worker. In a series of informal surveys of business agents, the LHSFNA came up with the following things employers care about most: Following Instructions; Passing a Drug Test; and Showing Up.

*Review with the Trainees things that can impact these characteristics. Ask them to group obstacles into things that are **controllable** and **not controllable**. Most things are eventually controllable or can be counter-balanced to some degree:*

Example: Being to Work on Time, and Dependability

Potential obstacles and solutions:

- Vehicle problems: Get reliable transportation; alternative/back up transportation; explore other options ahead of time; keep car maintained.
- Oversleeping: Set alarm clock; ask someone to wake you as back up; go to bed earlier; don't over-do it the night before.
- Traffic: Leave earlier, have "stuff" laid out ahead of time.
- Phone problems: Have a working phone; get a pager; return phone calls.



Section 2: Health and Safety Concerns in Construction

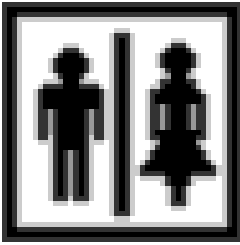
Laborers-AGC affiliated training centers already cover traditional health and safety topics in great detail in their training programs. While such topics should be gender neutral there are certain health and safety concerns that are disproportionately problematic for female construction workers. This section addresses these topics as an overview. More information is available in greater detail from the LHSFNA.

How to Use in Training

The information included in this section should be incorporated where appropriate within the health and safety portions of other classes, such as:

- OSHA-10
- Construction Safety and Health
- Disease Prevention or Hygiene classes
- New Member/Industry Orientation
- Hazard Communication
- Personal Protective Equipment

A. Access to Sanitary Facilities



Unclean or non-existent sanitary facilities is a problem for many construction worksites and is clearly a problem for both men and women. In some workplaces, such conditions are deemed normal and workers are expected to tolerate them or seek other less acceptable methods to “relieve” themselves.

This becomes a health and safety matter for the following reasons:

- Coming in contact with dirty seats can result in the spread of disease.
- “Holding it in” rather than using a dirty facility, awaiting access to better conditions at lunch or at the end of the day, can and does result in urinary tract infections and kidney disorders.
- Unsanitary conditions, particularly the lack of soap and water, contribute to the spread of Hepatitis A.
- Those who want to avoid using an unsanitary facility may avoid consumption of sufficient fluids, increasing the risk of dehydration and related heat/cold disorders.
- Sanitary facilities and access to water is included in the OSHA construction standard 29 CFR 1926.51. However, the standard is minimal and does not apply to mobile work areas. Efforts are underway to improve the standard.

While an equal opportunity problem, the lack of sanitary facilities has a disproportionate impact on women for the following reasons:

- Women have to sit more often than men and are more likely to come in contact with germs. They are, therefore, more likely to suffer the consequences of lavatory avoidance described above.
- Women have monthly needs that require increased access to privacy and access to additional supplies.
- Women who may already feel conspicuous on a construction site may be less likely to complain about conditions or ask for access to other facilities, such as a ride to a gas station or restaurant, in fear of ridicule from bosses and co-workers.
- Failure to provide sufficient sanitary facilities for women can result in charges of discrimination, as was the case for at least one contractor.

The EEOC was prepared to take the contractor to court when an apprentice was fired when she refused to use filthy facilities on site.

How to Use in Class

Some suggestions for how this problem can be addressed.

- Both men and women need to complain to employers and their union representatives if there are not sufficient facilities, including potable water, on site.
- Women in particular should be encouraged to exercise their rights to get access to public facilities if insufficient provisions are on the job site.
- Men should be reminded to not allow their employers to treat them like animals. Few other industries find it “acceptable” to have filthy toilets for their workers. Why should construction be the exception?
- To ensure their own sanitary protection, workers should be encouraged to keep hand-wipes or dry anti-bacterial cleansers with them.
- In some workplaces, employers have established separate sanitary facilities in order to accommodate more female construction workers, a position recommended to OSHA by the Advisory Committee on Construction Safety and Health (ACCSH).

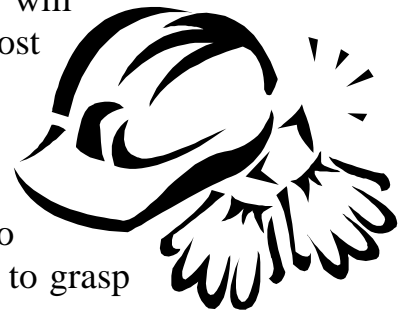


B. Personal Protective Equipment

Personal Protective Equipment (PPE) is an essential component of health and safety training. Some LHSFNA and Laborers-AGC affiliated training programs devote entire modules to the appropriate selection of PPE. When discussing the importance of PPE, emphasis rests on the notion that PPE protects the worker from workplace exposures and injury. However, in order for the equipment to “protect,” it must fit properly. This is as true for work gloves and boots as it is for respirators.

Most protective equipment and clothing is designed to fit average to large-sized men. When clothing and equipment don't fit, the risk to the worker is as follows:

- Hard hats (if there is no adjusting mechanism) will slip forward or fall off, often at times when most needed.
- Gloves that are too big prevent dexterity and can get caught in equipment, as well as allow entry of chemicals or harmful agents. They also pose ergonomic problems as it is more difficult to grasp tools.
- Boots that are too big result in increased risk of tripping in a work area already prone to slips, trips and falls. Women who attempt to compensate by putting on extra socks will minimally mitigate this problem.
- Steel-toed shoes that are too big don't cover the toe; the steel will be protecting air or socks. (See above.)
- Pant legs and sleeves that are too long compromise coordination and can get caught in equipment or other construction supplies.

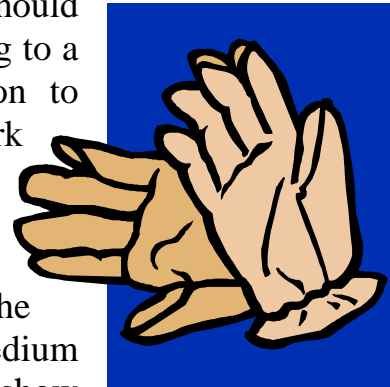


Even clothing that may be designed for a small man will not likely fit the shape of a similar sized female and be too snug in the hips and breast area, again, compromising worker mobility.

How to Use in Class

The importance of personal protective equipment and clothing is universally applied to both men and women. While emphasizing the importance of having clothing and equipment that fits, instructors should be particularly alert to women (and large-sized men) in their classes, reminding them that they may have a harder time finding such gear than their male counterparts and are at increased risk if they don't.

Suggested demonstration: The Instructor should provide over-sized gloves, boots and other clothing to a female or smaller male in the class to put on to demonstrate how difficult it would be to work under such conditions. Be careful to select someone who will be good-natured about this so as not to make that person feel they are being subject to ridicule. Alternatively, use yourself as the model. Similarly, you can do the same with medium sized clothing with very large men and women to show the reverse problem.



If their employers provide such equipment, members should be reminded to alert their union representative or supervisor to the fact that what is provided doesn't fit. If they are expected to purchase such supplies on their own, they need to be diligent in seeking out clothing and supplies that fit. The LHSFNA will be developing a list of suppliers of women's work clothes to be included in the reference section of this guide.

If there are women new to the workforce in general, let alone construction, the Instructor might want to cover what may or may not be appropriate dress on the job. Such information is of use to both genders, especially if the Instructor suspects that the trainees may come to work in clothing not suitable for the job. While this could be a sensitive topic, the Instructor can cover this topic in the following ways:

Alternative Exercises

- Ask the trainees to list what they think appropriate dress on a construction site is (male and female alike). This will eventually focus on the importance of wearing durable clothing that is loose enough to be comfortable but not so loose as to be dangerous. Conversely it also allows the trainees to discuss the issue of tight fitting clothes in general, the dangers of jewelry, problems of wearing revealing clothes, or men who may be inclined to work shirtless. Care should be made to ensure that the appropriateness of dress, including use of jewelry, is applicable to both genders.
- If possible, find pictures of workers on construction sites from magazines or other sources. Ask trainees to identify where workers are well dressed vs. poorly dressed for the job they are doing.

C. Reproductive Hazards



Workplace conditions and exposures in construction are ripe with potential for contributing to reproductive disorders. Most female laborers are of childbearing age. Virtually all male laborers are of reproductive age. Chemical agents, radiation and the elements (heat exposure) are just few of the situations that LIUNA members may find in this field that are applicable to men and women in different ways. However, many formal and informal reproductive policies are disproportionately applied to female workers. Such policies, when applied based on emotion rather than medical or legal knowledge, have the effect of unfairly keeping women out of jobs they could do and potentially exposing men to hazards they should know about.

Construction work often carries with it special demands that may make it more difficult for pregnant women to continue working. The American College of Obstetricians and Gynecologists notes the following as being particularly hard or risky for pregnant women at different stages of their pregnancy:

- heavy lifting
- climbing
- carrying heavy items
- standing for long periods of time
- tasks that involve balance

Reproductive hazards are chemical, physical or biological agents that can cause either reproductive impairment or adverse developmental effects on the child. Those agents that cause reproductive impairment affect a woman's ability to successfully conceive or a male's ability to produce sperm. Some reproductive hazards are particular to men, others to women. Unfortunately, the focus in the workplace tends to be on women's reproductive health almost exclusively, ignoring the effects on men.

In particular, some employers and even local unions and training centers, initiate policies that preclude pregnant women from working (or training)

with the good intentions of wanting to prevent an injury to the woman or her unborn child. As well intended as these may be, the Pregnancy Discrimination Act prevents employers from discharging or refusing to hire workers based on pregnancy status.

Applying policies in this fashion runs the following risks to workers:

- Only focusing on pregnancy problems results in overlooking attention to other reproductive problems for male and female workers.
- Policies that bar pregnant women from working can run afoul of the Pregnancy Discrimination Act. This Act prohibits employers (and unions) from treating pregnancy different from other medical conditions. (A summary of this Act is appended to this guide.)
- Unilaterally barring pregnant women from working in all cases will result in keeping members who are capable of working from employment during times when they may need it the most.
- Overly restrictive policies may result in women concealing their pregnancy, for fear of losing their jobs. This can result in women exposing themselves to situations that can cause harm, rather than getting appropriate direction and medical advice, particularly at the most vulnerable stages of their pregnancy.

Training centers, employers and union officials should avoid making judgments as to the suitability of a pregnant woman training or working. The extent to which someone can or can't work depends on factors that only the worker and her doctor can determine. The extent to which pregnancy "disables" a worker generally depends on three factors:

- the health of the woman
- the health of the fetus
- the type of work in question (workload and exposures)

What to Do in Class:

- Laborers-AGC affiliated training centers that teach classes on workplace exposures should include information on what chemicals or conditions can compromise the reproductive health of men and

women. Information specific to repro hazards for men and women are included in the reference section of this guide.

- Trainees (male and female) should be informed of the potential workplace hazards related to that program that can impact their reproductive health.
- Trainees should be advised that if they are, may be or plan to become pregnant, they are *strongly* encouraged to discuss their working conditions and potential exposures with their physicians to seek guidance about the circumstances under which they can continue to work. This is a situation that only the worker and the physician can regulate.



In general, employers, union representatives and training directors are not doctors and should not attempt to make employment and training decisions based on medical information that should be between a patient and doctor.

Note that the LHSFNA has a more detailed 1-2 hour program related to reproductive hazards for male and female Laborers that is available to training centers.

Section 3. Workplace Culture

A. General Stereotyping and Workplace Dynamics



Working in a new environment, when you are different from other workers, can be distracting and stressful. Women new to the field and not used to working in a predominantly male environment face difficulties not faced by other workers. Similarly, some men who are used to doing things a certain way may feel awkward working around women, maybe for the first time in their lives.

Following are some of the attitudes that women may face from their male colleagues who feel:

- Women don't belong in construction and shouldn't be there.
- Women are employed at the site only because they are female and therefore, have special privileges, or are not expected to work as hard.
- Women, by virtue of their strength (or lack thereof), will never be able to be as productive as men on a construction site and can't carry their load.
- Women are unreliable because they have childcare issues and need time off to tend to family matters.
- The bad experience of a specific female laborer will be the norm by which all others are similarly judged. In contrast, the better female laborers are the exception and not likely to be experienced again.
- Once a woman is hired, you can't get rid of her or you will be sued.
- When women start working in construction, it ruins the fun atmosphere that guys have at work; you can't make jokes or use language you normally would if they weren't there.
- If a woman comes into male territory, she should be expected to confront a different, often rough, culture and should just "deal with it."
- There must be something "wrong" with any woman who wants to work in construction.

While at any given work site, there may be someone that fits any of these characteristics, it is unfair to the thousands of women working in construction to paint them with such a broad and negative brush. Women who come to work every day to earn a living and do their best face a difficult battle when they have to work in the midst of such stereotyping. Consequently, many working women suffer from the following problems:

- Increased episodes of headaches, depression and anxiety related medical disorders.
- Increased accidents and mistakes due to distraction and mental anxiety.
- Feeling the need to overcompensate; being the “Super Laborer” just to be accepted as an equal.
- Becoming deskilled because of never being given the opportunity to try more challenging tasks of her co-workers, even when trained to do so.
- Guilt. Being made to feel that she must chose between caring for family needs and work needs; that she can only truly be dedicated to one or the other.
- Isolation from and distrust of co-workers.
- Reluctance to ask for assistance, even when undertaking tasks no male worker would be expected to do without help.
- Quitting. To some, it’s just not worth it.



What an Instructor Can Do

Instructors cannot be expected to single-handedly overturn long-time ingrained stereotypes and prejudices. However, Instructors can do a lot toward reaching this goal through the following methods.

Working within curriculum

Workplace culture issues are not normally covered in program curriculum (although some exercises that can be used as such are included in this guidebook). There are a number of situations where an instructor may be able to address some of these issues in the course of training. Note that this is especially important in apprenticeship classes where there are more likely to be female trainees and where the cultural norms are not yet so firmly entrenched.

- All trainees need to be encouraged to ask for assistance (verbal or physical) when needed. In fact, trainees should be reminded that workers who don't seek help run the risk of doing something wrong or hurting themselves or others. This provides an opportunity to emphasize the importance of teamwork in a construction setting.
- Acknowledge when trainees (male or female) demonstrate alternative methods to successfully accomplishing a task, particularly where they are working smarter rather than harder.
- Look for opportunities to showcase where a smaller sized or more flexible person (male or female) might be better equipped to accomplish certain work tasks, such as maneuvering in enclosed spaces, handling tools or picking up things in hard to reach areas, climbing scaffolding, etc. Some construction tasks aren't suitable for the muscle-bound.
- Where appropriate, the importance of "non"-strength related skills should be emphasized to all trainees during instruction. This includes the ability to follow directions, show up for work on time, work well as a team player, maintain good health and conditioning (endurance), exercise logic, pass a drug and alcohol test, display a good work ethic, show attention to detail and follow-through. Putting these skills on equal footing with sheer strength will give some women trainees (those who have these characteristics) an opportunity to attain a level playing field with their male counterparts. (See Module 1 Section D: Succeeding in Construction.)

Exercises

Instructors who would like to take on the challenge of addressing workplace culture issues and



perceptions can do some of the exercises in this manual. These exercises were designed to get Laborers to openly, yet respectfully, discuss different situations and see where each other is coming from.

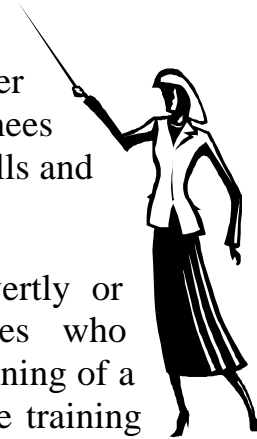


These include the following:

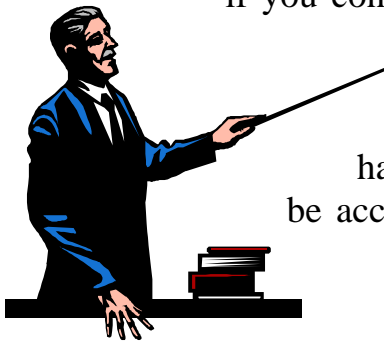
- **The Gender Gap:** This exercise is intended to get mixed classes to see how men and women may have different perceptions of themselves as well as the opposite sex. The Instructor must be comfortable facilitating a discussion of this sort to ensure that it isn't used to see one group as right or wrong. Rather, use differences to educate one another to see how we may view things differently.
- **Workplace Scenarios: What Would You Do?:** This exercise can also be used in classes on construction orientation (See Module 1). It is intended to get trainees thinking about how they might address situations that occur on the job, either as the person with a problem or a co-worker.
- **X's and O's.** These handouts can be accompanied by a video, *A Tale of "O"*, that demonstrates how people who are different from the majority in a workplace are viewed by others and themselves. This is an excellent exercise for diversity classes of any type. A more complete program on this issue is available through the Laborers-AGC.

Instructor Behavior

- Avoid exhibiting the same types of attitudes, either overtly or subconsciously. Assume that all trainees are in class for the same purpose, to learn new skills and make a living.
- Avoid the appearance of condoning, either overtly or passively, comments or behavior by trainees who propagate these attitudes and beliefs. At the beginning of a class is a good time to remind the trainees of the training center's policies, including respect for others. Hold female and male trainees to the same standards of work and conduct.
- Attempt to use gender-neutral language in class, when possible. Not all Laborers, foremen, union reps and contractors are "he."



- If you swear or use other inappropriate language in class, don't direct requests for "pardoning" of yourself toward the female trainees. Even if you consider that to be good manners, doing so will only make the women more self conscious about being different and disruptive to the male environment. Not all women are offended by harsh language; not all men find harsh language to be acceptable. Either excuse yourself to the whole class or make no excuses. Better yet, follow the premise that if you think you are going to offend anyone in the class, just don't say it to begin with.



B. Sexual Harassment

Background



The construction industry ranks second to the mining industry for the highest rate of sexual harassment complaints. Whether intended or not, a work environment where this occurs creates barriers to women entering the field. It also contributes to high turnover (among male and female workers) in an industry that cannot afford to lose workers. Furthermore it causes potential legal problems for union representatives, including training center personnel.

Addressing sexual harassment in training provides an opportunity to prevent problems in the workplace and within the union. At one time or another, LIUNA members (male and female trainees) may find themselves falling within any of the following categories listed below:

- A member complains of sexual harassment by a supervisor.
- A member complains of sexual harassment by another union member.
- A member is charged with a claim of sexual harassment.
- A member charges a union representative or training center employee with sexual harassment.

Sexual Harassment as a Safety and Health Issue

Sexual harassment is not just a problem of interpersonal conflict. It is also a safety and health problem, recognized as such by the International Labor Organization and some workers' compensation laws. NIOSH studies have shown sexual harassment to result in physical and psychological health problems. Furthermore, harassment on the job can contribute to workplace injuries in an industry already prone to accidents.

For these reasons, it is important that all members are familiar with what constitutes sexual harassment, how charges of such claims are investigated, how to monitor one's own conduct, and how to contribute to a workplace free of sexual harassment.

*Note that the LHSFNA has a complete 2-4 hour training program on sexual harassment, **Sexual Harassment: Being Part of the Solution**, that is available to LIUNA training centers. This program is customized so that it can be targeted for different audiences; members and workplace leaders (union and management personnel). The text below is a summary of key information provided in that program. Accompanying exercises are also included. This information can be used to teach members about workplace behavior or can assist the training center in areas that arise at the site.*

Defining Sexual Harassment

Sexual harassment is a form of sex discrimination, which is a violation of Title VII of the Civil Rights Act and a violation of some state and local employment laws. The Equal Employment Opportunity Commission defines sexual harassment as:

“Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature.”



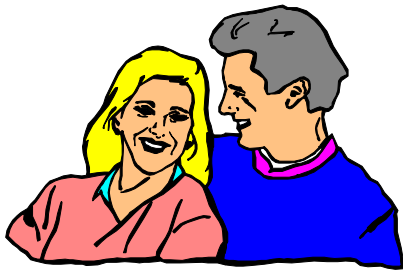
There are two types of sexual harassment. *Quid Pro Quo* sexual harassment is when submission to sexual favors is a condition of employment or of improved employment conditions. *Hostile Work Environment* is when someone's



conduct has the purpose or effect of unreasonably interfering with another's work performance or creating an intimidating, hostile or offensive work environment. The first type is almost always a supervisor, or someone in an official capacity, exercising control over a subordinate. The second form can involve supervisors, coworkers, union reps, other trades or anyone at the workplace. While *Quid Pro Quo* harassment is more blatant and understood, *Hostile Work Environment* cases are more common, more subject to interpretation and more likely to be a problem for trainees.

When considering whether a situation is or is not sexual harassment, consider the following:

- Harassment is viewed through the eyes of the *victim*; not your eyes, the employer's eyes, the class' eyes, or the rest of a job crew's eyes.
- Harassment is defined as *unwanted* attention. Willing flirtation, joke telling, dating and other sexual conduct is not harassment.
- *Intent doesn't matter*. Whether someone intends to be threatening or abusive is irrelevant.
- *Gender doesn't matter*. While the vast majority of cases are female victims charging males, there are also cases of women harassing males and same sex situations.



Also, note that, with few exceptions, there is no clear-cut formula for defining Hostile Work Environment harassment under all circumstances. It is measured by a combination of factors including frequency and severity. For example, a sexual joke is not severe conduct, but if done persistently, can be considered harassment.

The Instructor can have the trainees list examples of hostile environment/harassment. Discuss what makes some situations more severe than others.

Sexual Harassment, You be the Judge: These exercises get trainees thinking about what does or doesn't constitute sexual harassment. This exercise is best used as part of a more in-depth training on sexual harassment where the trainees are provided with more information necessary to allow them to provide defensible answers. Some of the scenarios are intended to be non-clear cut to allow for further discussion.

Investigating a Claim of Sexual Harassment

Claims of sexual harassment should be investigated by the employer and/or union official in the same way any other claim of a sensitive nature is pursued. The union (or the employer) has an obligation to protect the interests of its members (whether the victim or the alleged harasser) but has an equal obligation to seek out the truth.

Exercise: The Instructor can ask the trainees what information they think is important to collect in such an investigation. Make sure all the points addressed below are covered.

Interviewing the victim

If a member is the victim, the investigator needs as much information from that person as possible related to the inappropriate conduct. Remember that Hostile Work Environment harassment is based on a combination of how severe and persistent the behavior is. (Quid Pro Quo conduct need only happen once.) The victim needs to report how frequently this and similar behavior occurred. As with other grievances, he/she must supply dates, times, and locations. If possible, potential witnesses or others who could corroborate the story need to be identified.

While providing such information to a union or employer investigator can be embarrassing it is important that the victim realize that providing this information will be essential to following up with the problem. Victims who are reluctant to provide details verbally can put it in writing.

Because sexual harassment, as defined by law, has to be unwanted behavior, the victim should be prepared to tell the union representative if anyone could allege that he or she went along with this type of behavior in that particular situation or in the past. This is important information to have up front in case the accused raises this as a defense. Be careful to avoid the appearance of blaming the victim.

It also helps the victim's case if he or she complained about the problem before, either to the harasser or to the harasser's supervisor. Note that victims are not obligated to do this in order to sustain a claim, however it is helpful to the case if the victim had made these feelings known in the past.

Finally the victim should be asked if he/she has any concrete evidence of the harassment. Sometimes the victim is able to provide copies of "love" letters, abusive notes, offensive or inappropriate gifts, drawings and even pictures as evidence of harassment. While this isn't always possible, if available, it can be used to support a victim's claim.

Interviewing the harasser



If the alleged harasser is a member, the union needs to get his/her perspective of what happened. This would include responding to the same line of questions posed to the victim. In some situations, the harasser will simply deny that any such conduct occurred. In other situations, the harasser will admit that some behavior of a sexual nature occurred but it wasn't serious, or the victim was a willing party to the conduct. As with the victim, the alleged harasser should provide information about corroborating witnesses.

member, the union needs of what happened. This to the same line of questions posed to the victim. In some situations, the harasser will simply deny that any such conduct occurred. In other situations, the harasser will admit that some behavior of a sexual nature occurred but it wasn't serious, or the victim was a willing party to the conduct. As with the victim, the alleged harasser should provide information about corroborating witnesses.

While the alleged harasser may feel embarrassed about or “blow off” the accusations, it is important that the union representative know about any situations or behavior that could be raised against him or her. This may include prior accusations of harassment, failed attempts at pursuing a relationship with the victim, admitted pranks or other situations that could be used against him or her.

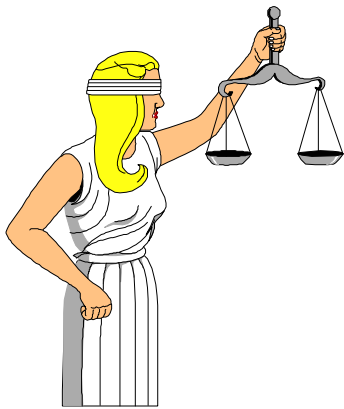
Avoiding a Charge of Sexual Harassment

All union members and officials have the potential of being charged with a sexual harassment claim and need to be alert as to their conduct. Remember, it is not intent that counts! And what a member may perceive as harmless, others may find degrading or harmful. Today it is not uncommon to work in a relaxed atmosphere where sexual issues and jokes are openly discussed. To avoid crossing the line, members and Instructors should ask themselves the following:

- Would I want anything I'm doing to be the subject of a union or company newsletter or on the broadcast news?
- Is there equal power between me and the person that I'm interacting with? While not true in every case, harassment is more easily established where it involves supervisors and subordinates. And, as an Instructor, you may have, or be perceived as having, power over your trainees.
- Would I behave the same way if the person I'm married to or currently in a relationship with were standing next to me?

- Would I want someone I have a relationship with (my spouse or child) treated the same way?
- Is there equal participation and interest between me and the person I'm interacting with?

Recourse for Pursuing a Sexual Harassment Complaint



Many cases of sexual harassment can be avoided by fostering a work environment of mutual respect. Others can be halted by improved communications between the parties and mediation by the union representative or supervisor. The EEOC requires that employers take necessary action to correct the problem. The action does not have to satisfy the victim, just stop the harassment. In cases where the victim wants to pursue legal recourse, note that the first course of action should be to exhaust official internal resolution procedures. Failure to adhere to company policies or appropriate contract provisions between the parties *may* limit a member's ability to succeed with a complaint at the state or federal levels.

After internal procedures are followed, if the member still feels more action is warranted, the member can file a complaint with the EEOC and/or the local or state human rights agency. Although not required, this often involves use of an attorney, however, an attorney is not required. There are time limits involved so it is important that the member consider this option as soon as possible.

Creating a “Harassment Free” Work Environment at Your Training Center

As a union leader, you have a role in protecting the interests of the students at your training center. That means working toward keeping members (potential victims) free from harassment and keeping members (potential harassers) out of trouble. It also contributes to a better environment for the other trainees as well.

Instructors can contribute to eliminating or minimizing harassment at their centers by doing the following:

- Become familiar with training center guidelines, policies and procedures on this issue. (See EEOC guidelines for policy development.) Make sure your director or administrator is in the loop when problems arise.
- Make sure that trainees know that sexual harassment (harassment of any nature) is something you take seriously in your classes. The LHSFNA has a poster available to training centers on sexual harassment prohibitions. (See Appendix.)
- Confront harassment when you see it, sooner rather than later. Don't let "bullies" take over your training centers. Either privately or in public let them know you think they are out of line.
- Be proactive when you think a trainee is being harassed. Let him or her know you see what's going on and offer to help.
- Avoid laughing at or encouraging offensive behavior. Harassers are looking for an audience. Don't provide one.
- Keep in mind that not all inappropriate behavior is "illegal" behavior. By the same token, something doesn't have to be "illegal" to be prohibited or discouraged by the training center.



***The Gender Gap: Does it Exist?
(Instructor Notes)***

Explain that answers are personal and in general, not to reflect every situation all the time.

1. Men and women communicate better with one another in the workplace than they do at home.
 - a. Mostly Agree ____
 - b. Mostly Disagree ____

See whether there is a difference in how the genders perceive workplace behavior and personal behavior. At home, may be more on equal footing. In the workplace, gender stereotypes may exist. Emphasize the importance of effective communication in the workplace.

2. Men and women are more competitive at work today than they were 20 years ago.
 - a. Mostly Agree ____
 - b. Mostly Disagree ____

See the extent to which we see things equaling out more or getting more aggressive. Construction is behind the curve in workplace culture changes. Be prepared.

3. In the workplace who do women compete against more? (pick only **one** of the three)
 - a. Other women ____
 - b. Men ____
 - c. Neither, there isn't much competition in the workplace. ____

Men may have perceptions that women fight among themselves more. Women may have same perception. Some people may not see competition at all. Emphasize that we shouldn't be competing at all, that the workplace in construction is at team practice.

4. Indicate who has a greater influence over women at work:
 - a. Other women coworkers ____ vs. male coworkers ____
 - b. Female supervisors ____ vs. male supervisors ____

Discussion should focus on why they believe these things.

5. Men find it more difficult supervising women workers than supervising male workers:
 - a. Mostly Agree ____
 - b. Mostly Disagree ____

Discussion should focus on why they believe these things.

6. Because of current efforts to reduce discrimination against women, women are given special treatment on jobs to make it easier for them to succeed.
 - a. Mostly Agree ____
 - b. Mostly Disagree ____

Some may think that women get special treatment. Others may perceive their treatment as less than optimal. Conflict between the genders. Women have the right to a job as do men. Women should feel compelled to do their jobs; should be concerned if they get extra treatment..

7. In general who is better at being a supervisor: (pick only one of the two)
 - a. Men ____
 - b. Women ____

Discuss supervisory traits. Authority. Collaboration. Knowledge. Leadership. Assertiveness.

8. Women have to work harder to get the same recognition as a man doing the same job.
 - a. Mostly Agree ____
 - b. Mostly Disagree ____

Something many women believe. Something men often discount.

9. List three qualities that you think make a good worker?

1. _____

2. _____

3. _____

See how these traits match up against the traits of male and female workers below.

10. Today's working men believe that women should be given the same chances and opportunities at work that men get.

a. Agree ____

b. Disagree ____

Gages perceptions of what is supposed to happen in theory. Probably will both be in agreement.

11. In general, women can be as successful doing construction work as men can.

a. Mostly Agree ____

b. Mostly Disagree ____

Will depend on how they respond to questions about what makes a good worker above. Skill vs dependability.

12. List three characteristics that most men have:

1. _____

2. _____

3. _____

Compare to traits of a good worker and leadership traits

13. List three characteristics that most women have:

1. _____

2. _____

3. _____

Compare to traits of a good worker and leadership traits.

14. Men are in better physical condition and health than women.
- a. Mostly Agree ____
 - b. Mostly Disagree ____

Find out why. Discuss the elements of physical condition and good health. Is it just muscles?

15. If there is a problem on the job, men are more likely to speak up about it than women.
- a. Mostly Agree ____
 - b. Mostly Disagree ____

Women may be reluctant to speak up for a few reasons. One is reluctance to stick out. Another is reluctance to make waves. However, some men may perceive women to be more outspoken than they are.

16. Women are more concerned than men are about their personal health and safety.
- a. Mostly Agree ____
 - b. Mostly Disagree ____

May or may not be an issue. Stereotyping would say that men are less concerned about their health and safety than women.

17. If I saw a man picking on a woman at work, my first thought would be that he was doing it to: (put #1 next to your first reaction and #3 next to your third reaction.)
- a. Show off to the other workers ____
 - b. Make her feel like one of the guys ____
 - c. Make her feel unwelcome on the job ____

Gets to what makes men tick.

18. These days, construction employers don't care if you are a man or a woman, they just care if you can do the job or not.
- a. Agree ____
 - b. Disagree ____

Gets to perceptions of discrimination

19. What is more important for you? (pick one)
- a. To be liked by co-workers at work; to work well with other people ____
 - b. To be liked by my employer at work; to get my work done ____

Gets to tendencies for women to be collaborators. Should work toward being a good team player but also important to get the job done right... but not at the expense of collaboration.

20. Boys and girls are raised differently, and therefore respond differently to similar situations.
- a. Agree ____
 - b. Disagree ____

Speaks to issue of how people are raised, but in the home and in society.

Please indicate whether you are Male ____ or Female ____

**MEN AND WOMEN IN CONSTRUCTION
WORKPLACE SCENARIOS
WHAT WOULD YOU DO?
(Instructor Version)**

Note: The participants should be reminded that the purpose of this exercise is only to discuss potential sticky situations in the workplace and to think in advance about different ways people would handle it. Different resolutions may have different consequences that should be considered. In a mixed class, the responses may reveal gender differences in approaches.

1. A new female worker has just been assigned to your work crew. Come Friday, your foreman offers to take her out alone for a beer after work. How do you feel about this? If she asked you what would you advise her to do? What if it is a co-worker she goes out with?
 - **Usually risky to go out with a supervisor, even if appears innocent setting.**
 - **Women may see this as potential for gaining bad reputation (gossip) or accusations of favoritism.**
 - **Being new on the job means hasn't had enough time to establish her own reputation or know what this foreman is like.**
 - **Women may suggest to include other coworkers as well.**
 - **In mixed groups, women likely to see this as potential for uncomfortable sexual situation; men see little wrong with it.**
 - **If it were a co-worker, discussion will focus on the pros and cons of socializing with co-workers, but definitely less risky than going out with a boss.**

2. Some of the guys on your crew have a habit of telling "dirty" jokes and stories. It isn't long before they make a point of directing these "jokes" at the new female
 - o you think of this one?" they ask. She wants to fit in with the crowd and definitely doesn't want to make any enemies. What advice should you give her if she comes to you with the dilemma? Should you say anything to the other male workers. What should you tell her?
 - a. Tell a few jokes of her own?
 - b. Tell them to blow off?
 - c. Ignore them?
 - d. Report them?
 - **Most women will say they would ignore it first, then tell them to back off, using reporting as last resort.**
 - **Most men say she should tell them they are offended right away.**
 - **Few believe more joke telling back is of value; can make problem escalate. Some may see this as a way to diffuse the situation in humor.**

3. A few male co-workers don't want a female on the job. You know it and she knows it. Would you tell her to confront them or just stay quiet and stick it out? Should you defend her to the other guys?
 - **Would depend on whether the dislike is reflected in hostility or a potentially dangerous situation.**
 - **More vocal women may tell the guys that she has every right to be on that job, as they do.**
 - **Many women will try to stick it out and do her job; may be advised to do that by the men; demonstrate their validity to be there.**
 - **Men may intervene depending on how obnoxious the men are or whether they know them or not. Also may depend on their relationship with the woman.**

4. You are working at a job site for one contractor. A new employee of the opposite sex is starting to make friends with you. You appreciate the friendly interaction and company this person offers and look forward to going to work. However, lately, you are concerned that these interruptions are interfering with your ability to work productively and comments from other people on the site. You don't want to turn away someone you like. What do you do?
 - **Men won't understand this scenario; of course tell them to go away.**
 - **Women less likely to say something but should.**
 - **Solution is to tell them to get together at another time, at lunch or after work.**
 - **Alert new members to issue of their employer only having control of his/her workplace, not the other trades. Even if the other person is causing the problem, the boss may blame the member for not stopping it.**

5. You've been working on the same job for some time. You are still doing the least skilled tasks, even though there are plenty of jobs on the site. You wish you could try your hand at doing something else for a change. How do you approach it?
 - **Some will say do whatever you are assigned; its no big deal**
 - **Have to be willing to do "crappy" jobs.**
 - **Important to consider approaches way you say something: complaining vs expressing desire to do something else.**
 - **If you don't say anything, run the risk of becoming deskilled**
 - **If you don't say anything, run the risk of not showing what you can do.**
 - **Some say that showing effort and willingness to work hard will gain attention from the boss (may not be the same standard for women.)**

6. You're given the chance to do some other work but you foresee an obstacle. You don't understand or don't know how to do something associated with this work. You know all eyes are on you, expecting that you'll fail. Should you pass it up so you don't make a fool of yourself? Do you try to do it anyway and see what happens?
 - **In a mixed group, few will admit they wouldn't ask for help.**
 - **Discussion may better be directed at whether students (men and women) are more inclined to try to work things out themselves or more inclined to ask for assistance.**
 - **Some discussion on who you ask, boss or co-worker.**

7. (For men only) A female worker wants to try doing a certain job but you feel she is not strong enough or otherwise unable to do it. You are concerned that she might hurt herself or look foolish failing. What, if anything, would you say to her?
 - **Have to be care to avoid appearing sexist.**
 - **Most will stay out of the issue, not their responsibility; will say nothing.**

8. You have only one female on a road crew. She has got to go the bathroom. There is only one sani-John and it isn't very sanitary. What should she do? How can you help her in the future with this dilemma?
 - **Options are to go in the ditch (may get in trouble; ditch might not be available.)**
 - **Ask for/offer a ride to a gas station.**
 - **Complain to someone (steward or boss) about the facility**
 - **Carry towelettes with you**
 - **Avoid holding it in or not drinking water**

9. Your female friend is assigned to run a jackhammer. She is capable of doing this but when she runs the equipment, her breasts jiggle. She doesn't want to be a spectacle on the job site. She is embarrassed to talk with the foreman. What advice would you give her? Should you talk with him on her behalf?
 - **Sports bra and loose shirt will minimize appearance of jiggling.**
 - **Do the job, but don't allow yourself to be a side show**
 - **Men/others may talk on her behalf.**
 - **Some discussion about picking and choosing jobs.**

10. A female co-worker wears clothes to work that are too revealing and/or she is flirting with fellow co-workers. This is causing a lot of disturbance and friction at work.

Should you:

- a. Talk with her about the problem
- b. Ignore it, it's none of your business
- c. Talk with the foreman about your concerns
- d. Enjoy the entertainment

- **Responses will be different based on gender and how well they know/like the woman.**
- **Can use this question to emphasize to women the importance of wearing appropriate clothes to work.**
- **Most would not talk to the foreman about it.**

Workshop Scenarios: Instructor's Version

Is It Sexual Harassment?

You Be the Judge

Scenario #1

Judy is a building construction Laborer. She has been with the union for two years and recently was dispatched to a new job site where there is a long-term project in progress.

Ron is a member from a different trade employed by a different subcontractor who works at the same site. He is a longtime employee of the contractor. When Ron first meets Judy, he comments about her attractive appearance and figure. Judy carries on casual and polite conversation with him.

Over the coming three weeks Ron's comments to Judy continue and get more graphic regarding her affect on him. Judy tries to re-direct the conversation to the job.

After the fourth week of continuing comments, Judy complains to Joe, her foreman, about Ron's behavior. His response is "Ron only goes for the real pretty girls. He must be hot for you."

The next week Ron tells Judy what he would do with her if she were his girlfriend. Judy responds coolly to him but doesn't say anything. However, once he leaves she immediately reports the incident to Joe. Joe tells Judy she should ignore him.

The next day, Ron finds an opportunity to rub up against Judy when they are working in close proximity, making a groaning sound as he does it. After Judy reports it to Joe, he tells her she should tell Ron to knock it off.

Judy files a sexual harassment complaint through her union.

- 1. Does Judy have a valid claim against her employer?**
 - Possibly: hostile work environment.

- 2. What facts lead you to your answer?**
 - Persistent unwelcome actions of a sexual nature.
 - Reported to supervisor who took no action

- 3. What do you think Ron would say if he knew about Judy's charge?**
 - He may say she never complained
 - He may say it was harmless
 - He may say it was a complement
 - He may be embarrassed.

Scenario #2

Lisa is a Laborers apprentice. She's been enrolled in the program for about nine months. Her work performance isn't very good in that she makes frequent mistakes and is slow. Because of this and other problems associated with the project she's on, her crew is behind on meeting some project milestones that are coming due in the next month.

The Project Manager tells Gary, the Superintendent, to do what it takes to meet the project deadlines. Gary, who is single tells Lisa (who is also single) that this is her opportunity to improve her performance record. Lisa is anxious to improve and works hard over the next two weeks in an effort to meet one of the milestones. Gary comments on her improvements.

Gary asks Lisa and other crew members to work overtime to get over the hump as they approach their deadline. She agrees, as she needs the money and she finally feels as though she is getting the hang of the work. She also feels that Gary has helped her restore her confidence as he has shown some faith in her ability to work. At 6:00 Gary sends the crew home. He invites Lisa to go out for beer and something to eat (his treat) to reward themselves for their work. They go to a local place and enjoy themselves.

The next day at quitting time, Gary asks Lisa to go out again, making a point in saying how much he enjoyed the prior evening. She declines nicely, saying she had fun too but it wouldn't be a good idea to do so. Gary accepts her rejection coolly.

They continue to work on the project together but fall behind schedule again. Eventually Gary needs to bring on more crew members, an extra expense to meet the deadlines.

Upon evaluation time, Gary gives Lisa a bad write up on her performance. He sends her back to the union hall, saying that he doesn't need her, but soon afterward, he calls for additional hands.

Lisa files a sexual harassment claim against her employer.

Q: Does Lisa have a valid claim? Why or why not?

- Answer 1: Possibly: quid pro quo. Because his bad evaluations came after she declined to go out with him. He sent her back to the hall even though he still needed workers (adverse job action.)
- Answer 2: No, Lisa had a history of poor performance and despite improving, fell behind again. She already went out with him once, why can't he ask her out again?? Gary had a work-based reason for the bad write-up

Q: What facts might have changed your "verdict" in the other direction?

- For Answer 1: If she hadn't shown improvement in her work; if he hadn't hired more workers.
- For Answer 2: If he had been more aggressive; if they hadn't fallen behind; if she hadn't been a bad worker to begin with;

Scenario #3

Nora is one of two women among a fourteen person construction crew. The crew, for the most part, work well together. They frequently horseplay and make sexual jokes about one another. Nora chimes in with the rest of the guys regularly. She has “shocked” a few male co-workers on more than one occasion.

Awards are given annually by the crew’s contractor for outstanding performance. Nora --a high performer-- wins the award. One of her co-workers, Bob, tells several other co-workers she probably got the award for her “performance” off the job.

Furious upon hearing this Nora files a sexual harassment claim against the contractor.

Q: Does Nora have a valid claim? Why or Why not?

- Probably not. Not sufficiently hostile work environment and no quid-pro-quo.
- Nora makes sexual jokes; leads one to believe she wouldn’t find her colleagues’ joke funny.

Q: What changes in circumstances would make you change your mind?

- If Nora hadn’t been known to accept that kind of humor.
- If the comments were persistent
- If she had complained but the comments didn’t stop
- If her boss had made such comments and acted upon them as though it were a job requirement for future awards.

Scenario #4

There is a Laborers skills training class underway at a Laborers-AGC training center. The class is comprised of 2 female students and 13 male students. The members don't already know each other, although they are all from the same local union. The program is an 80-hour class. The center is a residential facility.

Three days into the program, the Training Center Director finds out that one of the women has been sleeping with some of the other students. In fact, she has told some that she intends to go to bed with all the male students and then "grade" them at the end of the program.

The Instructors complain that something needs to be done about this and that the woman needs to be confronted. The Training Director is concerned that he will have a lawsuit filed against him.

1. Should the Training Director be concerned about a lawsuit? Would your answer be different if it were an Instructor doing the "hustling?" Explain.

- The woman's behavior is inappropriate and should be confronted. The Director would be remiss in not confronting her. However, he could find himself in trouble if he does nothing to the male students who also engaged in inappropriate activity.
- If the Instructor were doing the hustling, he should be concerned that the students might file a charge.

2. What could the Director do to avoid such problems in the future?

- Have a clear policy about training center conduct including consequences for violating it.
- Make it clear that men and women are both expected to treat each other with respect at the center.

Scenario #5

Marilyn is a secretary at the local union. She handles dues collections, correspondence, fields member complaints and other administrative duties. She started working for the local about a month ago.

Joe Johnson is an active member of the union. He likes to hang out at the hall periodically and he pays his dues in person. When he sees Marilyn for the first time he introduces himself in a tone that suggests his interest in her appearance. He gives her several “look overs” up and down. As she answers his questions his eyes are focused on her breasts. As he leaves and passes some of the other guys coming in he mentions to them that they now have something to look forward to when they come to the union hall. He also passes Patty, who’s a female member, and asks her

1. What do you think of Joe Johnson’s behavior? Is it innocent prattle or could it be or lead to a sexual harassment complaint?

- Probably inappropriate prattle at this point but if consistent or worse could result in a charge.

2. What should Marilyn do?

- Marilyn should put Joe in his place
- She should complain to her boss, the union business agent.
- She may not mind, in which case she should do nothing.

3. What about the female member that Joe talked to. Does she have a complaint?

- Only if the comments were persistent and created a hostile environment; not likely under these circumstances alone
- While obnoxious, even less so than for Marilyn.
- She should feel free to tell Joe where to go.

Section 4: Health and Conditioning

A laborer's health and fitness is paramount to his or her ability to successfully work in construction. Workers who are in good physical shape are not only better equipped to do the physical work of construction but also are more likely to show up for work (less sick time) and can recover more quickly from workplace accidents and injuries. Workers who are in good shape are better assets for the union and for the contractors that employ them. For women in particular, being in good physical shape may help level the playing field among their co-workers. Following are a list of classes that the LHSFNA has available that include health concerns of particular interest to women.

A. Building Better Bodies Conditioning Program

While some women may be strong, women as a group do not have the same muscular strength of their male counterparts. This can put them at a disadvantage with respect to tasks requiring heavy lifting. Female laborers should be encouraged to take a proactive role in their physical conditioning to meet this challenge, particularly with respect to developing improved upper body strength. This can be done in the context of encouraging all laborers (men and women) to stay in good physical condition.



The LHSFNA has a conditioning program, called "*Building Better Bodies*," that has exercise demonstrations, with an accompanying video, *Spring Training*. The program focuses on the tasks most often performed by Laborers, the muscles used in such tasks and how those muscles can be developed. Laborers who may need such development should be encouraged to do these exercises on their own, although they can also be done in the class. As all conditioning programs, these exercises need to be done on an ongoing basis by the member in his/her free time.

In promoting this conditioning program, don't lose sight of the fact that there is more to physical development than just strength building, which is the area that women would likely need the most. This program also addresses the importance of flexibility conditioning and endurance; two areas that women are more or less on equal footing with men. It also addresses the

importance of using proper body mechanics and staying generally in good health.

This program can be done in mixed gender as well as all female class settings.

B. Breast Cancer Awareness



The LHSFNA has a brief program on breast cancer awareness. While men can also get breast cancer, it is more appropriately conducted in female-only classes. This class covers the following information: Breast cancer statistics, risk factors, early detection and treatment. It is suggested that any training center conducting this class use a synthetic breast display model which includes nodules that the trainees can practice on to detect potentially cancerous lumps.

C. Fitness for Duty

The LHSFNA has a complete training program that covers a host of illnesses and diseases that laborers may encounter of the course of their lives. Sections cover health problems such as heart disease, cancer, hepatitis, HIV/AIDS, back injuries, smoking, substance abuse and more. This program was recently modified for the Laborers-AGC Minority Worker Training Program to ensure inclusion of data specific to women and minorities. It can be delivered in mixed class or single gender training classes, focusing on the health problems specific to that group.

Resolution XI

Membership Diversity

Whereas, we live in an increasingly diverse society, it remains vital that the union be open to all persons regardless of race, ethnicity, national origin or gender. Historically, the Laborers' International Union of North America has extended open arms to minorities and immigrant groups of every origin. The Union was built on a variety of Western European immigrant populations – Italian, Irish, and German foremost among them. African-Americans have long comprised a significant percentage of the membership, particularly in the South and in urban areas. In more recent years, Latinos have been an increasing proportion of our membership, first in the Southwest and now throughout the United States. We have substantial numbers of Polish members as well.

In 1996, we established a Department of Minority Advancement to deal specifically with issues of membership diversity. Through the activities of that Department and its Director we have made further advances in understanding and responding to the special challenges posed in recruiting members of various minority and ethnic groups. We applaud the accomplishments of our Department of Minority Advancement.

We know that we can do still better. While Portuguese members have found a home in our Canadian affiliates and in some local unions in the United States, there are other areas in which Portuguese workers comprise a significant portion of the workforce but are not well represented. The same can be said of Cubans in South Florida and of Latinos and African-Americans in many parts of the country. It is true everywhere that we need to recruit women in all industries, including construction.

We hereby reaffirm our commitment to extend an unqualified welcome to all workers. It is the right thing to do. It is also the necessary thing to do if the Union is to remain strong. Our ability to represent workers and to provide good wages and working conditions depends heavily upon our ability to organize all laborers in the workforce. We cannot represent any group of Laborers effectively, we cannot negotiate the highest wages possible, if we permit a competing workforce of the excluded African-Americans, Latinos, Portuguese or others to exist unorganized. Increasing our diversity is therefore a task that we assume out of self-interest as well as from our sense of decency and solidarity. If we are to succeed in organizing in an increasingly diverse workforce, we must routinely provide our written materials and communications in a variety of foreign languages, as appropriate.

We should support the call for a national holiday in the United States honoring Cesar Chavez, a great labor leader and a fitting representative of minority workers, just as we have a national holiday honoring Martin Luther King.

Responsibility for our efforts to expand and nurture the diversity of our membership cannot be assigned exclusively to minority members. As acknowledged above, diversity is as important to members of the majority as it is to minority group members. For those in the majority, a strong diversity program is vital to the strength of the Union and to its ability to provide effective representation for all. It is therefore important that those in the majority, as well as members of minority groups, be strongly represented in the leadership of our diversity program.

Therefore, be it resolved,

That the International Union reaffirms its historic welcome to all persons, regardless of race ethnicity, national origin or gender;

That the International Union and its affiliates target every racial or ethnic group, and women, within its organizing programs;

That, to the extent appropriate, the International Union publish its materials in a variety of languages to further strengthen its means of communication with its membership and with those it seeks to organize;

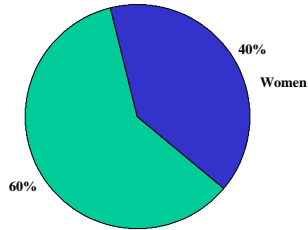
That the United States adopt a national holiday honoring Cesar Chavez for his work as a great labor leader and as a representative of minority workers; and

That the General President's decision to create a minority advisory committee to assist in developing our program of outreach to all persons, which committee is to consider both the needs of incumbent and minority members, and the means by which we can further organize all of the work, and workers, within our jurisdiction be approved.

Passed at the 22nd Convention of the Laborers' International Union of North America.

Union Membership by Gender

16.5 million members

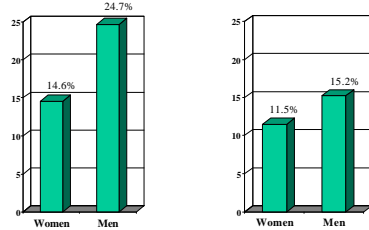


US DOL/BLS: 2000

Unionization Rates by Gender

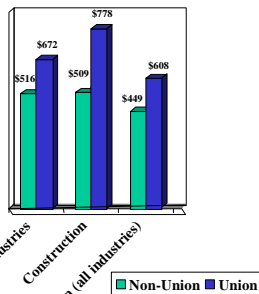
1983

2000



Weekly Median Earnings

Union vs. Non-Union



Source: DOL/BLS 1999

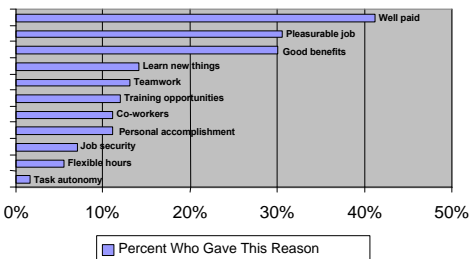
LIUNA/DOL 1995 Working Women Count Survey N = 200

Job Aspect Ratings



LIUNA/DOL 1995 Working Women Count Survey N = 200

Reasons for Job Satisfaction



The Percentage of Women Encountering These Conditions on the Job



Source: Chicago Women in Trades 1992

Women in Construction

Providing Equitable Safety and Health Protection

HASWIC Workgroup

- ⇒ LHSFNA
- ⇒ DOL/OSHA
- ⇒ NIOSH
- ⇒ Construction Company (Safety Officer)
- ⇒ DOL/Women's Bureau
- ⇒ Cal-OSHA; Dept of Health Services
- ⇒ Chicago Women in Trades

Data Sources

- ⇒ NIOSH Studies
 - Quantitative (focus groups)
 - Qualitative (telephone survey; 213 laborers)
- ⇒ Chicago Women in Trades Survey
 - Surveys, interviews and focus groups
- ⇒ Case Studies
- ⇒ Literature Review

Health and Safety Concerns

- Training
- Access to Sanitary Facilities
- Workplace Culture
- Personal Protective Equipment
- Reproductive Hazards
- Musculoskeletal Disorders

Training

- ⇒ Presumed Lack of Skills
- ⇒ Less "Home-based" Training
- ⇒ Safety and Health Not Taken Seriously by Peers
- ⇒ Training Provides Credentialing
- ⇒ Can Make Mistakes with Minimal Impact

Sanitary Facilities

- ⇒ Either No Toilets or Filthy Toilets
- ⇒ Reluctance to be a "Nuisance"
- ⇒ Hygiene Issues
- ⇒ Harassment Issues
- ⇒ Destructive Coping Mechanisms
 - Don't consume enough fluids
 - Retention

Sanitary Facilities

“The toilet was so dirty I couldn’t make myself use it. I was lucky there was a restaurant across the street where I could go during breaks and at lunch, but even that was an inconvenience”

Workplace Culture

- ⇒ Gender Harassment
 - General mistreatment due to gender
 - Work tampering
- ⇒ Sexual Harassment
 - Construction 2nd highest industry rate
 - Hostile workplace vs Quid Pro Quo
 - Health Impact
 - Safety Impact

Elements of a Hostile Work Environment

- ⇒ Lack of Training
- ⇒ Non-transmittal of Safety/Work Information
- ⇒ Physical Assault
- ⇒ Harassment
- ⇒ Isolation

Effects of a Hostile Work Environment

- ⇒ Acute Stress Reaction
- ⇒ Chronic Stress Reaction
- ⇒ Distractions Leading to Accidents and Injuries

Workplace Culture

“You could deal with the dangerous work if the men treated you right, or you could handle the men if the work wasn’t so dangerous. It’s the combination that’s so hard.

CWIT study

Personal Protective Equipment

- ⇒ Fit Issues
 - Smaller sizes
 - Different shape
- ⇒ Access Issues
 - Limited product availability (manufacturers)
 - Limited worksite availability (company)

Personal Protective Equipment

- ⇒ Health and Safety Impact
 - Tripping
 - Stuck in Equipment
 - Limited Dexterity
 - Compromised protection

Personal Protective Equipment

“When I went through the welding apprenticeship... they issued us welding boots size 9 ½. I had to wear 2 pairs of socks to wear them. They gave me a welding leather jacket that was a foot longer than my hand. I had to roll it up. And they gave me gloves so humongous, I couldn't even pick anything up.”

- NIOSH/CDC

Reproductive Hazards

“Chemical, physical, or biological agents can cause either *reproductive impairment* or adverse *developmental effects*.”

- ECOEM

Reproductive Hazards

- ⇒ Reproductive Toxicity
 - Adverse effects on repro system
 - Reduced sex drive; Infertility
 - Example: Ionizing radiation
- ⇒ Developmental Toxicity
 - Adverse effects on fetal development
 - Spontaneous abortion; Birth defects; Low birth weight; Neurological defects
 - Example: Lead, alcohol

Workplace Problems

- ⇒ Won't refer/employ pregnant women
 - Results in hiding pregnancy in most vulnerable stages
- ⇒ What the law says
 - Pregnancy Discrimination Act
 - Treat as any other disability
 - OSHA only applies to S&H of the worker, not fetus

Reproductive Hazards

- ⇒ Reproductive Hazards are not Limited to Females
- ⇒ “Reproductive policies must avoid sex discrimination and must consider potential effects on males, females and offspring.”
ACOEM
- ⇒ Inform workers of exposures
- ⇒ Inform female workers of potential risk

Reproductive Hazards

“When I got pregnant, my company agreed to give me light duty. But then they laid me off when everybody else was still working. My union wouldn’t help me get another job after that, even though they were usually pretty good.”

- CWIT

Musculoskeletal Disorders

- ⇒ Tool design
- ⇒ Access to/acceptance of alternative methods to move materials
- ⇒ Lifting technique
 - Lower upper body strength
 - Proper lifting is with the legs

Resolution? Solutions?

Increase awareness among all members

Increase awareness among union representatives

Increase awareness among employer community

Northwest Laborers Study

- ⇒ Purpose:
 - To assess the relationship between job site stressors and health and safety outcomes among construction workers

Sample

- ⇒ 211 female laborers from locals (204 males)
 - #242, #440 in Seattle, WA
 - #252 in Tacoma, WA
 - #292 in Portland, OR
- ⇒ 76% response rate overall

What the survey measured -

- ⇒ Outcome variables:
 - Job Satisfaction
 - Psychological Symptoms
 - Physical Symptoms (headaches, insomnia, nausea)

What the survey also measured

- ⇒ Job Stressors
 - Control, Training, Job demands, Safety climate, Job certainty, Daily exposure, Harassment/Discrim., Having to prove oneself, Skill under-use, Responsibility for safety of others, Social support from co-workers and supervisor

Results

- ⇒ Job Satisfaction:
 - Job demands (-)
 - Safety climate (+)
 - Responsibility for safety of others (+)
 - No chance to use skills (-)
 - Male supervisor support (+)

Results (continued)

- ⇒ Psychological Symptoms
 - Control (-)
 - Significant other support (-)
 - Harassment/Discrimination (+)
 - Responsibility for safety of others (+)

Results (continued)

- ⇒ Physical Symptoms:
 - Insomnia
 - Having to prove self (+)
 - No chance to use skills (+)
 - Nausea
 - Harassment/Discrimination (+)
 - Headaches
 - Harassment/Discrimination (+)

Study Limitations

- ⇒ Cross sectional data collection – one point in time
- ⇒ Limited to the Pacific Northwest
- ⇒ Limited to Laborers

Conclusion

- ⇒ Tradeswomen face a number of stressors associated with negative health outcomes
- ⇒ Strategies designed to change attitudes and behaviors could affect these associations
- ⇒ Reducing stressors should:
 - Increase retention
 - Increase psychological and physical well-being
 - Reduce stress-related accidents and injuries

Facts About Pregnancy Discrimination

The Pregnancy Discrimination Act is an amendment to [Title VII of the Civil Rights Act of 1964](#). Discrimination on the basis of pregnancy, childbirth or related medical conditions constitutes unlawful sex discrimination under Title VII. Women affected by pregnancy or related conditions must be treated in the same manner as other applicants or employees with similar abilities or limitations.

HIRING

An employer cannot refuse to hire a woman because of her pregnancy related condition as long as she is able to perform the major functions of her job. An employer cannot refuse to hire her because of its prejudices against pregnant workers or the prejudices of co-workers, clients or customers.

PREGNANCY AND MATERNITY LEAVE

An employer may not single out pregnancy related conditions for special procedures to determine an employee's ability to work. However, an employer may use any procedure used to screen other employees' ability to work. For example, if an employer requires its employees to submit a doctor's statement concerning their inability to work before granting leave or paying sick benefits, the employer may require employees affected by pregnancy related conditions to submit such statements.

If an employee is temporarily unable to perform her job due to pregnancy, the employer must treat her the same as any other temporarily disabled employee; for example, by providing modified tasks, alternative assignments, disability leave or leave without pay.

Pregnant employees must be permitted to work as long as they are able to perform their jobs. If an employee has been absent from work as a result of a pregnancy related condition and recovers, her employer may not require her to remain on leave until the baby's birth. An employer may not have a rule which prohibits an employee from returning to work for a predetermined length of time after childbirth.

Employers must hold open a job for a pregnancy related absence the same length of time jobs are held open for employees on sick or disability leave.

HEALTH INSURANCE

Any health insurance provided by an employer must cover expenses for pregnancy related conditions on the same basis as costs for other medical conditions. Health insurance for expenses arising from abortion is not required, except where the life of the mother is endangered.

Pregnancy related expenses should be reimbursed exactly as those incurred for other medical conditions, whether payment is on a fixed basis or a percentage of reasonable and customary charge basis.

The amounts payable by the insurance provider can be limited only to the same extent as costs for other conditions. No additional, increased or larger deductible can be imposed.

If a health insurance plan excludes benefit payments for pre-existing conditions when the insured's coverage becomes effective, benefits can be denied for medical costs arising from an existing pregnancy.

Employers must provide the same level of health benefits for spouses of male employees as they do for spouses of female employees.

FRINGE BENEFITS

Pregnancy related benefits cannot be limited to married employees. In an all-female workforce or job classification, benefits must be provided for pregnancy related conditions if benefits are provided for other medical conditions.

If an employer provides any benefits to workers on leave, the employer must provide the same benefits for those on leave for pregnancy related conditions.

Employees with pregnancy related disabilities must be treated the same as other temporarily disabled employees for accrual and crediting of seniority, vacation calculation, pay increases and temporary disability benefits.

Elements of an Anti-Harassment Policy and Complaint Procedure

*Minimum components as described in the U.S. Equal Employment Opportunity Commission
Enforcement Guidance: Vicarious Employer Liability for Unlawful Harassment by Supervisors:
No.915.002; June 18, 1999*

“It is generally necessary for employers to establish, publicize, and enforce anti-harassment policies and complaint procedures. ... While the (U.S.) Supreme Court noted that this ‘is not necessary as a matter of law,’ failure to do so will make it difficult for an employer to prove that it exercised reasonable care to prevent and correct harassment.”

“An Employer should provide every employee with a copy of the policy and complaint procedure, and redistribute it periodically.”

1. A clear explanation of prohibited conduct

The policy should make it clear that it will not tolerate harassment of any kind (sex, race, color, religion, national origin, age, disability and protected activity).

This prohibition should cover harassment by anyone in the workplace including supervisors, co-workers or non-employees.

The policy should encourage employees to report harassment before it becomes severe or pervasive so that the employer can stop it before it becomes a violation of law.

2. Protection against retaliation

The policy should make it clear that no adverse action will be taken against employees who report harassment or provide information related to such complaints.

Workers should be reminded of this portion of the policy when conducting an investigation.

A policy without protection against retaliation will be ineffective. The EEOC may view a policy without this protection as evidence that the employer did not exercise reasonable care in preventing or correcting harassment.

3. An effective complaint process

The complaint procedure should be designed to encourage victims to come forward, clearly laying out the procedure and ensuring that no obstacles exist.

When a complaint is issued, the employer is obligated to investigate regardless of whether it conforms to a particular format or is in writing.

It is advisable that the employer designate at least one official outside an employee's chain of command to take complaints of harassment.

Include information within the policy explaining the time limitations for filing a charge with the EEOC or applicable state agency, reminding them that the deadline starts from the last date of the alleged harassment, not the date that the complaint was filed.

4. Confidentiality

The policy should indicate that the employer will protect the confidentiality of harassment allegations to the extent possible.

Complete confidentiality can't be guaranteed if the employer is expected to do a thorough investigation. However, information should only be shared with those who have a need to know.

A supervisor who is aware of harassment but is asked by the victim not to pursue it is obligated to report it to the employer could subject the employer to liability.

5. An effective investigative process

The investigation process should be prompt, thorough and impartial.

The employer may have to take intermediary steps to ensure further harassment doesn't occur, such as making scheduling changes to avoid contact between the two parties. The complainant should not be involuntarily transferred or otherwise burdened, since such matters would constitute unlawful retaliation.

The person conducting the investigation should be someone over whom the alleged harasser has no supervisory authority.

6. Assurance of immediate and appropriate corrective action

The policy should make it clear that the employer will undertake immediate and appropriate corrective action when it determines that harassment has occurred in violation of the employer's policy. Both parties should be informed of the result of the investigation and the action taken.

Remedial measures should be designed to stop the harassment, correct its effects on the employee and ensure that it does not recur.

Remedial measures need not be those that the employee requests or prefers, as long as they are effective and do not adversely affect the complainant.

Building a Positive Self-Esteem



Produced in-house by the
Laborers' Health & Safety Fund of North America
for the
Laborers-AGC Minority Worker Training Program
(Funds for this publication provided by the
National Institute of Environmental Health Sciences.)

August 2001

Workshop Objectives

This workshop will help the class participants explore the many aspects of self-esteem in their own lives. It will help them identify the parts of their lives that make them feel good about themselves and those that don't make them feel so good. This workshop will help the participant build a stronger, more positive sense of who they are and the power of self-esteem.

Each section includes information intended to be relayed to the participants as well as *instructor notes*, which are in *italics*. Participant handouts, which are included with these materials, are referred to throughout.

Length:

Total of two hours, with a ten minute break in between 55-minute sessions.

Intended Audience:

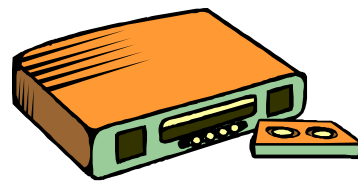
This workshop is designed for young adults (ages 17-25) who are relatively new to the workforce.

Instructor Aides:

- Overheads (PowerPoint)
- Handouts
- Video: "The Power of Choice: Self-Esteem" (30 min.)
(Purchase from The Bureau for At-Risk Youth, 1-800-99-YOUTH)

Materials/Supplies Needed:

- Flip chart
- Overhead projector
- Screen
- VCR with large monitor



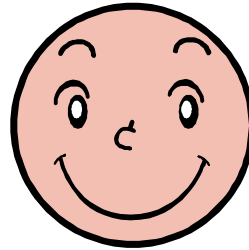
Building a Positive Self-Esteem

I. Introduction: Self Esteem – A Key to Being Happy!

Instructor: Explain how a strong, positive self-esteem is vital to a person being happy and successful. Then ask the class: “What does self-esteem mean to you?”

Defining self-esteem can be difficult since it has to do with a state of mind. Therefore, it can mean different things to different people. Most believe it has to do with ...

- Liking oneself
- Feeling good about oneself
- Having self-respect



Experts say that self-esteem is more complex than that. Self-esteem is an internal picture we build of ourselves, based on seven areas: (overhead)

- Basic self-worth
- Accountability and responsibility
- Life meaning and purpose
- Physical self
- Family and relationships
- Work and career
- Acceptance of others

II. How Strong is Your Self-Esteem?

A. How to Identify Areas of Strong and Weak Self-Esteem

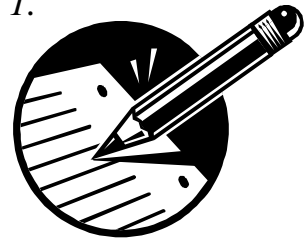
Instructor: Emphasize the importance of identifying where self-esteem is strong and where it is weak.

Areas where self-esteem is strong allows us to build on those strengths in our lives and work.

Areas where it is weak shows us where we can begin to focus on improvement.

B. Self Test

Instructor: Have the class take the exercise in Enclosure 1. Allow about 15 minutes. Emphasize that they should be honest with their answers, which are private to them. After they add up their scores, ask if they are surprised about their areas of strength or weakness, or if it is what they expected. Areas with the lowest scores are those which the participants should focus on for improvement.



III.Exploring the Elements of Self-Esteem

Let's take a close look at the seven areas of self-esteem.

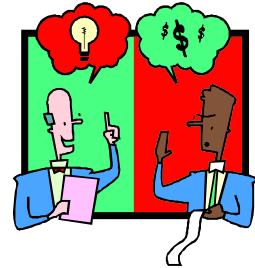
A. Basic Self Worth

Self-worth is the foundation for self-esteem. Normally, this begins at childhood. Those appreciated and treated with respect as children are more likely to be happy, confident adults. On the other hand, those who did not get this as children may have developed lower self-esteem. Remember, it is never too late to develop a positive self-esteem. We need to have a realistic picture of ourselves, seeing both our strengths and weaknesses. It is important to develop "positive self-talk."

Instructor: Give examples of both positive and negative self-talk. Have the class do the same.

Positive self-talk: "If I set my sights high enough I know I can make it."

Negative self-talk: "Who am I kidding? I will never pass this course."



B. Accountability and Responsibility

If we have strong self-esteem we: (overhead)

- accept responsibility for our lives
- are responsible for our choices
- are responsible for our actions
- are responsible for our happiness
- don't blame others for problems
- don't expect others to fix our mistakes
- take care of our health
- follow through on promises
- work towards important goals

Those who don't have strong self-esteem feel like they are victims, with little control over their lives. They often lack a feeling of accountability and may put off or avoid difficult situations, abuse drugs or alcohol, or display other vices. This is shown by the use of victim language, such as: "I can't," "I never will," "I'm too dumb, fat, short, tall, weak, etc.," "I never have any good luck," "Everyone is against me."

Instructor: Tell the class that by taking this course, they all had to overcome using victim language. (Example: "Why should I do this? It won't make a

C. Life Meaning and Purpose

How do we fit into the world? Some call it "spirituality," a relationship with a "higher power," a connection with nature, or a general sense of community or belonging.

Belonging is a key to self-esteem and a basic human need. This is why gangs and cults are so attractive to some people today. Most people need to fit in somehow.

People with low self-esteem feel they are on the outside looking in. It helps to feel they are making a contribution, such as volunteer work, recycling, counseling, or helping friends and colleagues in need.



Instructor: Ask the class to give examples of things people "join" to feel part of a community. How does one's participation in these organizations make them feel as though they are contributing to something? Examples: sports teams, churches, labor unions, Boy Scouts, PTA.

D. Physical Self

People with low self-esteem tend to neglect their bodies. Good health gives greater energy and strength. Feeling good about the way you look gives you more self-confidence and allows you to relax and enjoy yourself.

Instructor: Give examples, such as, "When you buy a new coat/outfit, how do you feel? A good haircut? Lose weight?"

E. Family and Relationships

The people in our lives have a major input on how we see ourselves. Usually, first on the list is our family. Relationships are like mirrors, they allow you to see yourself as others do. Being respected by others makes you feel valued, needed and appreciated, all of which lead to positive self-esteem. Being surrounded by positive people helps raise your self-esteem.



The opposite is true about being around negative people. When you are around negative people, especially those who constantly put you down or find fault with everything you do, it is hard to keep a positive opinion of yourself and, therefore, easy to develop a low self-esteem.

Exercise on working toward building a support system

Instructor: Do exercise on building support systems. (See Enclosure 2.) Talk about the results of the exercise. Have the class members volunteer who they use for support or who they offer support to. Emphasize that everyone, no matter how strong and independent, needs support at difficult times in their lives. (Examples: U.S. President, Jesse Jackson, LIUNA's General President).

F. Work and Career

Now more than ever, work can be a powerful source of self-esteem. Work helps us build pride and self-confidence. It can give our life direction. It becomes our identity; defines who we are. Being part of a union can also be a great source of pride and positive self-esteem. The key is to feel that what you do is important!

Instructor: Discuss how what they are training for or how the jobs they have are important. (Building highways and bridges, schools, flagging traffic, etc. – “helping their communities grow and prosper.”)

G. Accepting Others

An important aspect of self-esteem is how we view and treat others. It also shows us what we think of ourselves and whether we respect ourselves. People who don't value themselves are often especially critical and demanding of others. This can also show up as a lack of respect and tolerance for differences in race, culture, religious beliefs, and sexual orientation. This lack of respect and intolerance can come from the family we grew up in or our community. We are heavily influenced as children. As an adult, our own self-esteem can be improved by being more understanding and tolerant of others.



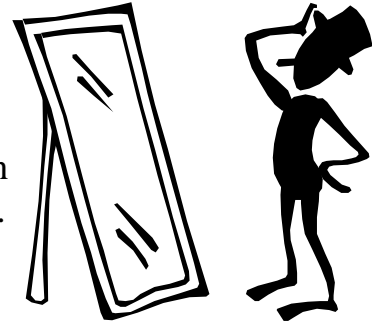
Instructor: Ask the class if they know of someone now or in the past who always was putting down other people. Does a “bully” come to mind? Bullies pick on other people who they think are weaker than they are. Emphasizing someone else’s weaknesses makes them look better or stronger in comparison. They are the ones with low self-esteem.

IV. Ten Steps to Building Self-Esteem (overheads)

Building a positive self-image can take a long time, especially if you received negative messages in your childhood. You need to get started NOW. It's never too late to start. Look at the following steps.

Step 1 : Take a Clear and Honest Look at Yourself

Learning to see yourself is an important first step in self-acceptance; both positive and negative qualities. Only by seeing yourself clearly can you change. It may be painful, but in the long run it will be worth it!



Self Evaluation Exercise (See Enclosure 3.)

Instructor: Ask the trainees to mention one positive quality they have. If someone believes he or she has no good qualities, the Instructor should be prepared to note something good about that person. (Examples: He's taking training; she has a pleasant smile; he's always on time for class, etc.)

Then ask the class for a few people to volunteer where they would like to improve something about themselves. The Instructor can start first by identifying something he or she would like to improve. Remind the class that only by identifying qualities that need improvement can you actually make improvements.

Step 2: Use Positive Self-Talk

We all have an internal voice in our heads continually judging everything we do, either consciously or subconsciously. Those with low self-esteem often have an internal voice which is very harsh and critical and sets standards too high. Never being “good enough” or accepting compliments is another sign of a person who was over-criticized as a child or young adult. This is normally rooted in childhood, when children are frequently over-criticized. Therefore, we need to change the message by doing positive “self-talk.” So, to set realistic standards for ourselves, be happy with the things we do well, even if not perfect, and learn to accept praise.

“Internal Critic” Exercise (See Enclosure 4.)

Instructor: Discuss this exercise with the class. Trainees can begin to develop stronger self-esteem by becoming aware of what their internal critic is saying and then changing the “messages” to more positive ones.

Ask them to reflect on their own situations. Give them a few scenarios whereby they may be judgmental. Examples: Failed a test that most people passed – or – Broke something that belonged to one of their parents.



Step 3: Accept Responsibility

People with low self-esteem use victim language. They see themselves as victims. They feel powerless to change. Examples include: “I can’t,” “I never will,” “Why me?,” etc.

People with strong self-esteem speak in terms of choices and decisions, therefore, they enforce their sense of power and self-esteem. Examples include: “I choose to,” “I decided to.”

“Victim Language” Exercise (See Enclosure 5.)

Instructor: Direct the class to do this exercise. Ask members to volunteer their examples with the class. Show that by using power language they can turn a negative situation into a positive one.

Step 4: Get Involved With Others

Everyone needs to belong, to feel a sense of connection with other people. Beyond family, neighborhood and community there are also other places, such as a church, club, recreational group, union activities and others where we can get involved.

Instructor: Have class give other examples.

Making a game plan for getting involved (See Enclosure 6.)

Instructor: Discuss this exercise with the class. Ask a few class participants to explain why they feel the way they do. If the participants can’t answer some questions, tell them not to worry. This only means that they need to work to explore ways of building connections.

Step 5: Develop Your Spirituality

Spirituality is very personal and hard to define, but it can be very important to self-esteem.

Instructor: Have the class discuss ways any of them may develop their spirituality and how it may help their self-esteem.

Examples they may offer:

- Attend religious services (formal connection).
- Spend time in nature (informal connection).
- Meditate/pray.
- Read/TV specials (PBS, Discovery Channel, etc.).
- Take classes (from studies of different religions/beliefs to martial arts to yoga).



Step 6: Make a Contribution (overhead)

A great way to improve your self-esteem is to give back to the world. Giving back to the community and others can make a difference.

Instructor: Ask the class to ask themselves the following questions:

- How do I currently give or contribute to something bigger than myself?
- What causes or issues concern me that I might become involved in?
- What skills do I have that can make a difference?

“Most people will find that they get more back from giving than they give out.”

Instructor: Have the class discuss the statement above. Most people find that by helping others they feel better about themselves. They also see others less fortunate than themselves and get inspiration and good feelings when receiving the gratitude of others.

Step 7: Take Care of Your Body

People with strong self-esteem take good care of their bodies, including their health and their appearance.

Instructor: Have the class answer the self-help questions in Enclosure 7. Stress the importance of taking action on those areas a little bit at a time.

Step 8: Develop Positive, Supportive Relationships

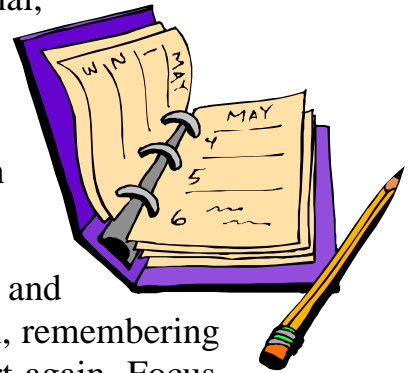
Although we cannot choose who is in our families and how we were treated as children, we have a lot to do with our relationships with other people after we grow up. Choosing to be around people who are good for us, and who encourage us to be the best we can be, will help us feel good about ourselves and develop a strong self-esteem.

Four Steps to Letting Go of Resentments (overhead)

One of the best ways to improve your relationships is to let go of any resentments towards others. It is not easy, but by letting go you will reclaim your power to choose. It frees you from wasting energy feeling bitter and angry.

Use these steps to let go of past or present hurts in your life:

1. **Find outlets for your feelings.** Writing in a journal, crying, or talking with a supportive person can help. You can also try physical outlets like punching a pillow or taking a brisk walk. It may sound silly, but it works. The worst thing one can do is hold it in.
2. **Separate forgiving from forgetting.** Letting go and forgiving doesn't mean you forget the hurt. Often, remembering past hurts can teach us how to prevent being hurt again. Focus on letting go of the feelings and learning from the experience.
3. **Practice forgiving small wrongs.** You can work up to letting go of bigger hurts by practicing on smaller wrongs. Practice letting go of anger and resentful feelings you may have about rude store clerks or inconsiderate drivers. Notice how much better you feel when you let the anger go. Then consider how freeing this process can be with bigger hurts. (Will the small wrong make a difference tomorrow, next week or next month?)



4. **Separate the act from the individual.** You may not approve of what someone did, but you don't have to go on resenting the person.

Instructor: Ask the class what outlets they use. Talk with the class about how holding a grudge or resentment can become all-consuming and limit a person's growth and overall happiness. By letting this happen, the other person "wins." If you "get even," will it ultimately make you feel better, be happier, or be a better person? Discuss with the class and see if they would like to share any personal experiences.

Step 9: Enjoy Your Work!

Many of us do not work in our ideal jobs. Since enjoying work is an excellent source of self-esteem, we need to find a job we can enjoy doing. If necessary, one needs to make positive career changes. Even if you are not in the job you ultimately want to have, take time to identify the positive aspects of your job. Also, use the job you have now to improve your skills to move you closer to your career goals.

Exercise for planning your career (See Enclosure 8.)

Instructor: Discuss this exercise with the class. This can be used as a way to encourage their pursuit of a construction career and joining the Laborers' Union.

Step 10: Celebrate Others



Everyone thinks differently. Often we disagree with how others think or what they say. But by developing tolerance for differences, we can help build our self-esteem. We have little control over what others say or do, thus it is not always easy to tolerate. Expect others to be different from you and to do things you disagree with. Allow others to be themselves. This will lower your stress and give you more confidence and self-esteem.

Remember, you can only control what you do and who you are. You can not control or change others. The most you can hope for is to influence them by being a positive role model.

Valuing the differences of culture (See Enclosure 9.)

Instructor: Have the class do the exercise on Celebrating Others. If the class has done workshops on working in multi-cultural workplaces, then this issue has already been covered. This is intended for the participants to report on their own biases and may help them understand how others are biased against them.

V. Conclusion

Instructor: Wrap up by saying, “It’s never too late to develop a positive self-image.” Emphasize that everyone at some point has self-doubts or wants to make themselves better. Positive Self-Esteem can only be achieved from within ourselves.

Positive Self-Esteem is a lifelong process of growing, and becoming more comfortable with yourself. If self-help workshops, books, or talking with true friends don’t help, sometimes one needs to seek professional assistance. Get professional help if you experience any of the following: (overhead)

- Long-term feelings of depression that interfere with your life.
- Hopelessness or suicidal feelings.
- Domestic violence or abuse.
- Drug or alcohol abuse.

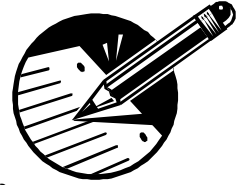


You can call your Member Assistance Program (MAP)*, if appropriate, or other professionals for confidential guidance and referral.

Otherwise: “Make the best of what you’ve got, it’s the only life you have!”

**Instructor: Find out if there is a MAP in this area before the class starts. The class participants may or may not be eligible for a MAP or mental health benefits, but they can always be referred to local community services (See the Yellow Pages under County/State services.) Have this information ready for distribution, if necessary. If the participants are eligible for a Laborers’ MAP, give them all a MAP brochure and tell the class that these are free, confidential services.*

Enclosure 1: How Strong Is Your Self-Esteem? – Exercise



The first step in building more positive self-esteem is to identify areas where your self-esteem may be weak. Take a few moments to complete this self-esteem inventory. Give yourself 3 points for “always,” 2 points for “sometimes,” and 1 point for “never.” **Be honest with yourself, and keep in mind that no one achieves a perfect score.**

1. Basic Self-Worth

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I think I am a worthwhile and lovable person. |
| ___ | ___ | ___ | I have a clear view of myself and my strengths and weaknesses. |
| ___ | ___ | ___ | I think I am a unique and special individual. |
| ___ | ___ | ___ | I think I deserve to be happy. |
| ___ | ___ | ___ | I am realistic in what I expect of myself. |

2. Accountability and Self-Responsibility

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I have clear values and standards that I use to make my decisions. |
| ___ | ___ | ___ | I accept responsibility for my mistakes without blaming others or making excuses. |
| ___ | ___ | ___ | I follow through when I make a promise or commitment. |
| ___ | ___ | ___ | I take responsibility for myself and don't use past wrongs or events as excuses for my problems or poor performance. |
| ___ | ___ | ___ | I create my own happiness and don't expect others to “make” me happy. |

3. Life Meaning and Purpose

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I have a sense of my spiritual self. |
| ___ | ___ | ___ | I know my life has meaning because I have unique gifts and talents that I can use to benefit others. |
| ___ | ___ | ___ | I give of myself to others. |
| ___ | ___ | ___ | I have a sense of belonging that gives a foundation to my life. |
| ___ | ___ | ___ | I have a clear sense of what is right and fair and use this to guide my daily decisions. |

4. Physical Self

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I am pleased with how I look. |
| ___ | ___ | ___ | I take good care of my body with healthy eating habits, regular exercise, and enough rest. |
| ___ | ___ | ___ | I drink alcohol in moderation (or not at all) and don't abuse drugs. |
| ___ | ___ | ___ | I am comfortable with my sexuality. |
| ___ | ___ | ___ | I take time to enjoy my senses: sight, taste, smell, touch, and hearing. |

5. Family and Relationships

Always Sometimes Never

- | | | | |
|-----|-----|-----|---|
| ___ | ___ | ___ | I have people in my life who love me and support me. |
| ___ | ___ | ___ | I am important to the people in my life, and I have something to offer them. |
| ___ | ___ | ___ | I ask for help when I need it, and I share my feelings with others. |
| ___ | ___ | ___ | I try to resolve disagreements and bad feelings with others. I don't hold onto resentments. |
| ___ | ___ | ___ | I put boundaries up when others are abusive, try to put me down, or treat me badly. |

6. Work and Career

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I feel satisfied with my work. |
| ___ | ___ | ___ | I do my job well. |
| ___ | ___ | ___ | I am proud of what I've done. |
| ___ | ___ | ___ | I work toward future goals. |
| ___ | ___ | ___ | I think what I do is important and valued. |

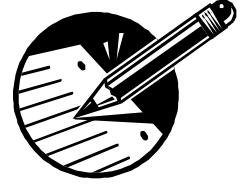
7. Accepting Others

Always Sometimes Never

- | | | | |
|-----|-----|-----|--|
| ___ | ___ | ___ | I respect the basic worth of every human being. |
| ___ | ___ | ___ | I accept and appreciate people whose race, religion, or sexual orientation is different from my own. |
| ___ | ___ | ___ | I work comfortably and communicate well with people who think differently from me. |
| ___ | ___ | ___ | I appreciate others for being different from me. |
| ___ | ___ | ___ | I understand that different cultures and ways of life can enrich my life. |

How to interpret your results. If you scored less than 15 in each category, there is room for improvement on your self-esteem. Keep in mind that your scores aren't permanent. How we feel about ourselves can change from day to day. Try taking this self-esteem inventory again in a few weeks, after you complete some of the exercises and activities in this program. You may be surprised at how much your score – and how you feel about yourself – has improved.

Enclosure 2: Building a Support System



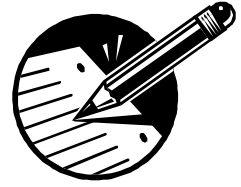
Answer the following questions. Be prepared to support your answers.

Who would I call if I needed support? Why?

Who can call on me for support? Why?

What relationships could I develop for more support? Why?

Enclosure 3: Self-Evaluation Exercise

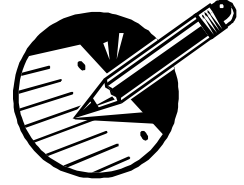


Answer the following questions to the best of your ability. Be honest with yourself – no one is perfect. You will not be required to share your answers with the class.

My positive qualities are (or, what I like about myself):

Things I'd like to change about myself (or, what I don't like about myself):

Enclosure 4: Revealing the “Internal Critic”



You can begin to develop stronger self-esteem by becoming aware of what your internal critic is saying and then changing the “messages” to more positive ones. Try this exercise.

1. **Pay attention.** Think of a situation where you felt guilty, anxious or inadequate.
2. **Listen.** What did your internal critic say to you in that situation? Was the voice harsh and critical or kind and supportive?
3. **Feel the feelings.** Pay attention to how the message your inner voice gave you made you feel.
4. **Is the message positive or negative?**

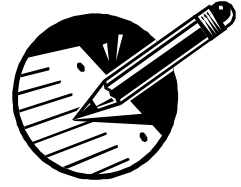
Example: A person makes a big mistake at work.

Negative message: “I’m a screw-up.”

Positive message: “Next time I’ll know not to do that.”

In the future, when faced with negative situations recognize that no one is perfect and mistakes or differences can be opportunities to learn and improve.

Enclosure 5: Changing Your Victim Language



Use the following space to identify what you might use as victim language and change it to self-responsible language.
(*Example: I can't get the job, because they're not going to want me.*)

I can't

because

Change to:

(*Example: I choose to apply for the job, because only if I apply will I get the chance to work there.*)

I choose

because

AND

(*Example: I have to take this class, because my parents are forcing me to.*)

I have to

because

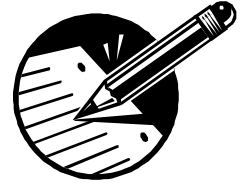
Change to:

(*Example: I've decided to take this class, because it will help me to get a good job.*)

I've decided

because

Enclosure 6: Planning For Getting Involved



Use the following space to make a plan for building connection with others.

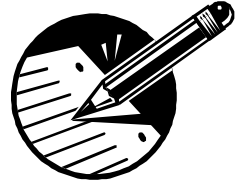
1. These are the places in my life where I feel that I belong:

2. These are the people I want to spend more time with because they make me feel that I belong and have self-worth:

3. These are the people I want to spend less time with because they don't make me feel that I belong and have self-worth:

4. These are the sports, hobbies, causes or groups I'm interested in becoming involved with to develop more community in my life:

Enclosure 7: Taking Care of Your Body



Please answer these questions about ways to improve your health:

1. What am I currently doing to maintain and protect my health and body? _

2. How can I improve my diet? _____

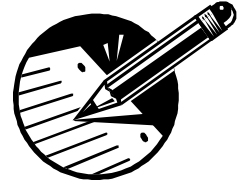
3. What can I do to become more fit? _____

4. Am I getting enough rest? _____

5. Are there things I can do to better minimize the stress in my life? _____

6. What do I like and enjoy about how I look right now? _____

7. What would I like to do to improve the way I look? _____



Enclosure 8: Planning Your Career

How satisfied am I with what I am currently doing in life?

What talents and skills do I have to offer?

Are my talents and skills being used right now?

If not, how can I go about using them better in my current situation or in another setting?

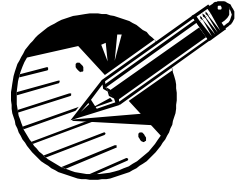
Is there some kind of work I would prefer doing?

What is holding me back from doing the work I'd really like?

What steps do I need to take, including getting more education and skills, to feel more satisfied in the work I hope to perform?

What are my goals if I go into construction and join the Laborers' Union?

Enclosure 9: Celebrating Others



Here are some ideas to help you build your own tolerance and teach you to value the differences in others.

- **Examine your own biases and prejudices.** How do you look at or think about people who are different from you? Do you hold “truths” (preconceived notions or stereotypes) about people of certain races, religions, cultures, or sexual orientation?

Explain: _____

- **Learn about people who are different.** Read, attend cultural festivals, travel. Learning about different cultures and different ways of living can be both interesting and enlightening. Who knows, you may find out something about yourself.

Have you done this? _____

- **Walk in someone else’s shoes.** When you think, “He’s ____ (stupid, lazy, rude, ugly, incompetent, wrong, etc.) because he’s ____ (of a different color, religion, culture, sexual orientation, physically handicapped, etc.),” consider how you would feel if people judged you on one characteristic. (Like the color of your hair or your height.)

Give personal examples of judging someone and being judged and once you/they received more information, how it turned out to be wrong. _____

Building a Positive Self-Esteem

Laborers-AGC
Education and Training Fund
Laborers' Health and Safety Fund of
North America

7 Areas for Building Self-Esteem

- ⇒ Basic Self-worth
- ⇒ Accountability and Responsibility
- ⇒ Life Meaning and Purpose
- ⇒ Physical Self
- ⇒ Family and Relationships
- ⇒ Work and Career
- ⇒ Acceptance of Others

Accountability and Responsibility

- ⇒ ... our lives
- ⇒ ... our choices
- ⇒ ... our actions
- ⇒ ... our happiness
- ⇒ ... our problems
- ⇒ ... our mistakes
- ⇒ ... our health
- ⇒ ... our promises
- ⇒ ... our goals

Ten Steps to Building Self-Esteem

- ⇒ Step 1: Take a Look at Yourself
- ⇒ Step 2: Use Positive "Self-Talk"
- ⇒ Step 3: Accept Responsibility
- ⇒ Step 4: Get Involved with Others
- ⇒ Step 5: Develop Your Spirituality

Ten Steps to Building Self-Esteem

- ⇒ Step 6: Make a Contribution
- ⇒ Step 7: Take Care of Your Body
- ⇒ Step 8: Develop Positive Relationships
- ⇒ Step 9: Enjoy Your Work
- ⇒ Step 10: Celebrate Others

Making a Contribution

- ⇒ How do I give to something bigger than me?
- ⇒ What causes might I get involved in?
- ⇒ What skills do I have that will make a difference?

"Most people will find that they get more from giving than they give out."

Letting Go of Resentments

- ⇒ Find Outlets for Your Feelings
- ⇒ Separate Forgiving from Forgetting
- ⇒ Forgive Small Wrongs
- ⇒ Separate the Act from the Individual

Get Professional Help for ...

- ⇒ Long-term Depression
- ⇒ Hopelessness/Suicidal Thoughts
- ⇒ Domestic Violence
- ⇒ Drug or Alcohol Abuse

Ways to Manage Your **STRESS**

(Instructor Guide)



Produced in-house by the
Laborers' Health & Safety Fund of North America
for the
Laborers-AGC Minority Worker Training Program
(Funds for this publication provided by the
National Institute of Environmental Health Sciences.)

August 2001

Workshop Objectives

This workshop is designed to demonstrate to the participant the basic elements of stress management. It is intended to define stress, show the impact of stress and demonstrate stress management methods to use both on and off the job.

Length:

Total of two hours, with a ten minute break in between 55-minute sessions. Can be longer with more interaction and use of video.

Intended Audience:

This workshop is designed for any worker or adult training class.

Instructor Aides:

- Instructor Guide: Ways to Manage Your Stress (LHSFNA)
- Participant Guide: Ways to Manage Your Stress (LHSFNA)
- “A Guide to Managing Stress” (optional; purchase from Krames Communications, 1-800-333-3032)
- Video: “Dealing with Stress” (optional; purchase from Coastal Human Resources, 1-800-767-7703)
- “Stress dots” (optional from LHSFNA)

Materials/Supplies Needed:

- Flip chart
- VCR with large monitor



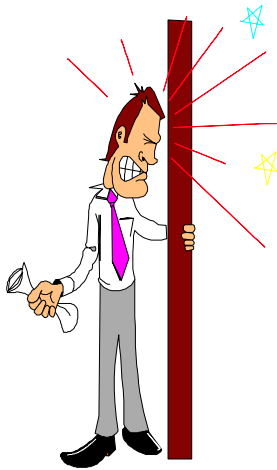
Ways to Manage Your Stress

This workshop is designed to help participants find ways to manage their stress both on the job and off. By keeping an open mind, participants will discover or rediscover methods to lower their daily stress levels. There is no “quick fix” or “magic pill.” Many small things done on a regular basis will not only help you overcome major crises, but also the everyday small stresses that are just, if not more, harmful to your health and happiness.

Level of Stress Exercise

“Just How Stressed Are You?”

Find out by performing the exercises on pages 3 and 4 of this guide. This is not a test so be honest with yourself so as to get a true indicator of your current stress level. There are no right or wrong answers.



Instructor: Have the class participants do “Just How Stressed Are You?” in the participant guide. Explain to them that it is important to be honest with themselves so that they can get a true picture of what their stress levels are at that current time. Give them plenty of time, then go over the scoring guide at the end of the exercise. Do not get too deeply into good or bad ratings. Tell the class that this is just an indicator. More details will follow in the workshop. (“Hold that thought!”) Instructors should explain that this workshop will help them in lowering or controlling their stress in the future, even if their current levels are not high (during times of crisis, etc.).

JUST HOW STRESSED ARE YOU ?

For each question write “M” for “most of the time,” “A” for “almost never” or “S” for “sometimes.”

- _____ 1. Are you able to keep a positive attitude and not get upset over little or trivial things?
- _____ 2. Are you able to talk yourself out of feeling stressed?
- _____ 3. Do you use any relaxation techniques when you feel stressed?
- _____ 4. Do you get at least 20 minutes of exercise (or other physical activities) a day?
- _____ 5. Do you set aside part of each day for spending quality time with family or friends?
- _____ 6. Is it difficult to express yourself or communicate effectively when conflicts arise?
- _____ 7. Do you lose sleep at night worrying about your work, career or family?
- _____ 8. Do you feel like you don't ever have enough time to relax?
- _____ 9. Do you skip meals, breaks or vacation time because you would rather work?
- _____ 10. Do you think about what to say next while others are speaking to you?

Bonus questions:

List 3 things that cause you stress in your life:

- 1. _____
- 2. _____
- 3. _____

List three ways you feel or ways you react when you experience this stress:

1. _____

2. _____

3. _____

SCORING GUIDE FOR JUST HOW STRESSED ARE YOU?

- For Questions # 1-5, score 10 points for each “ALMOST NEVER” answer and 5 points for each “SOMETIMES” answer.
- For Questions # 6-10, score 10 points for each “MOST OF THE TIME” answer and 5 points for each “SOMETIMES” answer.
- For the two Bonus Questions, subtract 5 points for each one that you were able to complete with all three filled in.

√ If your score was above 30 points:
Stress is a big deal in your life. Start thinking of how to make changes now to help prevent serious health consequences.

√ If your score was between 20- 30 points:
Stress is definitely a presence in your life, and it’s possible that any major life change or trauma could easily move you into the above category.

√ If you score was below 20 points:
Stress may be a factor in your life, but your score indicates you have developed some positive coping mechanisms to handle it.

What is this Thing Called Stress?

Instructor: Have class participants give their definition of what stress is to them. Remember, there are no wrong answers: “One person’s stress is another person’s stimulation.” Most people will give examples of stress. Main points:

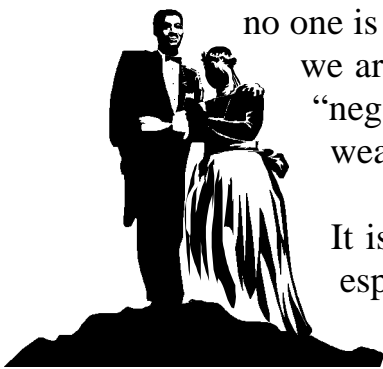
Stress is not the incident but your reaction to the incident. Stress is not the incident (e.g., traffic jam, paying bills, or marriage problems). Stress is your *reaction* to these incidents (e.g., becoming angry, being nervous, crying, acting irrational, etc.).

Stress is a very natural reaction to these types of events. It can be physical or mental. It comes from our past, the beginning of our existence (in the “caveman” days). It is a natural involuntary reaction. Like blinking your eyes when an object comes close, your body/mind is trying to protect you. It’s part of the “Fight or Flight” reaction. Either defend yourself (fight) or run away (flight) to survive.

Instructor: If used, also refer to page 2 of the booklet, “A Guide to Managing positive and negative stress. Tell the class that stressors are simply situations/events which cause stress. Negative – a death in the family. Positive – getting married. Both, however, cause stress and can be harmful if not managed properly.

Stress can be a hard thing to talk about. Everybody knows when they have it, but no one is exactly sure just what it is. Usually, when we talk about stress, we are referring to “negative stress.” Most people would agree that “negative stress” is any abnormal demand or threat that causes wear and tear on our bodies and our sense of well being.

It is important to realize that stress can have positive effects too, especially when it helps us meet the challenges or demands we face.



Human Stress Response

Instructor: This portion covers how the body physically reacts to stress. If available, you can use AP posters at the training site or other illustrations from the LHSFNA.

When most people perceive or anticipate a threatening or challenging situation, this results in a “stress response.” This “stress response” has a number of physical features.

In any normal day, we regularly respond to challenges, demands and sometimes even threats, often without consciously thinking about our responses. Some might say that a certain amount of stress is okay, as long as it comes in limited doses for short periods of time. Under these conditions, your body and mind have coping mechanisms to deal with these types of stresses. Your stress response can be divided into three parts:

1. Facing the challenging, demanding or threatening situation
2. Dealing with the challenge, demand or threat
3. Followed by automatic relaxation

Your response to stress is real; it is not an “attitude” or a “personal problem.”

An example of this stress response would be running to catch the subway train so you won't be late for work. As your mind sees the train coming, your body goes into overdrive, and you start running, reaching the door of the train just as it is closing. You may be tired from dealing with the challenge of rushing when you take your seat, but there is also a sense of relief because you did manage to catch the train and you won't be late for work after all. Now your body can relax and return to its normal operating level.



A stress response can also occur when your team wins the Super Bowl in the final seconds of the game. The adrenaline pumps through your body and all your systems are running on high. But, after a few moments, your body relaxes and you are left with a pleasant sense of satisfaction or well being.

Response to a situation that causes stress has **physical symptoms**. (The body reacts to stress.)

Symptomatic Nervous System Activity

The body produces adrenalin which gives you more energy and makes you more alert, but also makes people nervous/jumpy and puts them on edge.

Body Metabolism



Heart rate up
Blood pressure up
Breathing rate up
Oxygen consumption up

This is good if you are more active and put these functions to use. But if it is only mental stress for a long period of time, it may eventually damage the body.

Muscular Tension

The body's muscles tense, getting ready for action. This makes it hard for the person to relax and causes stress headaches, mainly in the neck and shoulders.

Blood Clotting Time

Blood clot levels go up (blood thickens) to protect you from physical injuries (e.g., cuts). This might be useful in the short-run, but if it occurs for a long period of time this can lead to heart/artery problems.

Blood Flow Storage

Blood flow stays mainly around your vital organs (heart, lungs, etc.) and major muscles to prepare you for "fight or flight." (For example, if you were being chased by a wild tiger and the tiger bites your hand, your blood is mainly flowing around your vital organs to protect them). But this also causes poor circulation in your limbs (hands, feet) and can be very bad, especially if in conjunction with other health problems, like diabetes.

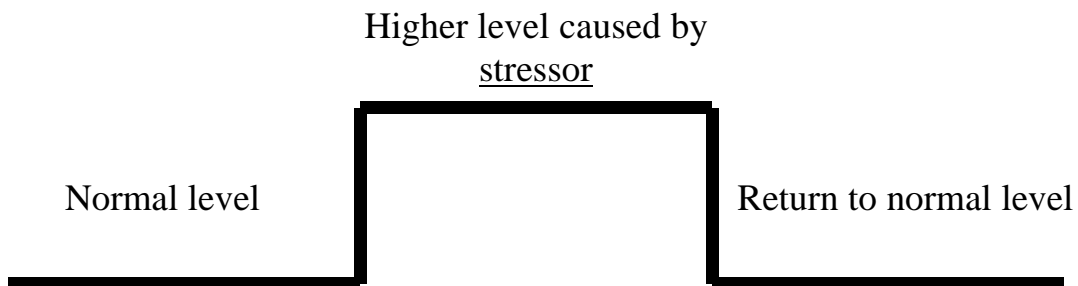
These automatic bodily changes, which occur almost instantly, prepare us for the physical exertion that may occur during the “fight or flight” response. In prehistoric times, this response helped us to survive in a world filled with danger. But in today's world, where the stressors are more mental than physical, this can amount to having a continuous “fight or flight” response, which can have extremely harmful effects on our bodies and our emotions.

Instructor: Also refer to pages 4 and 5 of “A Guide to Managing Stress” by Krames. Ask the class if they have ever noticed any of these reactions: If you have stress dots, give them out here. Have the class put them on the top of hand, refer to them after 10 minutes: black = stress, blue = calm. However, remember that some people have poor circulation or naturally have cooler extremities (mainly women). The stress dots are only a crude indicator, but the class can refer back to them during the class period and the rest of the day.

Normal Stress Reactions and the Staircase Effect

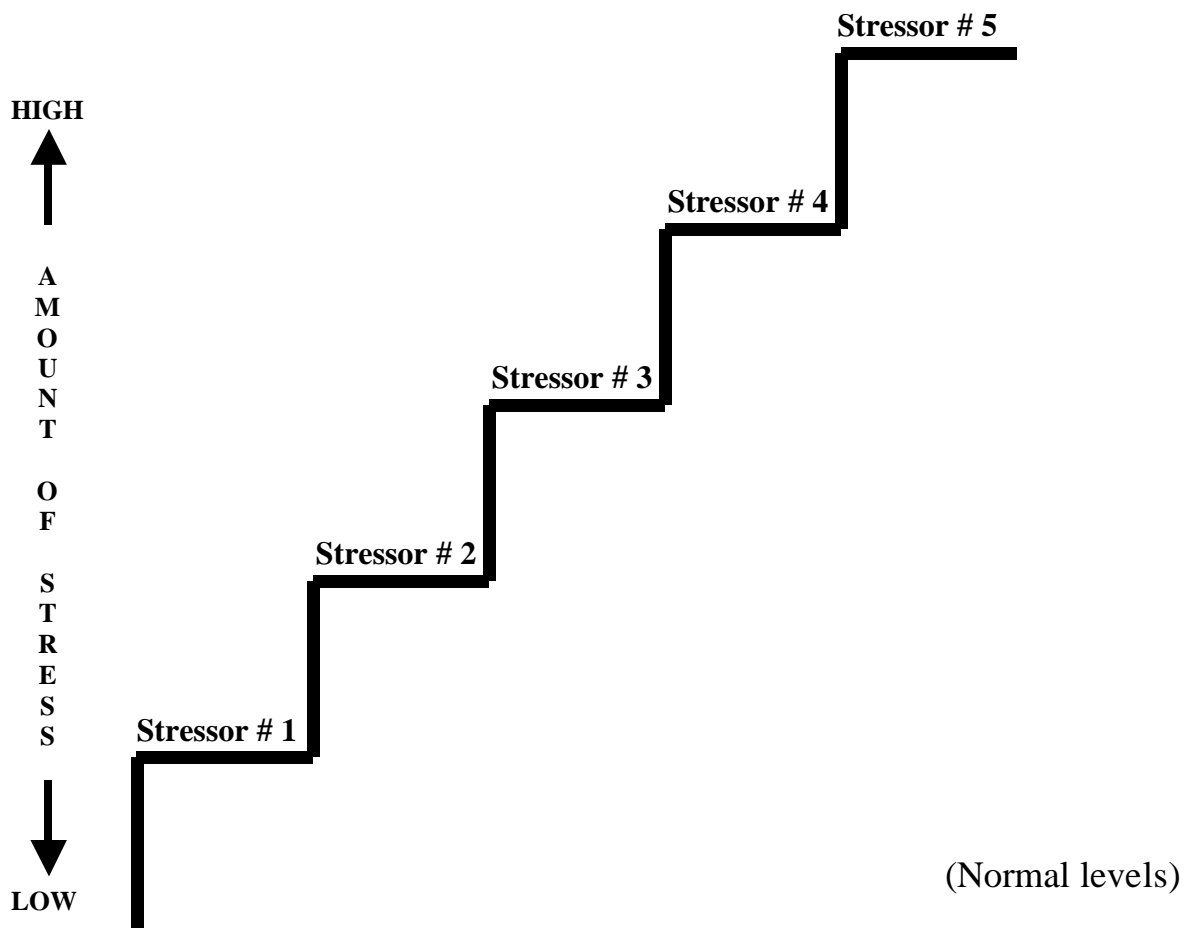
Instructor: This portion is intended to show the problems caused by continuous stress buildup.

The normal stress reaction is once you have a stressor you then mentally and physically operate at a higher level of activity and awareness. Then, once the stressor has passed, you relax and your body will return to its normal level of stress. An example of this would be a firefighter. Normally for a firefighter, the alarm goes off at the firehouse and the stress goes up, stays up, and the physical and mental reactions it causes, helps in putting out the fire (stressor). When the fire is over, and when the firefighter is back at the firehouse, he/she relaxes both physically and mentally. The stress level goes back to normal, ready to fight the next fire (stressor).



Instructor: Ask the students to give examples of continuous stressors over the course of a stressful day (perhaps even today). Use the Instructor's own experience if necessary. Example: Alarm didn't go off, car didn't start, kids lost homework, etc. See how these "build the staircase" over the day.

The **staircase effect** happens when, because of the types of stressors, or their frequency, or the personality of the person, the stress does not go back to normal, but stays up and keeps going up with each new stressor. Because of this, the person will never have a chance or take the time, to relax and return to a normal level of stress.



The body is designed to work most effectively around the normal resting state. However, when we have inadequate time or ability to return to our normal resting state after exposure to a stressor, the stress response to the next stressor will be added to the remaining effects of the previous stressor. This build-up or accumulation of stress is most often caused by setting off the stress response for inappropriate and non-life threatening reasons. Cumulative stress can become chronic stress, which can be very damaging to the body.

Chronic Stress and the Body

Instructor: Have class do exercise, “Cumulative Stress Test” (on page 11 of the Participant Guide). Discuss with the class that if they have had a lot of stressful events (good or bad) during the last year, especially within the last 6 months, that it will be harder for them to cope with the next major stressor. In addition, having a high score on the test also makes them more likely to develop future medical problems. That is why it is important to treat your body as if it is ill when you are under a lot of stress, especially for a long period of time. (More sleep/rest, eat well, lots of water, relaxation techniques, etc.)

Chronic stress is a killer! Prolonged stress levels can lead to many physical problems, from high blood pressure to neck and back pain to maybe even various types of cancer. People with long-term stress also may have psychological and social problems, such as being irritable, using drugs/alcohol, or depression.

One difficulty in understanding the effects of stress is that the same stressful conditions can cause different results in different individuals. These stressors may cause one person to develop headaches, another to lose sleep and not affect someone else. Stress may cause some people to become depressed and withdrawn, while others might use alcohol excessively or engage in other compulsive behavior like gambling or overeating.

Because individual responses vary so much, the fact that all these different reactions may have a common cause is hidden. This leads some people to blame themselves for being “stressed out.” They think they are the only ones who “can’t handle it.” The truth is we are all unique in the varied ways we perceive and react to the many stresses in our lives. When untreated, chronic stress response can have many serious health consequences. Some of these are:

High Blood Pressure

Heart Attacks

Headaches

Ulcers

Neck & Back pain

Arthritis

Insomnia

Colitis

More Frequent Colds

Asthmas

Weight loss/gain

Sexual dysfunction

In addition to the above physical health problems, people under chronic stress often report feelings of tension, anxiety, boredom, depression, anger and low self-esteem. Because chronic stress reactions may include fatigue, frustration or apathy, when under stress, a person may withdraw from their families, friends and social and community activities. The isolation that follows may then further intensify the effects of stress. Some common psychological signs of chronic stress are:

Being irritable

Getting angry easily

Lack of energy

Misuse of alcohol or drugs

Over/under eating

Disturbed sleep/nightmares

Depression

Abnormal risk taking

CUMULATIVE STRESS TEST

This index lists forty-three sample stressful life events and the value of each in “stress units.” Check those events that have occurred in your life during the past twelve months.

<u>LIFE EVENT</u>	<u>VALUE</u>	<u>YOUR SCORE</u>
Death of a spouse	100	_____
Divorce	73	_____
Jail term	65	_____
Marital separation	63	_____
Death of a close family member	63	_____
Personal injury or illness	53	_____
Marriage	50	_____
Fired from work	47	_____
Death of a close friend/coworker	45	_____
Marital reconciliation	45	_____
Retirement	45	_____
Change in health of family member	44	_____
Eye-witnessing a serious injury or death	40	_____
Pregnancy	40	_____
Sex difficulties	39	_____
Gain of new family member	39	_____
Business readjustment	39	_____
Change in financial state	38	_____
Change to different line of work	36	_____
Change in number of arguments with spouse	35	_____
Mortgage over \$100,000	31	_____
Foreclosure of mortgage or loan	30	_____
Change in responsibilities at work	29	_____
Son or daughter leaving home	29	_____
Trouble with in-laws	29	_____
Outstanding personal achievement	28	_____
Wife begins or stops work	26	_____
Begin or end school	26	_____
Change in living conditions	26	_____
Revision of personal habits	25	_____
Trouble with boss	24	_____
Change in work hours or conditions	23	_____
Change in residence	20	_____
Change in schools	20	_____
Change in recreation	19	_____
Change in church/social activities	19	_____
Mortgage or loan less than \$100,000	17	_____
Change in sleeping habits	16	_____
Change in # of family get-togethers	15	_____
Change in eating habits	15	_____
Vacation	13	_____
Christmas	12	_____
Minor violations of the law	11	_____
Your total		_____

If your score is:

- 150 – 199
- 200 – 300
- Over 300

You are experiencing:

- mild life crisis
- moderate life crisis
- major life crisis

What are your chances of becoming physically ill from stress?

- 150 – 199: 37%
- 200 – 300: 51%
- Over 300: 80%

Remember, a high score is not a guarantee of illness. It is simply an indication that, because of the stress you have been subjected to, there is a chance of becoming ill. It is very important to understand that the amount of stress one has experienced during the last year will greatly determine how well they will handle the next major stressor or traumatic event.

Stress Awareness

Instructor: Tell the class that unless they become aware of what causes their stress and how they react to it, they will never be able to manage their stress levels.

Becoming aware of stress is a two-step process:

STEP ONE: Identify your stressors. (What causes your stress?: work, home life, health, finances, etc.)

STEP TWO: Realize how your body feels under stress. (Look for the mental and physical symptoms that you have after a stressor.)

- √ First, try to recognize and identify the things in your life that cause you to feel stress. These may be minor hassles, major lifestyle changes, or a combination of both.
- √ Then, once you realize what causes your stress response, try to focus on how your body feels under stress. For example, you may know that getting caught in traffic is one of your stressors, but do you know how your body reacts? Do your muscles tense up? Does your heart start beating faster?
- √ Identifying your stressors and noting your physical reactions will better prepare you to deal with the problem and learn how to control your level of stress.

Recognize the Stressors

Stressors usually fall into one of the following categories:

- Minor hassles
- Major changes
- Stress overload
- Feeling helpless

Minor hassles are those daily annoyances that are a part of day-to-day life. Traffic jams, missed buses, lost car keys, and petty disagreements are rarely earth-shattering events, but their side effects can accumulate. Even these minor irritations can lead to chronic, negative stress and health-related problems, so try to be more aware of the situations in your life and work that “get your blood pressure up.”



Major changes are any changes – positive or negative – that affect your lifestyle. Positive changes, like the birth of a new baby or a promotion, can be just as stressful as negative changes such as the loss of a loved one or being laid off from a job. Most major lifestyle changes require you to adapt to new or unknown situations, which itself can be stressful.

Stress overload can occur when you find yourself faced with situations beyond your control that have combined to an unmanageable level. At home or in the workplace, there may be times when you feel pulled in so many directions at once that you're not sure what to deal with first. Try to accept the fact that it's virtually impossible to control all of life's variables.

Feeling helpless often results when the cause of your stress is not easily recognizable or manageable. If you (or someone you know) feel as if there's “no way out,” or feel overwhelmed or depressed, seek out professional help. Your family doctor, your employer, your union, or your local health agencies can refer you to a specialist who can help you to cope with these feelings.

When you have recognized your stressors, then you should also recognize what your body is trying to tell you. Some reactions are physical, some are emotional, and some are mental.

Finding Solutions

The Instructor can use some of the examples of stress shared by the participants and put them into categories of what is controllable and what is not controllable. Things that aren't controllable are those which require good coping skills.

Once you're identified the causes of your stress, it's easier to find solutions to the problems.

Avoiding hassles can help you to eliminate some of the minor irritations that lead to chronic, negative stress. If rush-hour traffic “drives you up a wall,” why not join (or start) a carpool, or try taking public transportation? If rushing to get to work on time makes you anxious, try getting up earlier. If one of your co-workers annoys you, try to find a “middle ground” in which you work together or avoid that person altogether.

Controlling changes in life isn't as difficult as it may sound. When one aspect of your life changes (positively or negatively), do what you can to limit other changes. If you've just started going back to school, maybe you should put off starting a family. If you've recently had a major life change, make an effort to continue doing the things that bring you pleasure. Don't change your entire lifestyle just because one aspect of your life has changed. In general, remember that change, even positive change, causes stress, so be prepared to use your coping skills at that time.

Take a break when your stressors combine to push you to the “I can't cope” level. Sometimes you need to get a little distance from a troubling situation or work problem to figure out how to deal with situations effectively. Take a few minutes by yourself to calm down. Sit down, relax, and then decide what needs to be done immediately, what can wait until later, and so on. Use the old saying “Sleep on it,” if you wish. Many things often look different after a good night's sleep. And remember to take it one step at a time.



Finding help is the best solution when you feel overwhelmed or unable to deal with stress on your own. First, try talking to your friends, family minister or another person whom you respect, then if you are still troubled you may wish to see your doctor. If no physical problem exists, consider seeing a professional counselor who can help you understand your feelings. Even when you feel “helpless,” remember help is available. If your health plan or union has a Member Assistance Program (MAP), it is an excellent source to help you learn ways to manage your stress.

Stress On the Job

Instructor: Depending on time constraints and population, the Instructor may want to spend more or less time on this portion of the program. Job stressors are often different from personal stressors, but the physical results are the same. Discuss such things as increased workload, lack of proper equipment, hazardous working conditions, etc., and their effect on the typical Laborer's experience. Then discuss how the participants would deal with those situations to reduce their own levels of stress on the job. Let the class report what they feel causes workplace stress and then discuss with the class.

Just as having a job will relieve certain stressors, such as lack of money or meeting goals in life, it can also cause stress, which is normal. However, high continuous levels of stress are not normal and can be very damaging.

People often consider workplace stress as “part of the job” or “just something to put up with until quitting time.” However, when workplace stress goes on day after day



over a long period of time, our reaction to it can become chronic, that is, our bodies continue to react as if everything were an emergency. This chronic stress response can be caused by things like an increased workload, lack of proper equipment or resources, unpredictable job futures, disciplinary actions, hazardous working conditions, and never feeling recognized for the work you do.

What Causes Stress at Work ?

Much research has been done about workplace stress. Here are some of the top causes of workplace stress:

- A lack of control over your work situation
- No chance to use your job skills, creativity or intelligence
- Lack of say over what you are producing and how
- Excessive noise
- Poor ventilation, lighting or heating
- Hazardous or dangerous working conditions (real or imagined)
- Shift work (normal and rotating)
- Conflicting job demands (production vs. quality)
- Lack of job security

- Lack of recognition for good work
- Lack of respect or cooperation from co-workers, supervisors, managers or the public
- Harassment from co-workers, supervisors, managers or the public
- Racism, sexism and other forms of prejudice
- Physical isolation from co-workers
- Psychological isolation from co-workers

Take a moment and write down a few causes of workplace stress you may have encountered (or may expect to) below:

Instructor: Discuss the “perfect world” of the classroom and the “real world” of the workplace. How are they different, how are they similar? Also discuss that you need to combine the goals of obtaining perfection within the reality of the imperfect world we work and live in to be successful in both work and your personal life. Remind the class that those who become union members can take an active role in making the workplace better for everyone.

Easy Stress Reducers To Use At Work

Instructor: Have the class go over each stress reducer and then discuss how they could do this in the workplace. Where appropriate, use your own personal experiences as examples.

- **Personal Time Out.** Take a step back and try pretending you are watching a movie of yourself and the stressful situation.
- **Avoid Battles With Your Co-Workers.** If you think about it, even if you win, you usually lose in the end.
- **Develop Some Workplace Friends.** To talk to, laugh with, and to just blow off some steam.
- **Change The Channel.** Either “turn off” troubling thoughts or switch to some that are more pleasant and more productive.
- **Deep Breathing.** Scientifically proven as one of the most effective of all short term remedies when you are uptight!
- **Progressive Muscle Relaxation.** This technique consists of alternately tensing and then relaxing specific muscle groups (neck, back).
- **Clearing Your Head.** Take yourself away from the “heat of the battle” for a few seconds to a few minutes, several times a day, to “recharge your batteries.”
- **Maintain Your Perspective.** Work hard, but remind yourself that your worth as a person is not judged by what you do at work (or how good you are at it.)
- **Happiness Is Not A Right.** Happiness is the reward we get when things “work out” – usually because we worked hard to make it happen.
- **Allow Yourself To Have A Less Than Perfect Day.** People make mistakes, things happen – so remember that you can plan for the future, but not the outcome, so sometimes it’s best to just let it go.

Take a moment to visualize yourself in a common stressful situation at work. Select one (or more) of the above stress reducers and imagine you are actually using it successfully to eliminate or at least reduce your stress response. Imagine yourself moving on to the next task or activity without the “baggage” of the stress response. Savor this feeling of “heading off” a stress reaction.

Developing Good Listening Skills

Instructor: Emphasize that good listening skills do not come naturally to most people. It takes time and a conscious effort to do it well.

A significant cause of workplace stress (all stress for that matter), is poor communication skills. The ability to properly communicate information and to really listen to what others are saying is extremely important.

Listening Requires Effort!

The ability to listen is not an inborn trait. It takes a conscious effort to do it well. Listening to others is a key component of effective communication.

Successful listeners are those people who:

- **Listen intently** – Their minds do not “wander.” They concentrate on what the other person is saying.
- **Don't interrupt** – Nor are they constantly thinking only of what they want to say when the speaker finishes.
- **Are patient** – Nothing is more annoying than people who do not have the patience (or the courtesy) to hear you out.
- **Are concerned** – They care about what the other person is saying to them, because they care about that person's views.



If you don't understand or don't hear what someone says, ask the person to repeat it. If you are doing the talking, make sure your listener hears and understands what you mean. Asking for clarification and ensuring understanding prevents miscommunication, which often contributes to stress.

Stress Reduction Exercises and Techniques

Instructor: If time permits, conduct some stress reduction stretching exercises with the class. These can be found on the next page, “Relax Your Stress Triangle.” If used, exercises can also be found in the booklet, “A Guide to Managing Stress,” starting on page 8.

Exercise is a great way to reduce stress. Also, there are many stress relief techniques that a person can do on a daily basis to lower high levels of stress.

Note: Stress reduction techniques that can be started **today**, at work or anywhere and that you can do no matter what else, especially when under a lot of stress.

1. Deep Breathing (the right way)
2. Stretching
3. Drinking lots of water



Relax Your “Stress Triangle”

Instructor: Exercises to Relieve Headaches and Tension. Have the class actually try these exercises, if time permits.

Traffic gets worse. It’s your busy season at work. You’re trying to go to school at the same time. Your shoulders tense, your neck aches, you feel as if your head is gripped in a vise! The head, neck, and shoulder areas (which form the “stress triangle”) are the places where we hold much of our tension. Learning how to release the tension in these muscles can help us relax and “de-stress.”

Find Your “Stress Triangle”

Place your left hand on your right shoulder. Move your fingers halfway in toward your neck. You’re at one point of the triangle. The second point is the same place off your left shoulder. The third point is on your forehead, between your eyes. This “stress triangle” is where we hold much of our tension.

Why Tense Muscles Hurt

Your muscles tighten to protect you. That was important to your prehistoric ancestors, who needed to fight or run. But usually, you don’t need that protection. When your muscle shortens, and then holds that position, “metabolites” (the waste products from muscle activity) get trapped, causing pain. The pain is released when the muscle regains its natural length.

Stretch Away Tension

These simple stretches and rolls can help relieve tightness in your “stress triangle.”

- **Neck roll.** Stretch your right ear to your right shoulder, keeping your left shoulder pulled down. Roll your head down so your chin is on your chest. Continue on to your left side. Do rolls from side to side. Begin with eight, build up to 16.
- **Shoulder shrug.** Draw a big circle with your shoulders, one at a time. Start with four, build up to eight times, going forward, then back.



- **Pick fruit.** With one hand, reach up as if you were picking an apple from a tree slightly ahead and far above you. Go from one arm to the other, building up to eight times on each side.
- **Massage yourself.** Use your right hand to work on your left shoulder and your left hand on your right shoulder. Work your fingers gently but firmly, beginning with your should blade, moving up toward the neck and including the scalp.
- **Standing body roll.** Let your head roll forward until your chin is on your chest. Keep rolling down as your knees begin to bend. When your hands are hanging near your knees, rest there a moment and slowly roll back up. Work up to ten times.

Welcome Release

At work, at home, or wherever you are, take a few moments to release stress. Use these exercises every couple of hours, if necessary. You'll feel better and prevent tension from building up both physically and mentally.



Ways to Manage Your Stress

Instructor: Review the eight points listed below, which relate to the exercise on the next page.

- 1. Sleep.** The average adult in 1900 got 8-9 hours of sleep per night. The average adult today gets less than 7 hours. Sleep is very important to managing your level of stress, especially during times of crisis.
- 2. Diet.** Not only is this statement “you are what you eat” true, but eating healthy foods helps give you energy and lowers your stress. This includes stopping poor snacking habits and excessive use of drugs and alcohol. Always drink a lot of water, especially during times of high stress.
- 3. Exercise.** A moderate exercise program three times a week will do wonders in helping both to lower a person’s level of stress and increase resistance to future stress. Not only does exercise relax the body, flush out toxic chemicals and build up resistance to future stress, it also releases positive chemicals into the body which helps us relax.
- 4. Leisure Time.** Learn to relax. Build this into your daily life. Find activities away from work. Decompress after work before you go home.
- 5. Family & Friends.** Good friends and family give one a support system that helps them cope. Having someone to talk to is important to controlling your level of stress.
- 6. Get Organized.** Being organized helps lower stress. Get a daily planner. Build in family or relaxation time into your schedule just like you do work or chores.
- 7. Establish Goals in Life.** Make goals realistic and, therefore, obtainable. If you fall back, don’t punish yourself. Just get back on track and look toward the future.
- 8. Ventilate.** Talking is great medicine. If necessary, seek professional help, such as your Member Assistance Program (MAP) or community resources.



Your Personal Plan For Managing Your Stress

Instructor: Give the class ample time to finish this exercise, then discuss with the class, keeping in mind the examples given in their participant guide and the Krames' workbook. Remind participants that positive changes occur gradually. They don't have to fix everything at once.

Take a few moments to write down your own personal plan for stress management below. Be prepared to discuss some of them with fellow class members.

1. **Sleep** _____

2. **Diet** _____

3. **Exercise** _____

4. **Leisure Time** _____

5. **Family And Friends** _____

6. **Organization** _____

7. **Goals** _____

8. **Ventilate** _____

Conclusion

In conclusion, the best way to manage your stress is to first understand what causes your stress, then how it affects you. Use the information provided in this workbook to find the best coping skills. Lastly, work out a plan for managing your stress over time.

Stress Management for Construction Supervisors

Self Test: Just How Stressed Are You???????

Understanding Stress

- Stress Is Not the Incident
 - Stress is your reaction
 - Physical or mental
 - Natural or involuntary
 - Fight or flight
 - Negative vs. positive

Human Stress Response

Physical Symptoms

Symptomatic Nervous System

- Adrenalin
 - Energy
 - Alert
 - Nervous/jumpy

Body Metabolism

- The Body's Metabolism Changes
 - Heart rate increases
 - Blood pressure goes up
 - Breathing rate increases
 - Oxygen consumption increases

Muscular Tension

- Muscles tense, prepare for action
 - Difficulty relaxing
 - Causes stress headaches

Blood Clotting

- Blood thickens
 - Protects you from physical injuries
 - Positive if short term
 - You're expecting a fight
 - Negative if long term
 - Can lead to problems in your heart and arteries

Blood Flow Storage

- During Stress:
 - Blood flow stays mainly around vital organs
 - Blood flow stays mainly around major muscles
 - Both of these prepare the body to fight or run
 - Also results in poor circulation in your limbs
 - Dangerous over time
 - Dangerous in conjunction with other health problems esp. diabetes

Fight or Flight Syndrome

- Automatic Bodily Changes From Stress
 - Prepare us for physical exertion
 - This was necessary in prehistoric times, world filled with physical danger
 - Considered protection
- Today Stressors Are More Mental
 - Continuous fight or flight response due to high levels of stress
 - Harmful affects on our bodies and emotions

Health Consequences

- Heart disease
- Sexual dysfunction
- Colds
- Colitis
- Backaches/headaches
- Insomnia

Stress Reaction and the Staircase Effect

Stress Awareness

- Identify Your Stressors
 - What causes you to feel stress?
- Realize How Your Body Feels Under Stress
 - Look for the mental and physical symptoms you have after a stressor

Categories of Stressors

- Minor Hassles
 - Can't find keys, traffic
- Major Hassles
 - Car accident, large budget overrun
- Major Changes
 - New job, marriage, lost job
- Stress Overload
 - Combination of several stressors, can't cope

Stress In the Workplace

What causes workplace stress?????

Focus on the *IMPORTANT* and
CONTROLLABLE

Work Policy To Reduce Workplace Stress

- Work schedules
- Worker participation
- Workload
- Content
- Roles
- Social environment
- Future

Con't

- Talk together
- Organize
- Identify stressful conditions
- Advocate for stress reduction services

Personal Responses to Reduce Workplace Stress

- Avoid battles with co-workers
- Employ planning & time management skills
- Change the channel
- Develop workplace relationships
- Deep breathing
- Progressive muscle relaxation
- Clearing your head

Con't

- Accept the fact that “things” happen
- Allow yourself to have a less than perfect day

Daily Planning Procedure

- Select a distraction free environment
- Review goals for the day or week
- Insert any scheduled tasks, appts. And activities for the day
- Review the previous day's list
- Prioritize your list
- Delegate what you can

Con't

- Periodically check off and note progress
- Review the next few days
- Allocate time for expected intrusions

Developing Good Listening Skills

- Poor communication causes a lot of workplace stress
- It is important to be able to communicate your own points, ideas, and concerns
- It is equally as important to listen to others

Traits of Successful Listeners

- Listen intently
 - Minds don't wander
- Don't interrupt
 - Don't think about what you want to say next
- Are patient
 - Hear someone out
- Are concerned
 - Care about what someone else says & their views

Ways to Manage Your Stress: The Big Picture:

- Sleep
- Diet
- Exercise
- Leisure time
- Family and friends
- Get organized
- Establish goals
- Ventilate

Your Personal Plan for Managing Your Stress

Conclusion

- Understand what causes your stress
- Know how your triggers affect you
- Work out a plan for managing your stress over time and update it as necessary

Ways to Manage Your **STRESS** *(Participant Guide)*



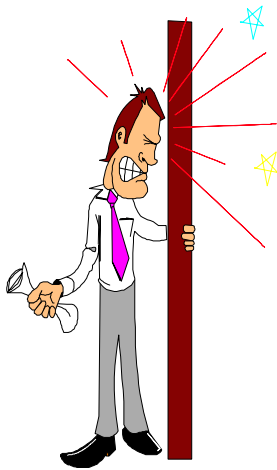
Produced in-house by the
Laborers' Health & Safety Fund of North America
for the
Laborers-AGC Minority Worker Training Program
(Funds for this publication provided by the
National Institute of Environmental Health Sciences.)

August 2001

Ways to Manage Your Stress

This workshop is designed to help participants find ways to manage their stress both on the job and off. By keeping an open mind, participants will discover or rediscover methods to lower their daily stress levels. There is no “magic pill.” Many small things done on a regular basis will not only help you overcome major crises, but also the everyday small stresses that are just, if not more, harmful to your health and happiness.

Level of Stress Exercise



How Stressed Are You?”

Find out by performing the exercises on pages 3 and 4 of this guide. This is not a test so be honest with yourself so as to get a true indicator of your current stress level. There are no right or wrong answers.

JUST HOW STRESSED ARE YOU ?

For each question write “M” for “most of the time,” “A” for “almost never” or “S” for “sometimes.”

- _____ 1. Are you able to keep a positive attitude and not get upset over little or trivial things?
- _____ 2. Are you able to talk yourself out of feeling stressed?
- _____ 3. Do you use any relaxation techniques when you feel stressed?
- _____ 4. Do you get at least 20 minutes of exercise (or other physical activities) a day?
- _____ 5. Do you set aside part of each day for spending quality time with family or friends?
- _____ 6. Is it difficult to express yourself or communicate effectively when conflicts arise?
- _____ 7. Do you lose sleep at night worrying about your work, career or family?
- _____ 8. Do you feel like you don't ever have enough time to relax?
- _____ 9. Do you skip meals, breaks or vacation time because you would rather work?
- _____ 10. Do you think about what to say next while others are speaking to you?

Bonus questions:

List 3 things that cause you stress in your life:

- 1. _____
- 2. _____
- 3. _____

List three ways you feel or ways you react when you experience this stress:

1. _____

2. _____

3. _____

SCORING GUIDE FOR JUST HOW STRESSED ARE YOU?

- For Questions # 1-5, score 10 points for each “ALMOST NEVER” answer and 5 points for each “SOMETIMES” answer.
- For Questions # 6-10, score 10 points for each “MOST OF THE TIME” answer and 5 points for each “SOMETIMES” answer.
- For the two Bonus Questions, subtract 5 points for each one that you were able to complete with all three filled in.

√ If your score was above 30 points:
Stress is a big deal in your life. Start thinking of how to make changes now to help prevent serious health consequences.

√ If your score was between 20- 30 points:
Stress is definitely a presence in your life, and it’s possible that any major life change or trauma could easily move you into the above category.

√ If you score was below 20 points:
Stress may be a factor in your life, but your score indicates you have developed some positive coping mechanisms to handle it.

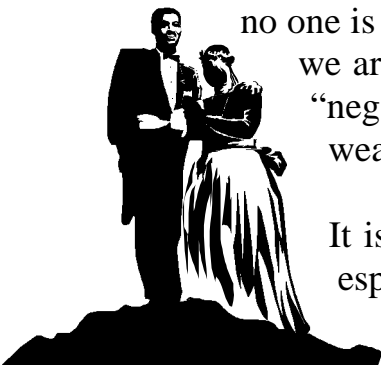
What is this Thing Called Stress?

Stress is not the incident but your reaction to the incident. Stress is not the incident (e.g., traffic jam, paying bills, or marriage problems). Stress is your *reaction* to these incidents (e.g., becoming angry, being nervous, crying, acting irrational, etc.).

Stress is a very natural reaction to these types of events. It can be physical or mental. It comes from our past, the beginning of our existence (in the “caveman” days). It is a natural involuntary reaction. Like blinking your eyes when an object comes close, your body/mind is trying to protect you. It’s part of the “Fight or Flight” reaction. Either defend yourself (fight) or run away (flight) to survive.

Stress can be a hard thing to talk about. Everybody knows when they have it, but no one is exactly sure just what it is. Usually, when we talk about stress, we are referring to “negative stress.” Most people would agree that “negative stress” is any abnormal demand or threat that causes wear and tear on our bodies and our sense of well being.

It is important to realize that stress can have positive effects too, especially when it helps us meet the challenges or demands we face.



Human Stress Response

When most people perceive or anticipate a threatening or challenging situation, this results in a “stress response.” This “stress response” has a number of physical features.

In any normal day, we regularly respond to challenges, demands and sometimes even threats, often without consciously thinking about our responses. Some might say that a certain amount of stress is okay, as long as it comes in limited doses for short periods of time. Under these conditions, your body and mind have coping mechanisms to deal with these types of stresses. Your stress response can be divided into three parts:

1. Facing the challenging, demanding or threatening situation
2. Dealing with the challenge, demand or threat
3. Followed by automatic relaxation

Your response to stress is real; it is not an “attitude” or a “personality trait.”

An example of this stress response would be running to catch the subway train so you won't be late for work. As your mind sees the train coming, your body goes into overdrive, and you start running, reaching the door of the train just as it is closing. You may be tired from dealing with the challenge of rushing when you take your seat, but there is also a sense of relief because you did manage to catch the train and you won't be late for work after all. Now your body can relax and return to its normal operating level.



A stress response can also occur when your team wins the Super Bowl in the final seconds of the game. The adrenaline pumps through your body and all your systems are running on high. But, after a few moments, your body relaxes and you are left with a pleasant sense of satisfaction or well being.

Response to a situation that causes stress has **physical symptoms**. (The body reacts to stress.)

Symptomatic Nervous System Activity

The body produces adrenalin which gives you more energy and makes you more alert, but also makes people nervous/jumpy and puts them on edge.

Body Metabolism



Heart rate up
Blood pressure up
Breathing rate up
Oxygen consumption up

This is good if you are more active and put these functions to use. But if it is only mental stress for a long period of time, it may eventually damage the body.

Muscular Tension

The body's muscles tense, getting ready for action. This makes it hard for the person to relax and causes stress headaches, mainly in the neck and shoulders.

Blood Clotting Time

Blood clot levels go up (blood thickens) to protect you from physical injuries (e.g., cuts). This might be useful in the short-run, but if it occurs for a long period of time this can lead to heart/artery problems.

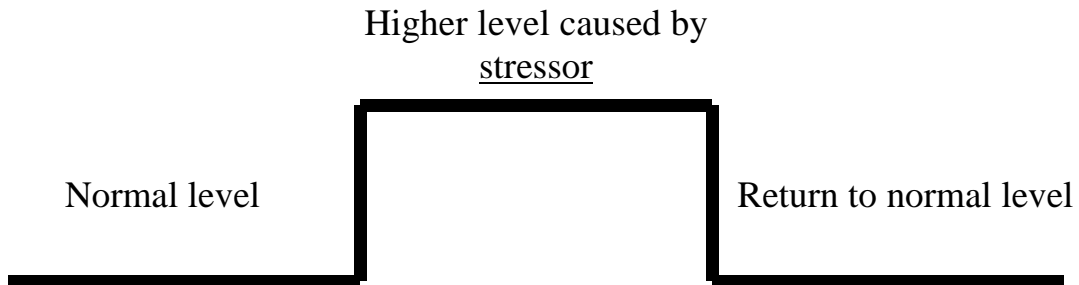
Blood Flow Storage

Blood flow stays mainly around your vital organs (heart, lungs, etc.) and major muscles to prepare you for "fight or flight." (For example, if you were being chased by a wild tiger and the tiger bites your hand, your blood is mainly flowing around your vital organs to protect them). But this also causes poor circulation in your limbs (hands, feet) and can be very bad, especially if in conjunction with other health problems, like diabetes.

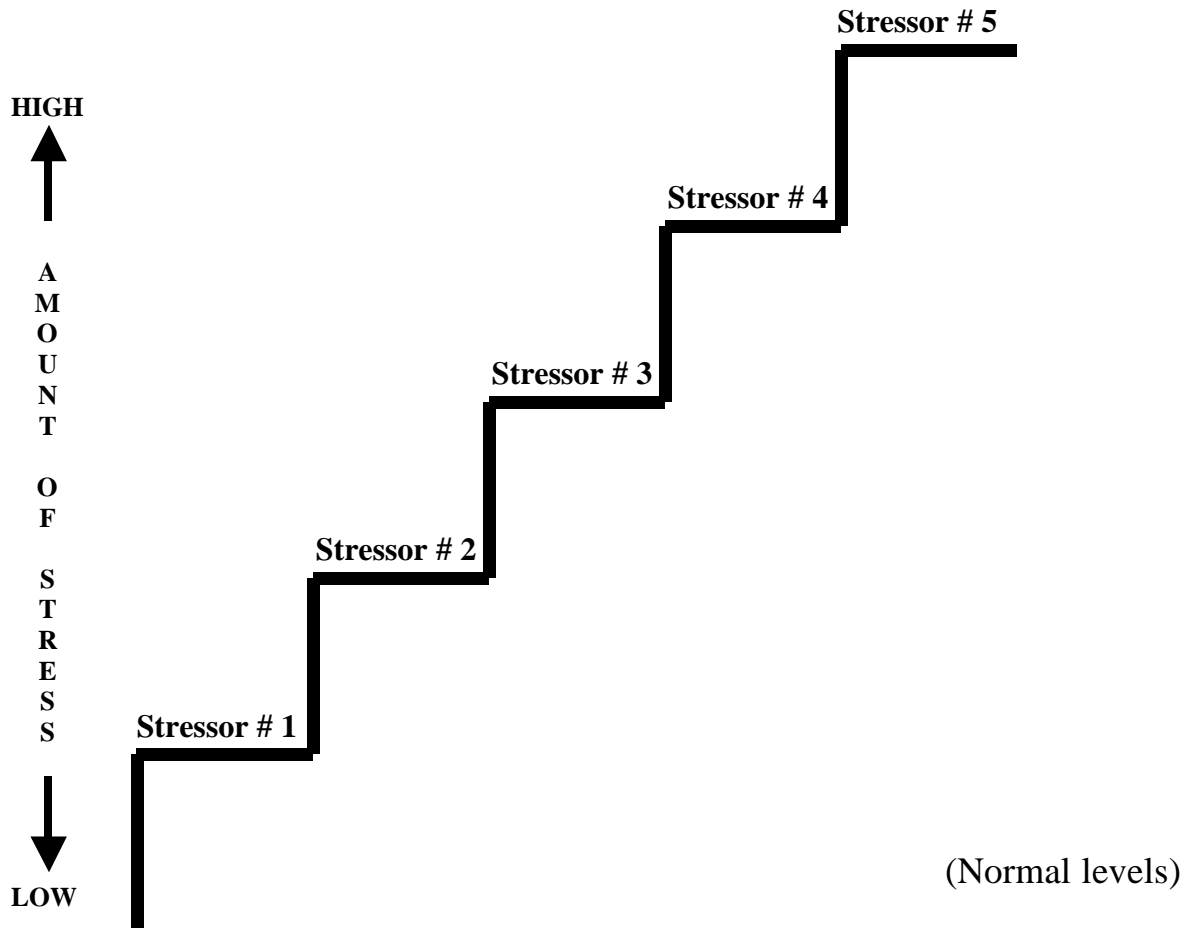
These automatic bodily changes, which occur almost instantly, prepare us for the physical exertion that may occur during the “fight or flight” response. In prehistoric times, this response helped us to survive in a world filled with danger. But in today's world, where the stressors are more mental than physical, this can amount to having a continuous “fight or flight” response, which can have extremely harmful effects on our bodies and our emotions.

Normal Stress Reactions and the Staircase Effect

The normal stress reaction is once you have a stressor you then mentally and physically operate at a higher level of activity and awareness. Then, once the stressor has passed, you relax and your body will return to its normal level of stress. An example of this would be a firefighter. Normally for a firefighter, the alarm goes off at the firehouse and the stress goes up, stays up, and the physical and mental reactions it causes, helps in putting out the fire (stressor). When the fire is over, and when the firefighter is back at the firehouse, he/she relaxes both physically and mentally. The stress level goes back to normal, ready to fight the next fire (stressor).



The **staircase effect** happens when, because of the types of stressors, or their frequency, or the personality of the person, the stress does not go back to normal, but stays up and keeps going up with each new stressor. Because of this, the person will never have a chance or take the time, to relax and return to a normal level of stress.



The body is designed to work most effectively around the normal resting state. However, when we have inadequate time or ability to return to our normal resting state after exposure to a stressor, the stress response to the next stressor will be added to the remaining effects of the previous stressor. This build-up or accumulation of stress is most often caused by setting off the stress response for inappropriate and non-life threatening reasons. Cumulative stress can become chronic stress, which can be very damaging to the body.

Chronic Stress and the Body

Chronic stress is a killer! Prolonged stress levels can lead to many physical problems, from high blood pressure to neck and back pain to maybe even various types of cancer. People with long-term stress also may have psychological and social problems, such as being irritable, using drugs/alcohol, or depression.

One difficulty in understanding the effects of stress is that the same stressful conditions can cause different results in different individuals. These stressors may cause one person to develop headaches, another to lose sleep and not affect someone else. Stress may cause some people to become depressed and withdrawn, while others might use alcohol excessively or engage in other compulsive behavior like gambling or overeating.

Because individual responses vary so much, the fact that all these different reactions may have a common cause is hidden. This leads some people to blame themselves for being “stressed out.” They think they are the only ones who “can’t handle it.” The truth is we are all unique in the varied ways we perceive and react to the many stresses in our lives. When untreated, chronic stress response can have many serious health consequences. Some of these are:

High Blood Pressure

Heart Attacks

Headaches

Ulcers

Neck & Back pain

Arthritis

Insomnia

Colitis

More Frequent Colds

Asthmas

Weight loss/gain

Sexual dysfunction

In addition to the above physical health problems, people under chronic stress often report feelings of tension, anxiety, boredom, depression, anger and low self-esteem. Because chronic stress reactions may include fatigue, frustration or apathy, when under stress, a person may withdraw from their families, friends and social and community activities. The isolation that follows may then further intensify the effects of stress. Some common psychological signs of chronic stress are:

Being irritable

Getting angry easily

Lack of energy

Misuse of alcohol or drugs

Over/under eating

Disturbed sleep/nightmares

Depression

Abnormal risk taking

CUMULATIVE STRESS TEST

This index lists forty-three sample stressful life events and the value of each in “stress units.” Check those events that have occurred in your life during the past twelve months.

<u>LIFE EVENT</u>	<u>VALUE</u>	<u>YOUR SCORE</u>
Death of a spouse	100	_____
Divorce	73	_____
Jail term	65	_____
Marital separation	63	_____
Death of a close family member	63	_____
Personal injury or illness	53	_____
Marriage	50	_____
Fired from work	47	_____
Death of a close friend/coworker	45	_____
Marital reconciliation	45	_____
Retirement	45	_____
Change in health of family member	44	_____
Eye-witnessing a serious injury or death	40	_____
Pregnancy	40	_____
Sex difficulties	39	_____
Gain of new family member	39	_____
Business readjustment	39	_____
Change in financial state	38	_____
Change to different line of work	36	_____
Change in number of arguments with spouse	35	_____
Mortgage over \$100,000	31	_____
Foreclosure of mortgage or loan	30	_____
Change in responsibilities at work	29	_____
Son or daughter leaving home	29	_____
Trouble with in-laws	29	_____
Outstanding personal achievement	28	_____
Wife begins or stops work	26	_____
Begin or end school	26	_____
Change in living conditions	26	_____
Revision of personal habits	25	_____
Trouble with boss	24	_____
Change in work hours or conditions	23	_____
Change in residence	20	_____
Change in schools	20	_____
Change in recreation	19	_____
Change in church/social activities	19	_____
Mortgage or loan less than \$100,000	17	_____
Change in sleeping habits	16	_____
Change in # of family get-togethers	15	_____
Change in eating habits	15	_____
Vacation	13	_____
Christmas	12	_____
Minor violations of the law	11	_____
Your total		_____

If your score is:

- 150 – 199
- 200 – 300
- Over 300

You are experiencing:

- mild life crisis
- moderate life crisis
- major life crisis

What are your chances of becoming physically ill from stress?

- 150 – 199: 37%
- 200 – 300: 51%
- Over 300: 80%

Remember, a high score is not a guarantee of illness. It is simply an indication that, because of the stress you have been subjected to, there is a chance of becoming ill. It is very important to understand that the amount of stress one has experienced during the last year will greatly determine how well they will handle the next major stressor or traumatic event.

Stress Awareness

Becoming aware of stress is a two-step process:

STEP ONE: Identify your stressors. (What causes your stress?: work, home life, health, finances, etc.)

STEP TWO: Realize how your body feels under stress. (Look for the mental and physical symptoms that you have after a stressor.)

- √ First, try to recognize and identify the things in your life that cause you to feel stress. These may be minor hassles, major lifestyle changes, or a combination of both.
- √ Then, once you realize what causes your stress response, try to focus on how your body feels under stress. For example, you may know that getting caught in traffic is one of your stressors, but do you know how your body reacts? Do your muscles tense up? Does your heart start beating faster?
- √ Identifying your stressors and noting your physical reactions will better prepare you to deal with the problem and learn how to control your level of stress.

Recognize the Stressors

Stressors usually fall into one of the following categories:

- Minor hassles
- Major changes
- Stress overload
- Feeling helpless

Minor hassles are those daily annoyances that are a part of day-to-day life. Traffic jams, missed buses, lost car keys, and petty disagreements are rarely earth-shattering events, but their side effects can accumulate. Even these minor irritations can lead to chronic, negative stress and health-related problems, so try to be more aware of the situations in your life and work that “get your blood pressure up.”



Major changes are any changes – positive or negative – that affect your lifestyle. Positive changes, like the birth of a new baby or a promotion, can be just as stressful as negative changes such as the loss of a loved one or being laid off from a job. Most major lifestyle changes require you to adapt to new or unknown situations, which itself can be stressful.

Stress overload can occur when you find yourself faced with situations beyond your control that have combined to an unmanageable level. At home or in the workplace, there may be times when you feel pulled in so many directions at once that you're not sure what to deal with first. Try to accept the fact that it's virtually impossible to control all of life's variables.

Feeling helpless often results when the cause of your stress is not easily recognizable or manageable. If you (or someone you know) feel as if there's “no way out,” or feel overwhelmed or depressed, seek out professional help. Your family doctor, your employer, your union, or your local health agencies can refer you to a specialist who can help you to cope with these feelings.

When you have recognized your stressors, then you should also recognize what your body is trying to tell you. Some reactions are physical, some are emotional, and some are mental.

Finding Solutions

Once you're identified the causes of your stress, it's easier to find solutions to the problems.

Avoiding hassles can help you to eliminate some of the minor irritations that lead to chronic, negative stress. If rush-hour traffic “drives you up a wall,” why not join (or start) a carpool, or try taking public transportation? If rushing to get to work on time makes you anxious, try getting up earlier. If one of your co-workers annoys you, try to find a “middle ground” in which you work together or avoid that person altogether.

Controlling changes in life isn't as difficult as it may sound. When one aspect of your life changes (positively or negatively), do what you can to limit other changes. If you've just started going back to school, maybe you should put off starting a family. If you've recently had a major life change, make an effort to continue doing the things that bring you pleasure. Don't change your entire lifestyle just because one aspect of your life has changed. In general, remember that change, even positive change, causes stress, so be prepared to use your coping skills at that time.

Take a break when your stressors combine to push you to the “I can't cope” level. Sometimes you need to get a little distance from a troubling situation or work problem to figure out how to deal with situations effectively. Take a few minutes by yourself to calm down. Sit down, relax, and then decide what needs to be done immediately, what can wait until later, and so on. Use the old saying “Sleep on it,” if you wish. Many things often look different after a good night's sleep. And remember to take it one step at a time.



Finding help is the best solution when you feel overwhelmed or unable to deal with stress on your own. First, try talking to your friends, family minister or another person whom you respect, then if you are still troubled you may wish to see your doctor. If no physical problem exists, consider seeing a professional counselor who can help you understand your feelings. Even when you feel “helpless,” remember help is available. If your health plan or union has a Member Assistance Program (MAP), it is an excellent source to help you learn ways to manage your stress.

Stress On the Job

Just as having a job will relieve certain stressors, such as lack of money or meeting goals in life, it can also cause stress, which is normal. However, high continuous levels of stress are not normal and can be very damaging.

People often consider workplace stress as “part of the job” or “just something to put up with until quitting time.” However, when workplace stress goes on day after day



over a long period of time, our reaction to it can become chronic, that is, our bodies continue to react as if everything were an emergency. This chronic stress response can be caused by things like an increased workload, lack of proper equipment or resources, unpredictable job futures, disciplinary actions, hazardous working conditions, and never feeling recognized for the work you do.

What Causes Stress at Work ?

Much research has been done about workplace stress. Here are some of the top causes of workplace stress:

- A lack of control over your work situation
- No chance to use your job skills, creativity or intelligence
- Lack of say over what you are producing and how
- Excessive noise
- Poor ventilation, lighting or heating
- Hazardous or dangerous working conditions (real or imagined)
- Shift work (normal and rotating)
- Conflicting job demands (production vs. quality)
- Lack of job security
- Lack of recognition for good work
- Lack of respect or cooperation from co-workers, supervisors, managers or the public
- Harassment from co-workers, supervisors, managers or the public
- Racism, sexism and other forms of prejudice
- Physical isolation from co-workers
- Psychological isolation from co-workers

Take a moment and write down a few causes of workplace stress you may have encountered (or may expect to) below:

Easy Stress Reducers To Use At Work

Instructor: Have the class go over each stress reducer and then discuss how they could do this in the workplace. Where appropriate, use your own personal experiences as examples.

- **Personal Time Out.** Take a step back and try pretending you are watching a movie of yourself and the stressful situation.
- **Avoid Battles With Your Co-Workers.** If you think about it, even if you win, you usually lose in the end.
- **Develop Some Workplace Friends.** To talk to, laugh with, and to just blow off some steam.
- **Change The Channel.** Either “turn off” troubling thoughts or switch to some that are more pleasant and more productive.
- **Deep Breathing.** Scientifically proven as one of the most effective of all short term remedies when you are uptight!
- **Progressive Muscle Relaxation.** This technique consists of alternately tensing and then relaxing specific muscle groups (neck, back).
- **Clearing Your Head.** Take yourself away from the “heat of the battle” for a few seconds to a few minutes, several times a day, to “recharge your batteries.”
- **Maintain Your Perspective.** Work hard, but remind yourself that your worth as a person is not judged by what you do at work (or how good you are at it.)
- **Happiness Is Not A Right.** Happiness is the reward we get when things “work out” – usually because we worked hard to make it happen.
- **Allow Yourself To Have A Less Than Perfect Day.** People make mistakes, things happen – so remember that you can plan for the future, but not the outcome, so sometimes it’s best to just let it go.

Take a moment to visualize yourself in a common stressful situation at work. Select one (or more) of the above stress reducers and imagine you are actually using it successfully to eliminate or at least reduce your stress response. Imagine yourself moving on to the next task or activity without the “baggage” of the stress response. Savor this feeling of “heading off” a stress reaction.

Developing Good Listening Skills

A significant cause of workplace stress (all stress for that matter), is poor communication skills. The ability to properly communicate information and to really listen to what others are saying is extremely important.

Listening Requires Effort!

The ability to listen is not an inborn trait. It takes a conscious effort to do it well. Listening to others is a key component of effective communication.

Successful listeners are those people who:

- **Listen intently** – Their minds do not “wander.” They concentrate on what the other person is saying.
- **Don't interrupt** – Nor are they constantly thinking only of what they want to say when the speaker finishes.
- **Are patient** – Nothing is more annoying than people who do not have the patience (or the courtesy) to hear you out.
- **Are concerned** – They care about what the other person is saying to them, because they care about that person's views.



If you don't understand or don't hear what someone says, ask the person to repeat it. If you are doing the talking, make sure your listener hears and understands what you mean. Asking for clarification and ensuring understanding prevents miscommunication, which often contributes to stress.

Stress Reduction Exercises and Techniques

Exercise is a great way to reduce stress. Also, there are many stress relief techniques that a person can do on a daily basis to lower high levels of stress.

Note: Stress reduction techniques that can be started **today**, at work or anywhere and that you can do no matter what else, especially when under a lot of stress.

1. Deep Breathing (the right way)
2. Stretching
3. Drinking lots of water



Relax Your “Stress Triangle”

Traffic gets worse. It’s your busy season at work. You’re trying to go to school at the same time. Your shoulders tense, your neck aches, you feel as if your head is gripped in a vise! The head, neck, and shoulder areas (which form the “stress triangle”) are the places where we hold much of our tension. Learning how to release the tension in these muscles can help us relax and “de-stress.”

Find Your “Stress Triangle”

Place your left hand on your right shoulder. Move your fingers halfway in toward your neck. You’re at one point of the triangle. The second point is the same place off your left shoulder. The third point is on your forehead, between your eyes. This “stress triangle” is where we hold much of our tension.

Why Tense Muscles Hurt

Your muscles tighten to protect you. That was important to your prehistoric ancestors, who needed to fight or run. But usually, you don’t need that protection. When your muscle shortens, and then holds that position, “metabolites” (the waste products from muscle activity) get trapped, causing pain. The pain is released when the muscle regains its natural length.

Stretch Away Tension

These simple stretches and rolls can help relieve tightness in your “stress triangle.”

- **Neck roll.** Stretch your right ear to your right shoulder, keeping your left shoulder pulled down. Roll your head down so your chin is on your chest. Continue on to your left side. Do rolls from side to side. Begin with eight, build up to 16.
- **Shoulder shrug.** Draw a big circle with your shoulders, one at a time. Start with four, build up to eight times, going forward, then back.
- **Pick fruit.** With one hand, reach up as if you were picking an apple from a tree slightly ahead and far above you. Go from one arm to the other, building up to eight times on each side.



- **Massage yourself.** Use your right hand to work on your left shoulder and your left hand on your right shoulder. Work your fingers gently but firmly, beginning with your should blade, moving up toward the neck and including the scalp.
- **Standing body roll.** Let your head roll forward until your chin is on your chest. Keep rolling down as your knees begin to bend. When your hands are hanging near your knees, rest there a moment and slowly roll back up. Work up to ten times.

Welcome Release

At work, at home, or wherever you are, take a few moments to release stress. Use these exercises every couple of hours, if necessary. You'll feel better and prevent tension from building up both physically and mentally.



Ways to Manage Your Stress

- 1. Sleep.** The average adult in 1900 got 8-9 hours of sleep per night. The average adult today gets less than 7 hours. Sleep is very important to managing your level of stress, especially during times of crisis.
- 2. Diet.** Not only is this statement “you are what you eat” true, but eating healthy foods helps give you energy and lowers your stress. This includes stopping poor snacking habits and excessive use of drugs and alcohol. Always drink a lot of water, especially during times of high stress.
- 3. Exercise.** A moderate exercise program three times a week will do wonders in helping both to lower a person’s level of stress and increase resistance to future stress. Not only does exercise relax the body, flush out toxic chemicals and build up resistance to future stress, it also releases positive chemicals into the body which helps us relax.
- 4. Leisure Time.** Learn to relax. Build this into your daily life. Find activities away from work. Decompress after work before you go home.
- 5. Family & Friends.** Good friends and family give one a support system that helps them cope. Having someone to talk to is important to controlling your level of stress.
- 6. Get Organized.** Being organized helps lower stress. Get a daily planner. Build in family or relaxation time into your schedule just like you do work or chores.
- 7. Establish Goals in Life.** Make goals realistic and, therefore, obtainable. If you fall back, don’t punish yourself. Just get back on track and look toward the future.
- 8. Ventilate.** Talking is great medicine. If necessary, seek professional help, such as your Member Assistance Program (MAP) or community resources.



Your Personal Plan For Managing Your Stress

Take a few moments to write down your own personal plan for stress management below. Be prepared to discuss some of them with fellow class members.

1. **Sleep** _____

2. **Diet** _____

3. **Exercise** _____

4. **Leisure Time** _____

5. **Family And Friends** _____

6. **Organization** _____

7. **Goals** _____

8. **Ventilate** _____

Conclusion

In conclusion, the best way to manage your stress is to first understand what causes your stress, then how it affects you. Use the information provided in this workbook to find the best coping skills. Lastly, work out a plan for managing your stress over time.

Fitness for Duty

Fitness and Health as an Occupational Necessity for Laborers



**Laborers' Health & Safety Fund of North America
Division of Health Promotion
905 16th Street, NW, 3rd Floor
Washington, DC 20006
(202) 628-5465
www.lhsfna.org**



**Funds for this publication provided by the
National Institute of Environmental Health Sciences**



Fitness for Duty

Fitness and Health as an Occupational Health Issue for Laborers

Instructor's guidebook

This guidebook is designed to direct an Instructor through a workshop intended to increase the awareness of general health and fitness as an important issue for Laborers. Laborers often acknowledge the importance of learning new skills and recognizing occupational safety and health hazards in their careers, but they often underestimate the value of their general health as a means to extend their careers as well as their lives.

This program is of flexible duration and delivery. It can last anywhere from 2 to 4 hours (even a full day), depending on the needs of the program and how much time the Instructor wishes to devote to any particular health topic. Instructors should familiarize themselves with the health issues covered and select for themselves those areas they believe most important to devote time to. The extent of detail provided on the topics covered should be sufficient to meet program needs.

The guidebook is divided into five sections:

Section 1

Introduces participants to the notion of fitness as a workplace issue. The initial exercise sets the stage for the rest of the workshop. The responsibility given by the participants during the exercise will direct the rest of the program. The use of the exercise is not imperative for continuing with the program. However, it will vest the interest of the participants by having them play a role in identifying what issues are important to them as construction workers.

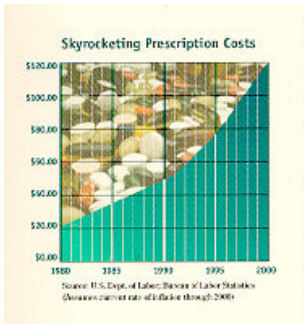
Sections 2 & 3

Covers the areas of fitness that are most likely to be included within the participants' responses to the exercise in section one. Section 2 covers conditions or diseases. Section 3 covers behaviors that result in health problems or diseases. The two most important sections are on heart disease and cancer, as these are the most common causes of death of Laborers. However, this section includes sufficient materials to cover/discuss other common health concerns to Laborers. The LHSFNA has compiled this information based on the responses given numerous times in which this workshop has been delivered. The Instructor can add to this section (or, preferably, ask the LHSFNA to provide more information on other health issues) should issues not covered become common concerns among respondents. It is doubtful that all of these issues will be able to be covered within one workshop period, unless the Instructor has several hours to devote to this program. **The Instructor is encouraged to focus on those issues which the participants identify as being more important to them, even if it means other topics aren't covered.**



Each section also includes additional information which is specific to different demographic groups, either by gender, race or ethnicity. Instructors should be sure to use these data where appropriate, depending on the composition of their classes. The intent is to make trainees more aware of the health problems most relevant to them.

Section 4



Addresses the importance of being a good health care consumer and of being aware of important screening tests that are available to keep Laborers fit. There may not be sufficient time to cover this topic, therefore, some of the issues pertaining to screening tests are included within the delivery of section 2. This section is optional, yet includes important information and awareness that Laborers don't typically get in other settings.

Section 5

Provides alternative ways of concluding the workshop. All options are intended to engage the participants in some way. This results in ending the session on a lively (and possibly controversial) note. This way, a more lasting impression will be left with the participants.

Materials

The LHSFNA has included samples of supplemental materials to pass out to the program participants. These are available in any quantity desired by the Instructor for distribution. Materials developed in house by the LHSFNA can be customized to meet local needs.

Instructors who plan on teaching this class on a routine basis should equip themselves with suitable demonstrative props, such as anatomical parts, sample foods, sun screens, etc. The more visual and hands-on the presentation the better the learning experience.

Resources and Reference Materials

To make it easier for instructors to have a broader base of statistics and knowledge on certain topics, particularly data on different ethnic groups, the LHSFNA supplies reference materials particular to the different subjects covered.

Interactives

Each section includes a variety of questions to pose or exercises to generate discussion and class participation. These questions are intended to be used at the discretion of the Instructor either before reviewing the written text, concurrent or afterwards.

Any questions or requests for additional topics or materials to supplement the program should be addressed to the Health Promotion Division of the Laborers' Health & Safety Fund of North America.

I. Introduction: Fitness and Health as an Occupational Issue for Laborers

A Stages of Life

Most chronic health conditions are caused by long-term poor health habits. Yet the time when Laborers have an opportunity to most effectively influence their level of *fitness* (their youth) is when they are most reckless and least concerned about their health.

Stage 1

Laborers in their teens or twenties don't pay much attention to their health.

⇔ Young laborers feel they are strong and invincible (they will always be young and healthy).

⇔ Young persons, especially young men, are most susceptible to reckless behavior (higher rates of heavy drinking, drug use, accidents, etc.).

⇔ They don't yet feel the impact of their behavior; with few exceptions (a hangover here and there), they "bounce back" well.

⇔ Women are introduced to the health care system sooner than men but still don't consider the long-term much.



Stage 2

Laborers don't begin to think about their health until they are older (late 30's 40's as a result of:

- beginning to feel aches and pains associated with construction work and/or bad behaviors (sore backs, chest pain, obesity, wheezing),
- or until they are diagnosed with early stages of disease (high blood pressure, high cholesterol, respiratory disease); most likely because they are seeing a doctor for some other unrelated health issue.
- Many women put off their own health care needs in order to devote more attention to their families' health concerns.
- While it would be better to address these behaviors early, there are, in most instances, still opportunities to correct/reverse these conditions or prevent future health problems, if members cared to make the effort to do so.

Stage 3



When do members care most about their health? When they are retired or otherwise in their senior years. When they are going to the doctor regularly, and taking lots of prescription drugs and have limited mobility or other restrictions based on health conditions. At this stage, opportunities are limited for correction of these health conditions. And the old axiom applies: **“If I had known I would live this long, I would have taken better care of myself.”**

Questions to Pose to Different Age Levels:

Stage 1: Young People; < 30 (Apprentices)

- 1. How do you feel now? Pretty good, right?*
- 2. How long do you think you're going to live? Forever, right?*
- 3. How many of you give two minutes of thought as to how what you do today will affect your future health?*
- 4. Why not? – the future is years away*
 - Most of what you do today won't affect you for years.*

BUT: What you do today and tomorrow WILL affect you in your 40's (when you are still working) and definitely in your 60's and 70's (if you live that long)

POINT: Most diseases are chronic. Assuming you plan on living to your 70's and 80's, you have to start taking care of yourself in your 20's.

Stage 2: Middle Working Years; 30's and 40's (Journeymen)

- 1. When did you start paying attention to your health?*
- 2. What made you see a doctor or take notice?*
- 3. Did you make any changes in your life as a result?*
- 4. Why? Answers: Family responsibilities*
No longer feel invincible
Want to stop hurting

POINT: When things are brought to your attention then you take action. Can do things to reverse the situation. Can do things to find problems in time.

Stage 3: Older Workers (Retirees)

- 1. How much do you think about your health?*
- 2. If you could do things differently what would you do?*
- 3. How much of your health concerns do you think are caused by your work? – things beyond your control? – your own behavior?*

B Defining Fitness

As a Laborer, it is important to be physically fit.

⇔ The image of a construction worker (male or female) is that of a strong, muscular person.

⇔ *Traditional view* (still valid): The ability of workers to meet the physical demands of construction work requires that they be fit in all functions of their bodies. To do the work of a construction worker, in the traditional sense, requires strength (strong arms, strong back). Being “strong” in the sense of being muscular, requires proper nutrition, sufficient sleep, and exercise.

⇔ *Alternative view* (long term outlook): Being “*fit*” requires more than having physical strength; in the true sense, the most fit person in this room may not necessarily be the biggest or most muscular.



Laborers need to look beyond the immediate work site; beyond what will be physically required of them today or even next week, if they want to be truly *fit* for duty and pursue a career in construction in the long run. This requires good lung capacity, efficient heart, clear mind, flexibility, etc.

⇔ What laborers do off the job affects how they will feel at work (short term and long term) in the same way that what they do on the job affects how they feel/their health at home.

⇔ Laborers are union members for longer than during their careers spent in construction. Hopefully LIUNA members will reach retiree status and live many enjoyable years thereafter.

Questions to Generate Discussion:

1. *When you think of a construction worker, what is the "image" you come up with?*

*Answer: Someone big and muscular; someone who is fit.
You have to be fit to do construction work.*

2. *What does it mean to be fit?*
3. *Who do you think is the most fit person in this room?*

*Answer: Ask class to make mental note of most fit person.
Compare the more muscular stereotype to a smaller person*

4. *If you are fit, you would expect to live a long time, right? Why do you think construction workers die at an earlier age than other types of workers?*

*Answers: Occupational health exposures
Bad health behaviors
Work wears you down*

5. *How long do you expect to be working as a Laborer?; When do you expect to retire?*
6. *Do you think what you do now as a laborer works for you or against you relative to your ability to work or the shape you'll be in when you retire?*
7. *What are you doing now to ensure a long career and/or a retirement you can enjoy?*

Group Exercise

Depending on time constraints and the set up of the class, ask the participants as a group or in individual break out units to respond to the following five questions. Their responses will validate the importance of being generally healthy and avoiding bad health behaviors to working in construction.

The Instructor continues the remainder of the program around those items mentioned. If the Instructor is not prepared to address a particular issue, he/she will have other issues to focus on in that time frame and should prepare to respond to that issue the next time it comes up. The LHSFNA staff is prepared to research a response to any issue that may be identified in this exercise.

Questions to Pose:

- 1. What are some habits that would result in a Laborer being “unfit?”*
- 2. What are some habits that would result in a Laborer being “fit?”*
- 3. What types of health conditions would make it difficult to do construction work?*
- 4. What parts of the body should a Laborer focus on keeping healthy and strong?*
- 5. Given your own racial identity, gender or ethnic background, what types of health problems should you be particularly concerned about? How do you think this health problem affects you as a Laborer?*

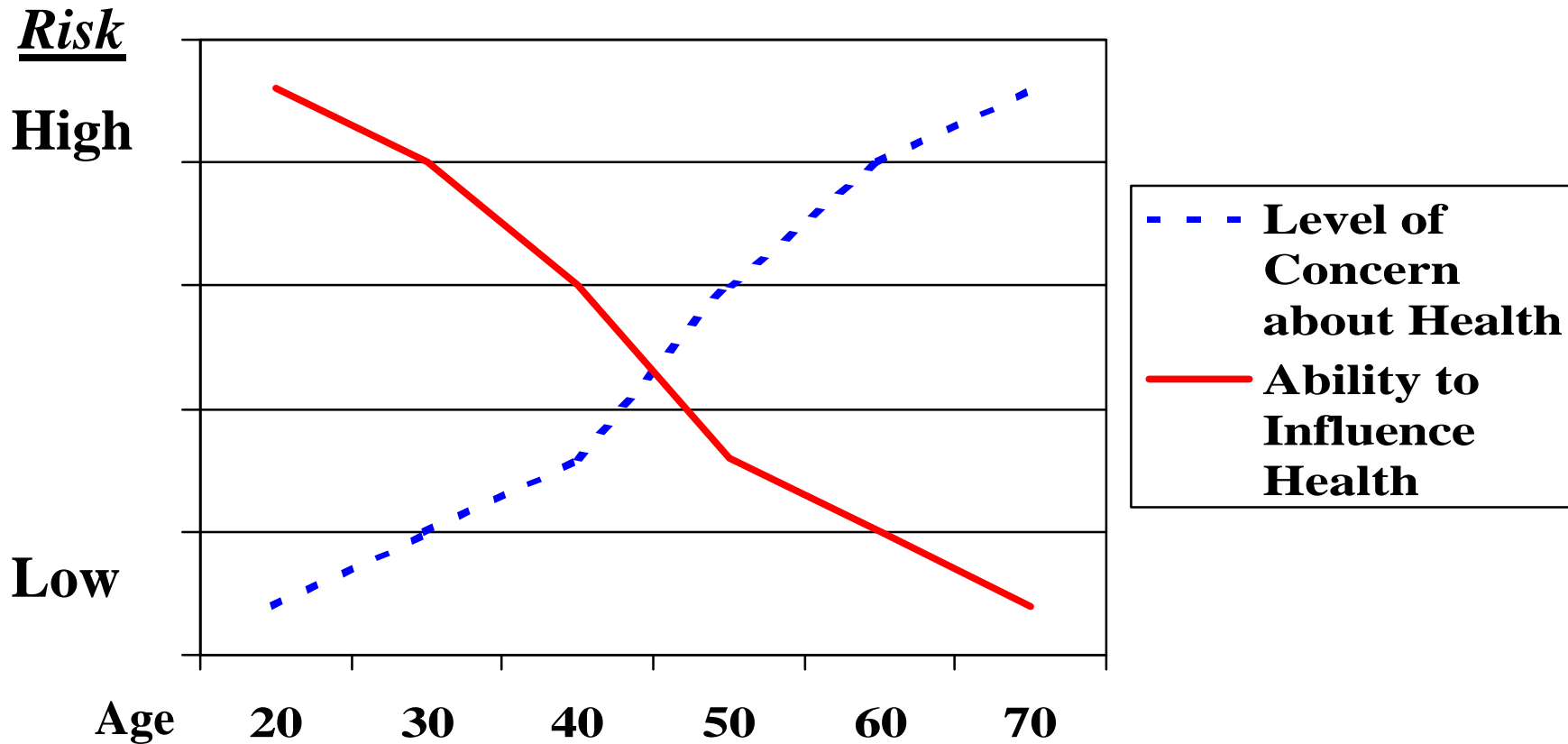
Life Expectancy by Race/Ethnicity

(1998)

Hispanic Males	75.1 years
Non-Hispanic White Males	74.0 years
Non-Hispanic Black Males	64.3 years
Hispanic Females	82.6 years
Non-Hispanic White Females	80.3 years
Non-Hispanic Black Females	74.4 years

Source: U.S. Bureau of the Census.

When you can most influence your long term health is when you are least concerned about it.



II. Primary Prevention: Leading Health Problems and Behavior Modification *(Heart Disease and Cancer)*

Review the leading health problems and behavioral issues relative to the participants' responses. Heart/cardiovascular disease will definitely be one of the issues raised. Cancer sometimes is, but is as often overlooked. Given that cancer is also a leading cause of death of our members, it should be focused on regardless of whether they raise it or not. The Instructor can make this relevant by focusing on the behavioral health conditions that the participants raise (e.g. smoking, diet, etc.)

Many people readily see the association between working construction and accidents and illnesses that result in debilitating disease or death: such as struck bys, electrocutions, asbestosis, falls, etc.



However, what a Laborer is most likely to die from is **first, heart disease**, and **second, cancer**. (Based on NIOSH/LHSFNA proportionate mortality study of LIUNA death records.)

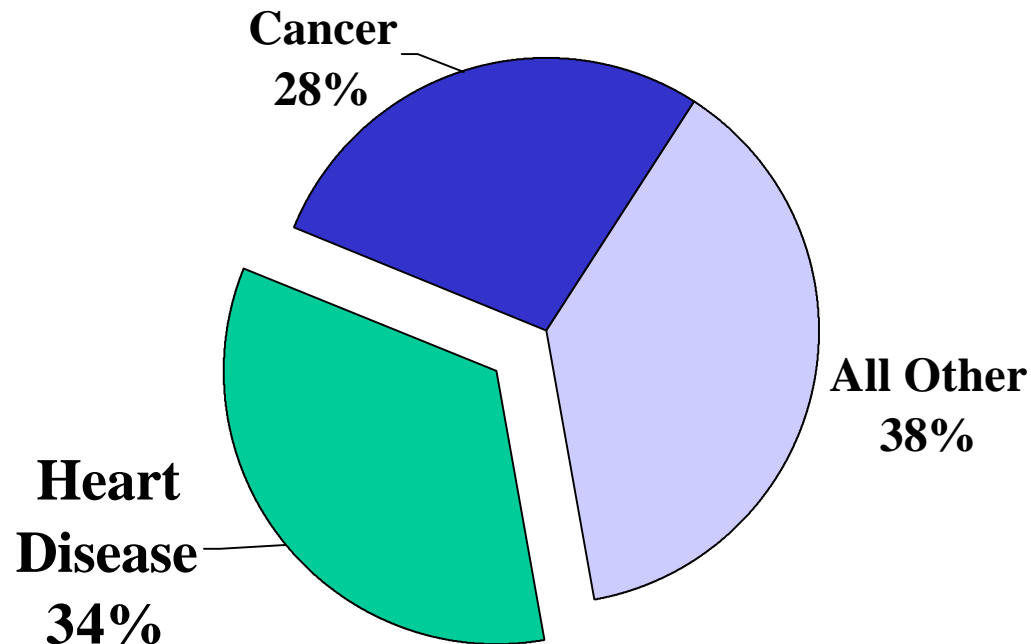
While clearly many health conditions (particularly heart disease and cancer) are influenced by hereditary factors and/or attributed to factors beyond our control, they are also highly influenced by behavior, or *controllable risk factors*.

The four major behavioral issues affecting both heart disease and cancer include: obesity, diet, tobacco use and exercise.

Questions to Generate Discussion:

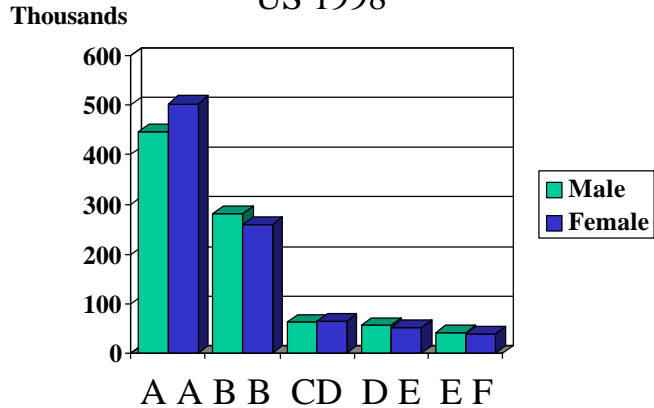
- 1. What do you think Laborers die of most frequently?*
- 2. Why do you think that Laborers die most often from heart disease?*
- 3. What about cancer?*

Heart Disease is the Leading Cause of Death of LIUNA Members



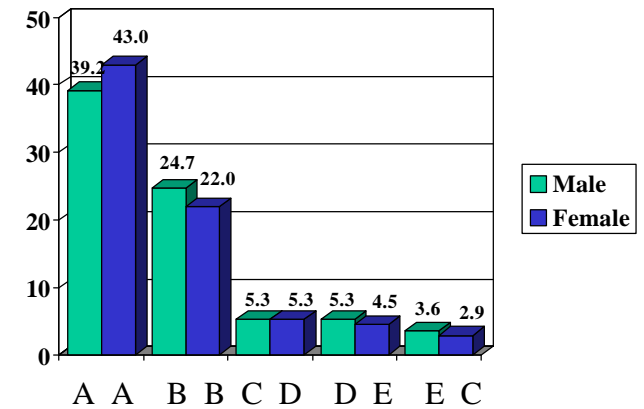
Source: LIUNA Death Certificates, 1985-1988

Leading Causes of Death for All Males and Females US 1998



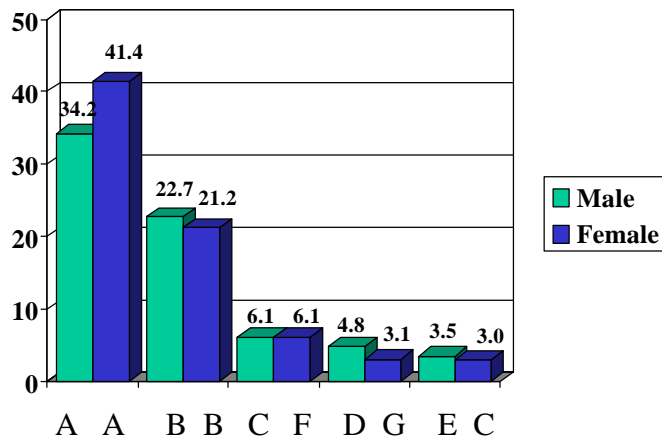
A = Total CVD D = Chronic Obstructive E = Pneumonia/Influenza
 B = Cancer Pulmonary Disease F = Diabetes Mellitus
 C = Accidents

Leading Causes of Death for White Males and Females US 1998



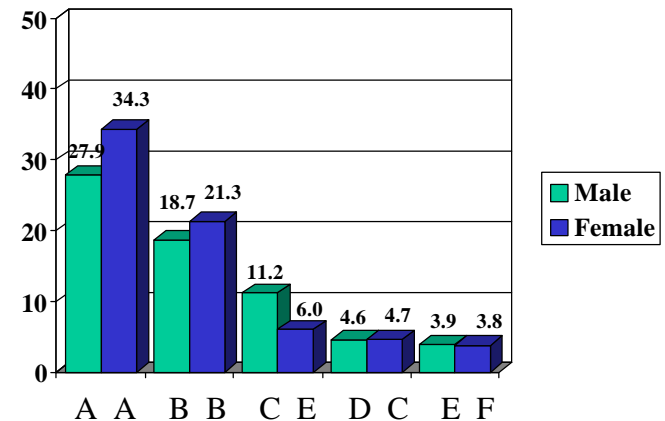
A = Total CVD D = Chronic Obstructive E = Pneumonia/Influenza
 B = Cancer Pulmonary Disease
 C = Accidents

Leading Causes of Death for Black Males and Females US 1998



A = Total CVD D = Homicide F = Diabetes Mellitus
 B = Cancer E = HIV (AIDS) G = Pneumonia/Influenza
 C = Accidents

Leading Causes of Death for Hispanic Males and Females US 1998

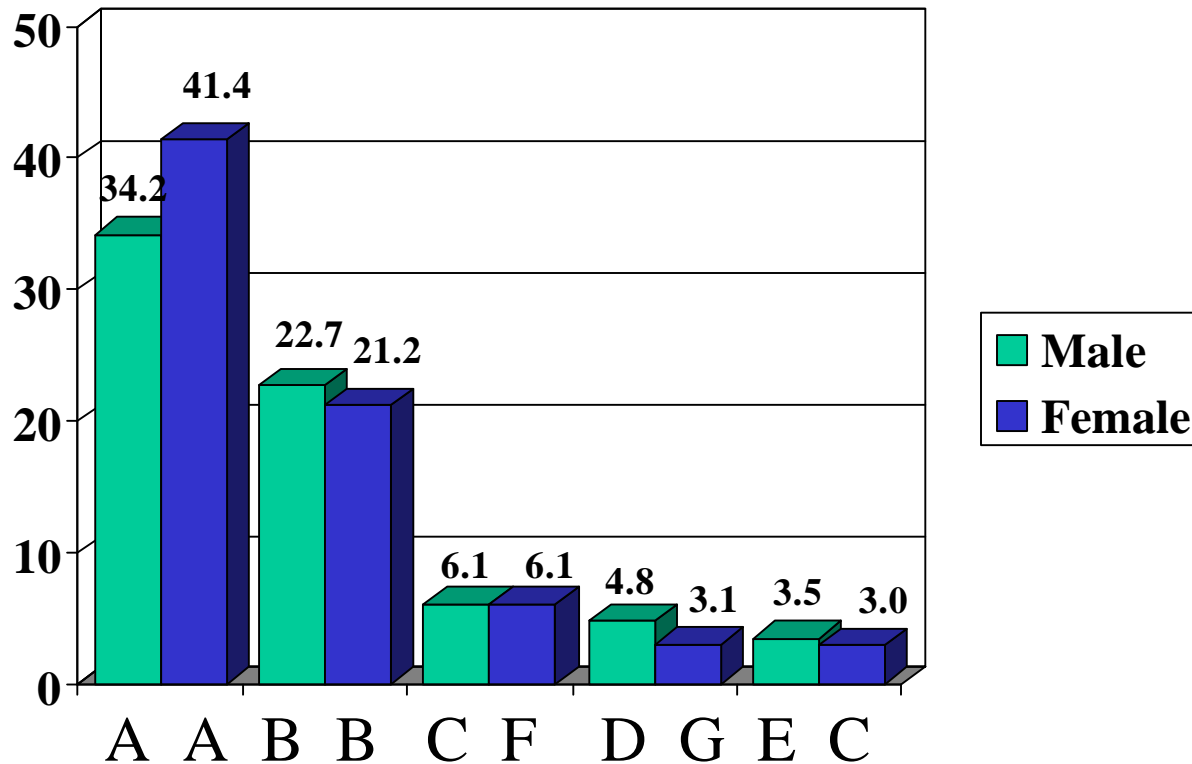


A = Diseases of the C = Accidents E = Diabetes Mellitus
 Heart, and Stroke D = Homicide F = Pneumonia/Influenza
 B = Cancer

Source: CDC/NCHS
 and the American Heart
 Association

Leading Causes of Death for Black Males and Females

US 1998



A = Total CVD

B = Cancer

C = Accidents

D = Homicide

E = HIV (AIDS)

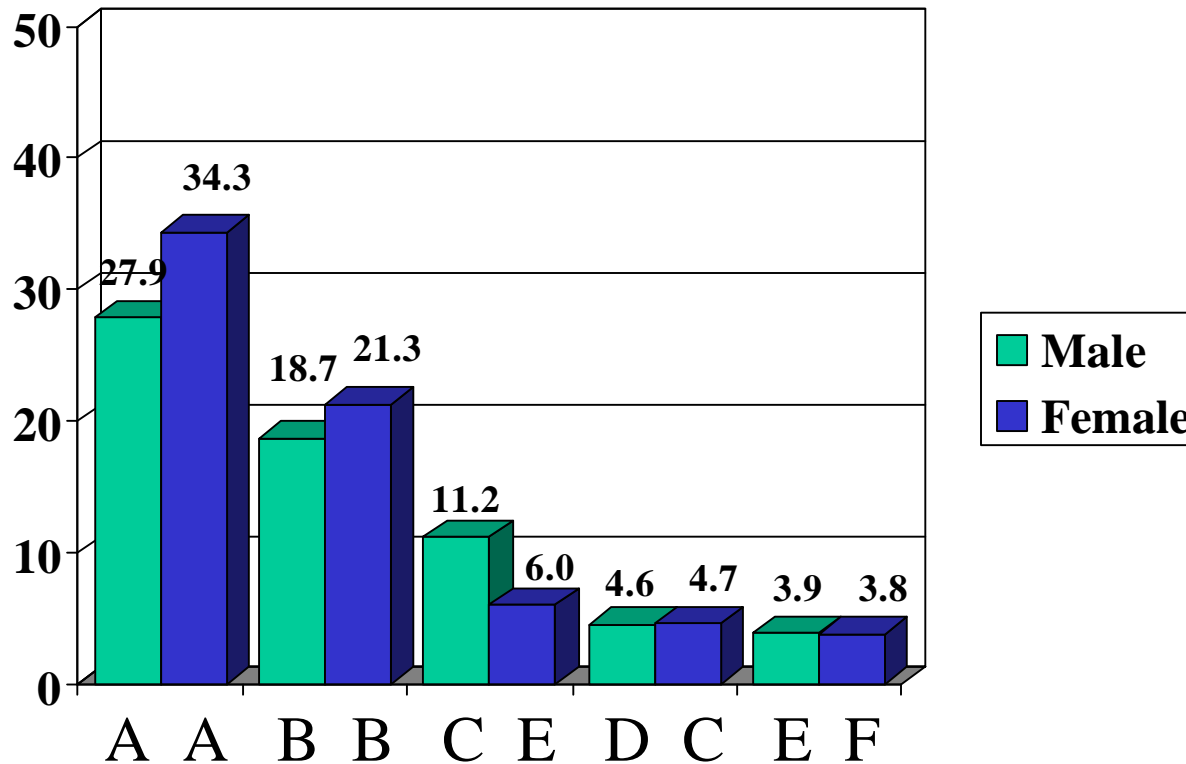
F = Diabetes Mellitus

G = Pneumonia/Influenza

Source: CDC/NCHS and the American Heart Association

Leading Causes of Death for Hispanic Males and Females

US 1998



A = Diseases of the
Heart, and Stroke
B = Cancer

C = Accidents
D = Homicide

E = Diabetes Mellitus
F = Pneumonia/Influenza

Source: CDC/NCHS and the American Heart Association

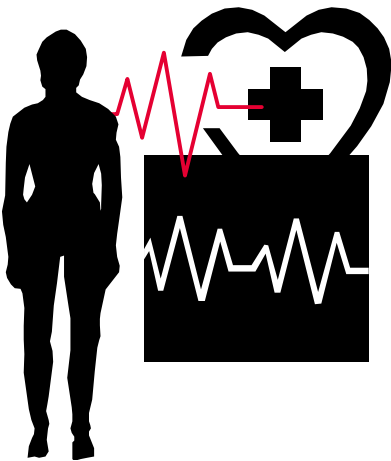
A. Heart Disease

Heart disease kills more men and women (and Laborers) than any other disease. Men in particular die from heart disease at twice the rate of women. And no one would deny the importance of having a healthy heart/cardiovascular fitness to having a career as a Laborer. This is especially true for those working in the field of environmental remediation where heavy work and wearing a respirator (and other PPE) are required.

How the Heart Works

Keep in mind what the purpose of the heart is: to pump oxygenated blood (which also carries necessary nutrients) to all of your body's organs via your blood vessels. Your heart is an organ itself, which also needs to be "fed" by the blood stream. Anything that interferes with this process or puts a burden on the heart can result in heart disease.

The major risk factors for heart disease include:



- **being a man***
- **having a family history of heart disease***
- **having high blood pressure (at or exceeding 140/90)**
- **being overweight**
- **having high blood cholesterol (exceeding 200 mg/dl)**
- **cigarette smoking; smokeless tobacco; second-hand smoke**
- **lack of exercise**
- **uncontrolled diabetes**
- **uncontrollable risk factors**

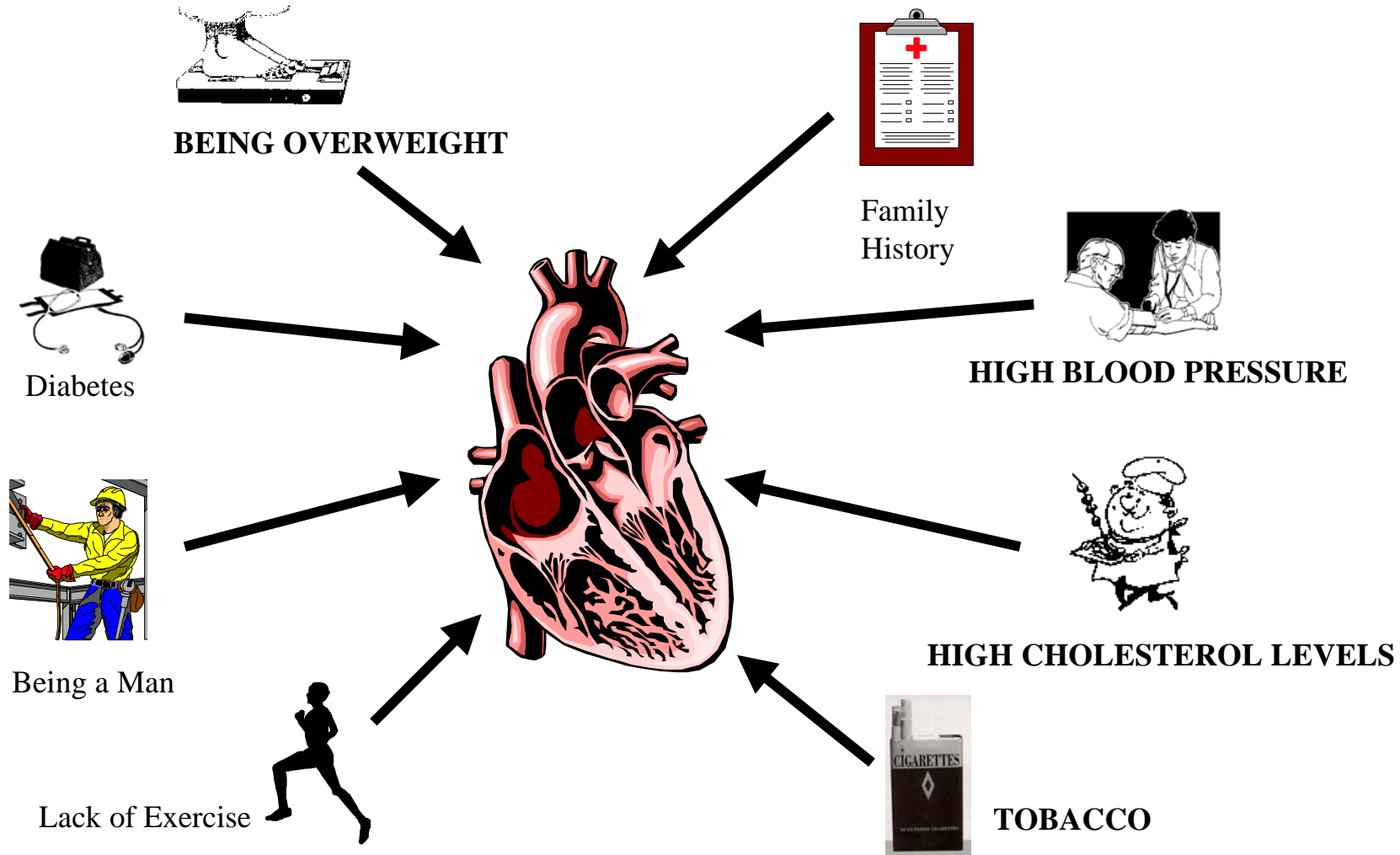
Age is another uncontrollable risk factor for heart disease because of the toll on your heart over time due to ongoing or unchecked risk factors.

Although you can't control your gender or your genes, you can control the other risk factors.

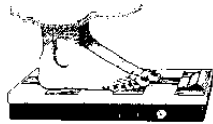
Questions to Generate Discussion:

- 1. How many of these risk factors do you have?*
- 2. If you have uncontrollable risk factors (gender, age, family history) are you taking extra precautions to improve the risk factors that you can control?*

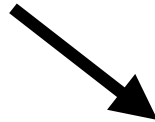
Major Risks Factors of Heart Disease



Major Risks Factors of Heart Disease



BEING OVERWEIGHT



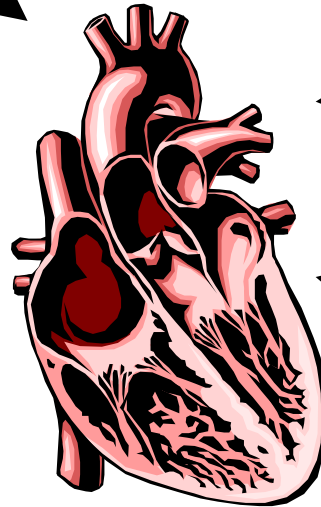
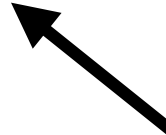
HIGH BLOOD PRESSURE



HIGH CHOLESTEROL LEVELS

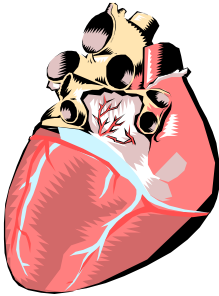


TOBACCO



The Instructor next reviews each of the major risk factors for heart disease, explaining how they have an impact on the heart. Wherever possible, relate the risk factors mentioned to the items identified by the participants in the responses to the group exercise, questions 3 and 4.

1. High Blood Pressure



Your blood pressure is the force of blood flowing within your arteries. It is measured and read in two numbers, the first (top/systolic) number is the pressure when your heart takes a beat (contracts) and the second (bottom/diastolic) number is the pressure when your heart is at rest.

Just as with water running through a hose, anything that adds more fluid to your blood flow, impedes flexibility or narrows the “tube” (your arteries) will cause the pressure to increase. Over time, having high blood pressure within the arteries (which are supposed to be smooth and flexible on the inside) results in damage to the artery walls. This can result in hardening of the arteries (walls become rigid) or a rupture of the artery (aneurysm). The damaged walls make it easier for cholesterol to collect and stick to the arteries, narrowing the walls further and causing potential for total blockage or a blood clot. Cutting off the blood flow to the heart muscle can result in a heart attack. Cutting off the blood flow to the brain can result in a stroke.

You can't know whether you have high blood pressure (*hypertension*) or not unless you have your blood pressure taken. A reading of **120/80** or lower is what you should be aiming for. Because your blood pressure changes under different conditions, a few readings are required to diagnose hypertension.

There are no signs or symptoms of high blood pressure: that's why it's called the *silent killer* and why it's so important to have your blood pressure regularly checked.

Following are the ranges of normal vs. dangerous blood pressure readings:

Upper Number (Systolic)		Lower Number (Diastolic)	Interpretation
<130	or	<85	Normal
130-139	or	85-89	Normal but borderline
140-159	or	90-99	Mild hypertension
160-179	or	100-109	Moderate hypertension
180-209	or	110-119	Severe hypertension
210+	or	120+	Very severe hypertension

Source: Mayo Clinic Heart Book

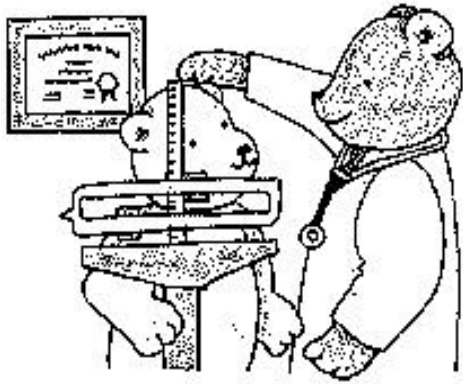
Questions to Generate Discussion:

- 1. If I took a tube (roll up a piece of paper to demonstrate) and had water running through it and constricted it's size, what would happen to the force of water within that tube? What if I turned up the volume of water within the tube? What if these flexible sides became rigid?*
- 2. (Take the same tube) what would eventually happen to this tube if I had water rushing through it at full force over several years, unchecked?*
- 3. If you had high blood pressure how would you know it? What are its symptoms?*

Information specific to ethnic groups:

- African-Americans have higher incidence of HBP (28%) than the general population (20%).
- HBP develops earlier in life among African-Americans and is more serious.
- Two-thirds of older African-Americans have HBP.
- Because of their higher rate of HBP, African-Americans have higher rates of stroke than other ethnic groups.

2. Obesity



Recently the American Medical Association declared obesity as the single greatest behavioral risk factor of heart disease. When you are overweight, your heart has to work harder in order to carry the extra load. Making your heart work harder makes the heart muscle get bigger. As it gets bigger, it works less efficiently. Eventually it can't keep up with your weight's demands and gives out.

Obesity is a result of consuming more calories than you burn, regardless of what you eat and regardless of your metabolism. The calories that you don't burn are stored as fat for future energy needs – you may or may not need this stored fat in the future.

Point of Discussion:

Someone may ask how you know if you are overweight or what constitutes being overweight. Common references are insurance table data or the new height/weight density ratio (Body Mass Index). Some will say that muscle weighs more than fat and that they are "all muscle." The best way to tell you are overweight is to look at yourself unclothed in the mirror and jump up and down. That which is jiggling which shouldn't be jiggling is fat. If you are overweight, you know it.

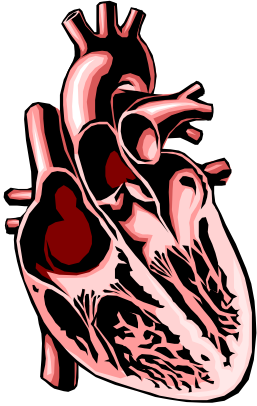
Statistics specific to gender or ethnic groups:

Percent of the adult population considered to be obese (1998)

	Male	Female
Non-Hispanic Whites	18%	16%
Non-Hispanic Blacks	23%	32%
Hispanics	19%	24%
Other	11%	13%

3. Cholesterol

What is cholesterol?



Cholesterol is a sticky, waxy natural substance that your liver produces. It serves many purposes, including hormone development and cell structure. Unfortunately, when you have too much of this sticky substance in your blood stream, it sticks to the walls of the arteries and hardens into a plaque. When the plaque builds up, there is less room for the blood to flow through. When the blood can't get through the arteries that "feed" the heart muscle, you can have a heart attack or a stroke.

How do you know when it is too high?

You might suspect that you have high cholesterol if you get chest pain (because of the blockage of blood flow to the heart). But, by then, much of the damage is done. In most cases, you won't know you have high cholesterol unless you have your blood tested. You should get your cholesterol checked every 5 years (more often if the numbers are high). You want your total number to be below 200 for a normal reading. 200-240 is of concern and beyond that is too high. (See Canadian values below.) Your doctor should also check to compare your ratio of good cholesterol to bad cholesterol. Good cholesterol helps eliminate bad cholesterol. A good ratio is about 1:3 or higher.

Questions to Generate Discussion: - use health aids for demo purposes

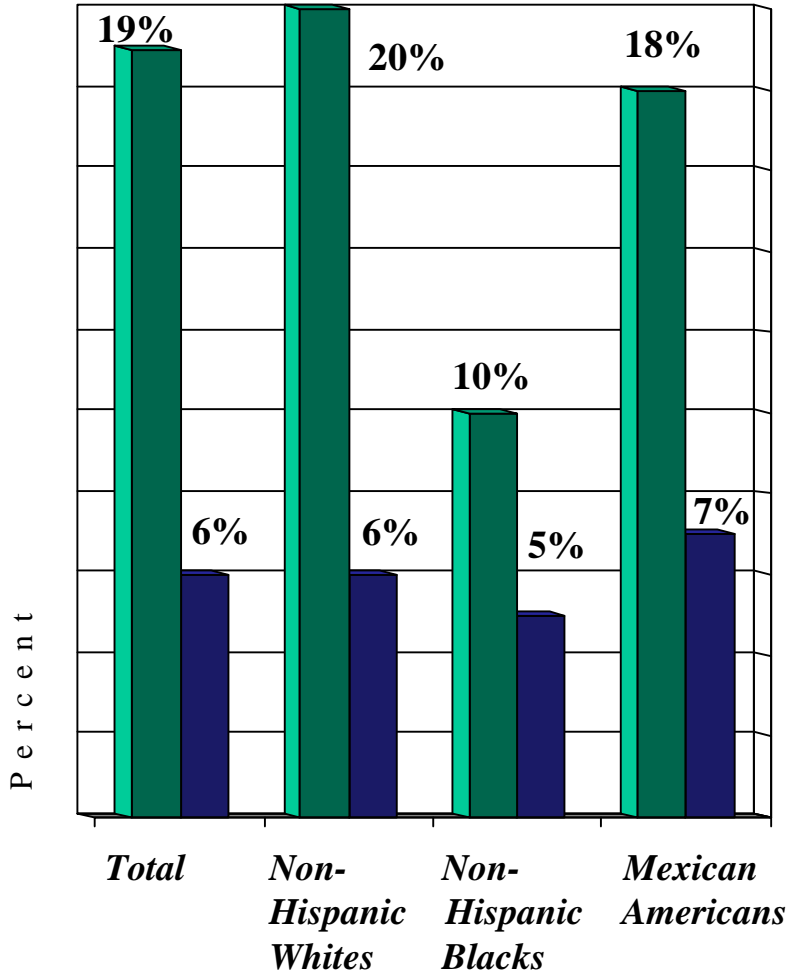
- 1. When your tube (artery) starts collecting gunk over time, what will eventually happen?*
- 2. What happens if your heart is cut off from a supply of blood?*

Information specific to gender or ethnicity:

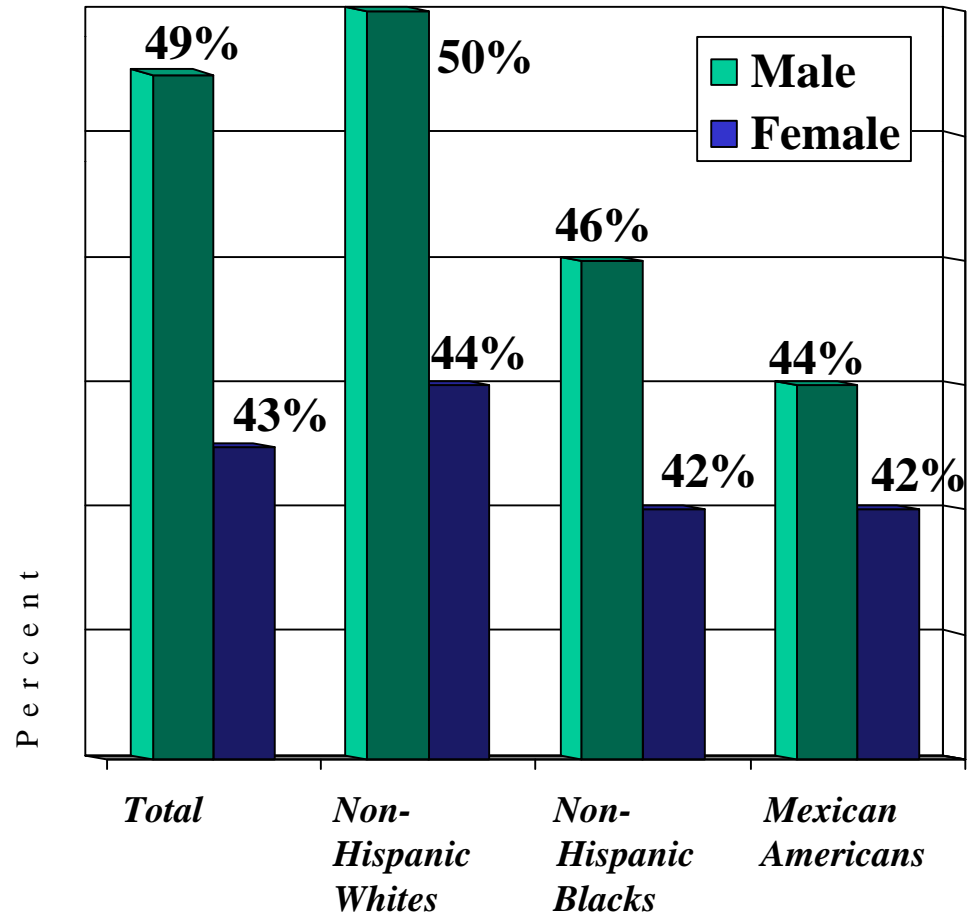
- Unhealthy cholesterol levels are a bigger problem among Caucasian men than among women and other ethnic groups.
- Mexican-American males have poor levels of good cholesterol which is close to that of Caucasian males.

Estimated Prevalence of Americans Age 20 and Older by Race/Ethnicity and Sex, 1988-94...

With HDL Cholesterol of 35 mg/dL or Lower



With LDL Cholesterol of 130 mg/dL or Higher



<i>Recommended Values</i>	<i>Based on Canadian Measures Total Serum Cholesterol</i>	
<i>Adults over 65 *</i>	<i>5.94 mmol/L</i>	<i>Target value</i>
<i>Adults 35-65 **</i>	<i>5.43 mmol/L</i>	<i>Target value</i>
	<i>5.43-6.17 mmol/L</i>	<i>Potentially at risk</i>
	<i>>6.17 mmol/L</i>	<i>At risk</i>
<i>Adults 18-29 **</i>	<i>4.60 mmol/L</i>	<i>Target value</i>
	<i>4.60-5.68 mmol/L</i>	<i>Potentially at risk</i>
	<i>>5.68 mmol/L</i>	<i>At risk</i>
<i>* Recommendation of the Canadian Society of Clinical Chemists</i>		
<i>** Canadian Consensus on Cholesterol Conference</i>		

4. Tobacco Use



Tobacco use (smoking in particular but also chewing tobacco and exposure to second hand smoke) is a major contributor to heart disease. Laborers smoke at a rate that is about double that of the general population (44% vs. 25%) so they are particularly at risk of tobacco-related heart disease.

Smoking affects the heart in the following ways:

- ⇔ The carbon monoxide in tobacco smoke replaces oxygen in the blood stream, including oxygen that is necessary for the heart itself. When your heart doesn't have enough oxygen, you may suffer from chest pain.
- ⇔ The nicotine in tobacco (including chewing tobacco) stimulates your heart. As your heart is stimulated to pump harder, it gets bigger and less efficient.
- ⇔ Nicotine in the bloodstream contributes to constriction of the blood vessels. When the blood vessels constrict, it makes your blood pressure go up (your blood passes through a more narrow passage). This increase in blood pressure then makes the heart have to pump harder to get the blood flowing to your organs. It also results in damaged arteries, which can result in heart disease.
- ⇔ Smoking inhibits the body's ability to produce good cholesterol (HDL). Therefore smoking contributes to unhealthy cholesterol levels.

Prevention

Based on these four major controllable risk factors for heart disease, this is what you should do to minimize your risk. This is especially true if you are male, African-American, and have a family history of heart disease (three things you can't control.)

Many of the things covered here, if not all of them, will be mentioned by the participants as things that Laborers should do to improve their level of fitness. Focus on those that the participants raise themselves. These recommendations can be covered together under the heading of ways to prevent heart disease. Alternatively, they can be addressed concurrently with each risk factor discussed in the prior section.

1. Lose weight.

Excess weight is considered a major risk factor for heart disease in and of itself. However, it is also the biggest controllable factor affecting high blood pressure, which is also a serious cardiovascular risk factor. In order to lose weight, you need to eat fewer calories and/or increase your energy output. Some studies indicate that people are more successful shedding pounds when they rely more on increasing exercise rather than going on a diet. But, one way or another, the result has to be more calories burned than consumed.

Point of fact: 3,500 calories = 1 lb. To lose one pound in a week you have to burn 3,500 extra calories or eat 3,500 fewer calories in that time period.

Weight reduction formulas (put on the board)

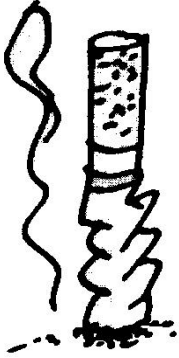
To determine caloric intake necessary to maintain your current weight use the following formula:

<i>Current weight</i>	<i>x 12 (if sedentary)</i>	<i>= daily calories</i>
<i>Current weight</i>	<i>x 14 (if moderately active)</i>	<i>= daily calories</i>
<i>Current weight</i>	<i>x 17 (if active)</i>	<i>= daily calories</i>

To lose one pound per week, decrease caloric intake by 500 calories/day.

To lose two pounds per week, decrease caloric intake by 1000 calories/day.

2. *Don't smoke/stop smoking*



If you smoke and you don't want you or those around you to get heart disease, then quit. It's possible: more than half of Laborers who ever smoked have quit smoking. Most of them have done so on their own after determining that enough is enough. If you have tried to quit in the past and resumed smoking, don't be discouraged. It often takes 3-5 attempts at quitting to finally do it. So if you failed in the past, consider it to be another step to put you that much closer to quitting for good. While most Laborers who have quit did so "cold turkey", there are many good pharmaceutical products on the market now, both over the counter and by prescription, that have been shown to be effective. These include nicotine gum, nicotine patches, inhalers – all of which are intended as nicotine replacement therapy – and Zyban, which affects your desire to smoke. (See smoking unit in Tab 3.)

3. *Exercise more*

Exercise helps you lose weight (burns calories), strengthens the heart muscle (makes it run more efficiently) and lowers blood pressure. It also increases your level of good cholesterol, so it improves your cholesterol level too. Many people also find that exercise helps them when they stop smoking. It helps to work off tension and results in an overall better feeling of fitness. Laborers get more exercise than most people because of the nature of their work. But you should be sure you are getting a sufficient amount of cardiovascular (aerobic) exercise during the week. This is the kind that gets your heart pumping (hard enough that you can't sing but can talk) 20 minutes at a time for 3 times a week. (See exercise unit in Tab 3.)

4. *Follow a heart healthy diet.*



There are many ways that diet affects your cardio risk factors. This is true especially when it comes to lowering cholesterol:

Reduce saturated fat. While it's true some foods you eat have cholesterol in them (dietary cholesterol) most of the cholesterol that ends up in the blood stream is produced by the liver. The liver produces cholesterol when it processes saturated fat that you eat. Saturated fats are most often those from animal products (milk, cheese, meat, etc) and are solid at room temperature. Compare that appearance to unsaturated fats, which come from vegetable sources (corn oil, olive oil, etc.) and are liquid at room temperature.

Consequently, the best way you can improve your blood cholesterol level is to cut down on saturated fats (meat and dairy products; fried foods) as well as foods with dietary cholesterol (shell fish, eggs, animal products.)

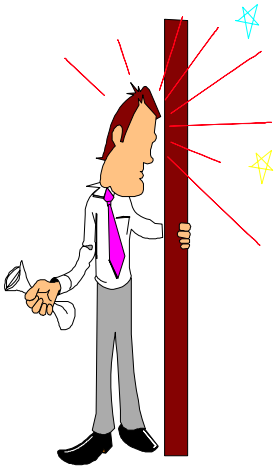
Eat more fiber. Soluable fiber helps get rid of bad cholesterol. Since insoluble fiber helps prevent colon cancer, don't worry too much about which is which. Either way you can't go wrong. Eat fruits, vegetables, beans and grains.

Drink less alcohol. For some people, alcohol is a staple of their diets. Aside from the risks associated with liver disease and intoxication, a diet heavy in alcohol contributes to high blood pressure and an enlarged heart (both are especially problematic among African Americans.) Too much alcohol is also associated with high cholesterol because it contributes to the fats in the blood stream. Some studies show a drink or two a day is good for the heart. However, too much alcohol (more than 2 drinks per day) can lead to heart disease. Alcohol has a higher caloric value per gram than for proteins and fruits and vegetables (7 calories/gram vs 4 calories/gram). (See alcohol unit in Section 3.)

Eat less salt. Many people with high blood pressure are salt sensitive, so salt aggravates their problem. If you love to eat salty foods, don't worry. If you gradually cut down, your taste buds will adjust so that a little bit of salt is sufficient to satisfy your craving.

Moderate caffeine. Some people who have high pulse rates should avoid caffeine which also stimulates the heart and will make them even more edgy. Caffeine also contributes to high blood pressure. For most people, however, moderate use of caffeine products isn't a problem.

5. Reduce stress



Stress in and of itself is probably overrated as a contributor to heart disease. You have to have some stress in your life otherwise you won't react and do things that are important. Problems can occur when you have too much stress or over react to stressful situations. Stress will temporarily raise blood pressure because it increases your pulse. If you are under constant stress, then you are continuously raising your blood pressure, which over time isn't good. Learning to eliminate stressful situations where possible or "coping" with stressful situations that you can't avoid would be useful.

Question to Generate Discussion:

Do you think that Laborers are prone to stress? Some people think Laborers have stressful lives because of their work environment and their erratic work schedules. Others think Laborers have less stress because they expend physical energy on the job.

Both can be true. If you can't control your stressful circumstances you need to learn how to deal with them.

Medical Attention:

Follow good preventive health practices, like having your blood pressure and cholesterol numbers checked as recommended. Ask your doctor for help if you are concerned about any of these cardiovascular risk factors. Be honest about your health behaviors and volunteer information that you think will be useful. Today's doctors are harried and less likely to pry for information that can be useful in treating you. But for the most part, doctors and other health professionals are willing to answer your questions and give advice when asked. Don't be shy.

For many people making behavioral modifications are sufficient to lower their blood pressure and cholesterol numbers, and will certainly work to reduce your weight. But, if your numbers don't improve or they are dangerously high, you most likely will need to take medications. If this happens, make sure that you take your medicine as prescribed. Don't stop taking it because you feel better. Remember, you can't *feel* high blood pressure or high cholesterol. And if your medicine has unpleasant side effects, tell your doctor. There are many alternatives available and he or she will help you find one that will work best for you.

Your doctor should also be able help you stop smoking, if you ask. A new prescription drug on the market, Zyban, blocks the brain's desire for nicotine. This works differently from nicotine replacement therapy, which is intended to give you progressively smaller doses of nicotine in an effort to wean you off. These products, in patch, gum and nasal spray form, are available over the counter. Some may be covered by your health plan. Regardless, it's well worth the out-of-pocket costs in the long run.



Questions to Generate Discussion:

- 1. How can going to the doctors "prevent" heart disease?*
- 2. Should you settle for a prescription to keep your blood pressure or cholesterol levels low as long as it's doing the job?*

CARDIOVASCULAR

Diseases

(ICD/9 390-459, 745-747) (ICD/10 I00-I99, Q20-Q28; see Glossary for details)

Prevalence

61,800,000 Americans have one or more types of cardiovascular disease (CVD) according to current estimates.¹ Of these, 29,700,000 are male and 32,100,000 are female. 24,750,000 are estimated to be age 65 and older.

- High blood pressure² — 50,000,000.¹
- Coronary heart disease — 12,600,000.¹
 - Myocardial infarction — 7,500,000.¹
 - Angina pectoris — 6,400,000.¹
- Stroke — 4,600,000.¹
- Congenital cardiovascular defects — 1,000,000.³
- Congestive heart failure — 4,790,000.¹
- 1 in 5 males and females has some form of cardiovascular disease.¹

Mortality

CVD claimed 958,775 lives in the United States in 1999. This is 40.1 percent of all deaths or 1 of every 2.5 deaths. CVD was about 60 percent of “total mention mortality,” which means that of the more than 2,000,000 deaths from all causes, CVD was listed as a primary or contributing cause on about 1,391,000 death certificates.

- Since 1900, CVD has been the No. 1 killer in the United States every year but 1918.
- More than 2,600 Americans die of CVD each day, an average of 1 death every 33 seconds.
- CVD claims almost as many lives each year as the next 7 leading causes of death combined.
- Almost 150,000 Americans killed by CVD each year are under age 65.
- 1999 CVD mortality: male deaths — 445,871 (46.5 percent of deaths from CVD); female deaths — 512,904 (53.5 percent of deaths from CVD). (Note: Includes congenital cardiovascular disease.)
- In 1999, 33 percent of deaths from CVD occurred prematurely (i.e., before age 75, the approximate average life expectancy in that year).

¹ National Health and Nutrition Examination Survey III (NHANES III), 1988-94, CDC/NCHS and the American Heart Association.

² A person is considered to have high blood pressure when he or she has a systolic pressure of 140 mm Hg or greater, and/or a diastolic pressure of 90 mm Hg or greater, or is taking antihypertensive medication.

³ National Health and Nutrition Examination Survey II (NHANES II), 1976-80, CDC/NCHS and the American Heart Association.

- The 1999 overall death rate from CVD was 354.1. The rates were 411.5 for white males and 526.0 for black males; 295.0 for white females and 402.1 for black females.
- From 1989 to 1999 death rates from CVD (ICD/10 I00-I99) declined 15.6 percent. In the same 10-year period actual CVD deaths increased 2.1 percent.

Comparisons

- Other causes of death in 1999 — cancer 549,838; accidents 97,860; Alzheimers disease 44,536; HIV (AIDS) 14,802.
- According to the most recent CDC/NCHS computations, if all forms of major CVD were eliminated, life expectancy would rise by almost 7 years. If all forms of cancer were eliminated, the gain would be 3 years. According to the same study, the probability at birth of eventually dying from major CV diseases (ICD/9 390-448) is 47 percent, and the chance of dying from cancer is 22 percent. Additional probabilities are 3 percent for accidents, 2 percent for diabetes and 0.7 percent for HIV. (U.S. Decennial Life Tables for 1989-91, Vol. 1, No. 4, Sept. 1999)
- In the United States in 1999, CVD claimed the lives of 445,871 males and 512,904 females, while cancer killed 285,832 males and 264,006 females. The CVD death rates were 418.2 for males and 303.2 for females; cancer death rates were 251.6 for males and 169.9 for females.
- Breast cancer claims the lives of 41,144 females each year; lung cancer claims 62,703. The 1999 death rates were 27.0 for breast cancer and 40.8 for lung cancer.

Age, Sex, Race and Ethnicity

- Based on data from the NHLBI's Framingham Heart Study in its 44-year follow-up of participants and the 20-year follow-up of their offspring...
 - The average annual rates of first major cardiovascular events rise from 7 per 1000 men at ages 35-44 to 68 per 1000 at ages 85-94. For women, comparable rates are achieved 10 years later in life. The gap closes with advancing age.
 - Under age 75, there is a higher proportion of CVD events due to coronary heart disease (CHD) in men than in women, and a higher proportion due to congestive heart failure (CHF) in women than in men.
- The age-adjusted prevalence of CVD in adults for non-Hispanic whites is 30.0 percent for men and 23.8 for women; for non-Hispanic blacks it's 40.5 percent for men and 39.6 for women; and for Mexican Americans it's 28.8 percent for men and 26.6 for women. (NHANES III [1988-94], CDC/NCHS)
- There are higher CVD risk factors among black and Mexican-American women than among white women of comparable socioeconomic status (SES). The large differences by both ethnicity and SES underscore the critical need to improve screening, early detection and treatment of CVD-related conditions for black and Mexican-

American women, as well as for women of lower SES in all ethnic groups. (NHANES III [1988-94], CDC/NCHS, *JAMA*. 1998;280:356-362)

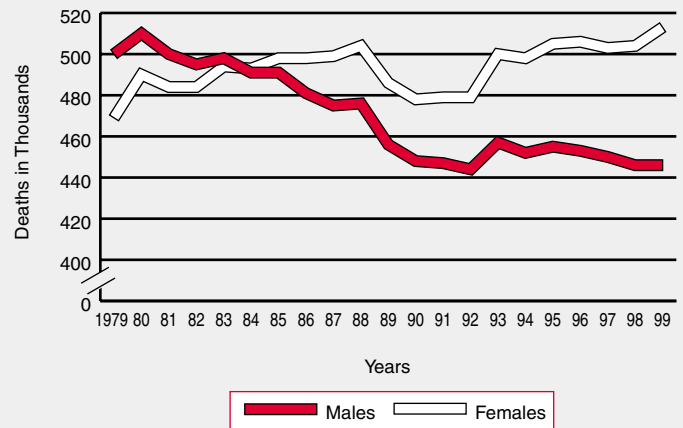
- Among American Indians/Alaska Natives age 18 and older, 63.7 percent of men and 61.4 percent of women have one or more CVD risk factors (hypertension, current cigarette smoking, high blood cholesterol, obesity or diabetes). If data on physical activity had been included in this analysis, the prevalence of risk factors probably would have been higher. (Behavioral Risk Factor Surveillance System, BRFSS [1997], CDC/NCHS)
- Surveys show that most women are far more afraid of breast cancer than of cardiovascular disease (even though 1 in 30 women's deaths is from breast cancer while 1 in 2.4 is from CVD).

Aftermath

- From 1979 to 1999 the number of Americans discharged from short-stay hospitals with CVD as the first listed diagnosis increased 29 percent.
- In 1999 CVD ranked highest among all disease categories in numbers of hospital discharges. That year CVD was the first listed diagnosis of 6,344,000 inpatients (3,161,000 males and 3,183,000 females).
- In 1999 there were 59,965,000 physician office visits and 5,862,000 outpatient department visits with a primary diagnosis of CVD. (National Hospital Ambulatory Medical Care Survey, 1999, CDC/NCHS)
- In 1998, \$26.4 billion in payments were made to Medicare beneficiaries for hospital expenses due to cardiovascular problems. That was an average of \$7,937 per discharge. (Health Care Financing Review, Statistical Supplement [2000], HCFA)
- In 1997, 25.8 percent of elderly nursing home residents age 65 and older had a primary diagnosis of cardiovascular disease at admission. This was the highest disease category for these residents. (1997 National Nursing Home Survey, USDHHS, April 25, 2000)
- In 1999 the annual rate of emergency department visits for cardiovascular conditions was 16.2 per 1,000 persons, up from 15.4 in 1992. (Trends in Hospital Emergency Department Utilization: U.S. 1992-99, CDC/NCHS)

Cardiovascular Disease Mortality Trends for Males and Females

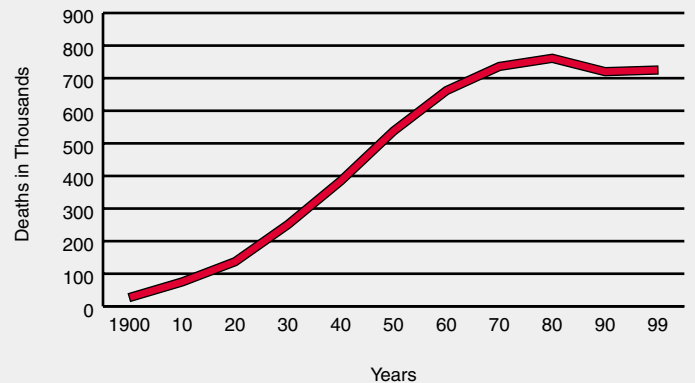
United States: 1979-99



Source: CDC/NCHS and the American Heart Association.

Deaths From Diseases of the Heart*

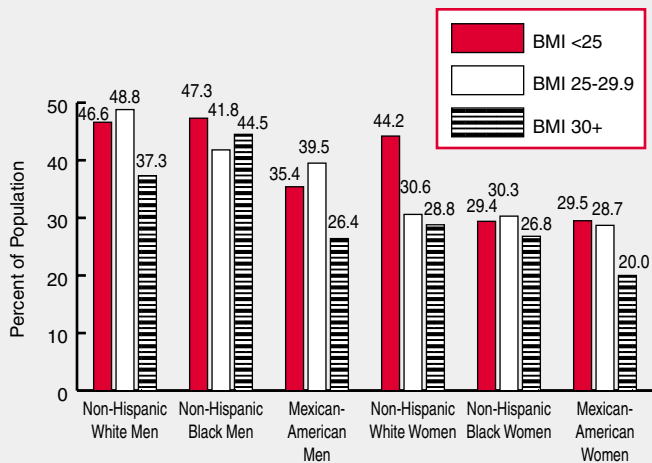
United States: 1900-99



* See "Common Classifications of Cardiovascular Diseases" on pages 2-3 for an explanation of "Diseases of the Heart." Total cardiovascular disease data are not available for much of the time period covered by this chart.

Source: CDC/NCHS and the American Heart Association.

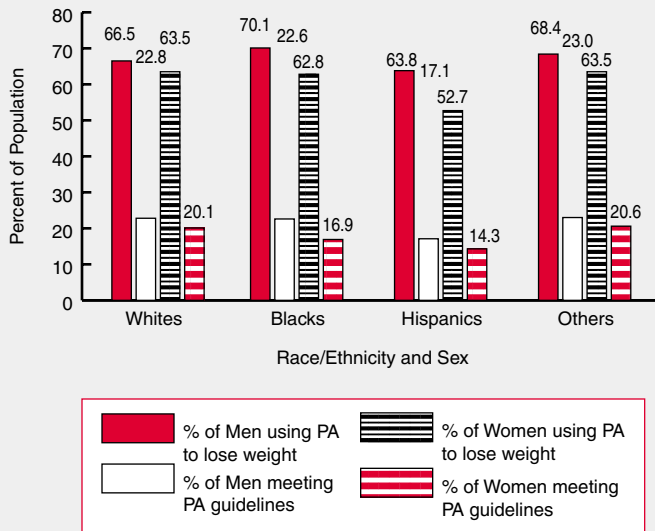
Prevalence of Moderate or Vigorous Physical Activity in Americans Age 20 and Older by Sex, Race/Ethnicity and BMI*
United States: 1988-94



* BMI indicates body mass index: weight in kilograms divided by height in meters squared (kg/m²).

Source: NHANES III (1988-94), CDC/NCHS.

Leisure-time Physical Activity (PA) Patterns Among Overweight Adults by Race/Ethnicity and Sex
United States: 1998



Source: BRFSS, 1998, MMWR, Vol. 49, No. 15;326-330, April 21, 2000, CDC/NCHS.

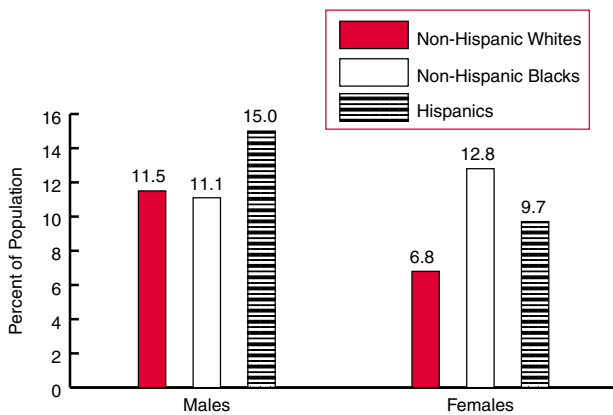
Overweight and Obesity

Using a body mass index (BMI) of 25.0 or higher as “overweight” and a BMI of 30.0 or higher as “obese,” 108,330,000 Americans age 20 and older are considered overweight (56,350,000 men and 51,980,000 women). Of these, 44,250,000 are considered obese (18,680,000 men and 25,570,000 women). In addition, an estimated 5,030,000 children ages 6-17 are considered overweight (based on the 95th percentile of BMI values in the 2000 CDC growth chart for the U.S.). (NHANES III [1988-94], CDC/NCHS)

- Using the 95th percentile of BMI values, the prevalence of overweight among American children ages 6-11 is (NHANES III [1988-94], CDC/NCHS):
 - For non-Hispanic whites, 10.3 percent of boys and 9.2 percent of girls.
 - For non-Hispanic blacks, 11.9 percent of boys and 16.4 percent of girls.
 - For Mexican Americans, 17.4 percent of boys and 14.3 percent of girls.
- Using the 95th percentile of BMI values, the prevalence of overweight among American adolescents ages 12-17 is (NHANES III [1988-94], CDC/NCHS):
 - For non-Hispanic whites, 11.1 percent of boys and 8.5 percent of girls.
 - For non-Hispanic blacks, 10.7 percent of boys and 15.7 percent of girls.
 - For Mexican Americans, 14.6 percent of boys and 13.7 percent of girls.
- Based on preliminary data from the 1999 NHANES IV, there seems to be an increase of 2-3 percent in the number of overweight children and adolescents, compared with data from NHANES III. (CDC/NCHS, March 2001)
- Each year an estimated 300,000 U.S. adults die of causes related to obesity. (BRFSS, CDC/NCHS, JAMA. 1999;282:1530-1538)
- Among Americans age 18 and older, the following people are overweight (defined as a BMI of 25 kg/m² or higher) (NHIS [1997], CDC/NCHS):
 - For non-Hispanic whites, 62.4 percent of men and 43.0 percent of women.
 - For non-Hispanic blacks, 64.1 percent of men and 64.5 percent of women.
 - For Hispanics, 64.7 percent of men and 56.8 percent of women.
 - For non-Hispanic Asian/Pacific Islanders, 35.2 percent of men and 25.2 percent of women.
- Among Americans age 18 and older, the median percentages of obesity are (defined as a BMI greater than 30 kg/m²) (BRFSS [1997], CDC/NCHS):
 - For whites, 15.6 percent.
 - For blacks, 26.4 percent.
 - For Hispanics, 18.2 percent.
 - For Asian/Pacific Islanders, 4.8 percent.
 - For American Indians/Alaska Natives, 30.1 percent.

- Among Americans ages 20-74 (with a BMI of 25.0 or higher to indicate overweight and a BMI of 30.0 or higher to indicate obesity), the age-adjusted prevalences are (NHANES III [1988-94], CDC/NCHS):
 - For non-Hispanic whites, 61.5 percent of men and 46.8 percent of women are overweight. 20.8 percent of men and 23.2 percent of women are obese.
 - For non-Hispanic blacks, 58.4 percent of men and 68.3 percent of women are overweight. 21.3 percent of men and 38.2 percent of women are obese.
 - For Mexican Americans, 69.3 percent of both men and women are overweight. 24.8 percent of men and 36.1 percent of women are obese.
- Among American Indians ages 45-74, 25.9 percent of men and 31.3 percent of women are overweight (defined as a BMI of 27.8-31.0 for men and 27.3-32.2 for women). 35.5 percent of men and 41.2 percent of women are obese (defined as a BMI of 31.1 or higher for men and 32.3 or higher for women). (Strong Heart Study [1989-92], NHLBI)
- The prevalence of obesity (BMI of 30 kg/m² or higher) was 19.8 percent in 2000. Mississippi had the highest prevalence of obesity (24.3 percent) and Colorado had the lowest (13.8 percent). (*JAMA*. 2001;286:1195-1200)
- An expert group convened by the World Health Organization in June 1997 found that overweight and obesity represent a rapidly growing threat to the health of populations in an increasing number of countries worldwide. WHO recognized obesity as a disease that is prevalent in both developing and developed countries and that affects children and adults alike.

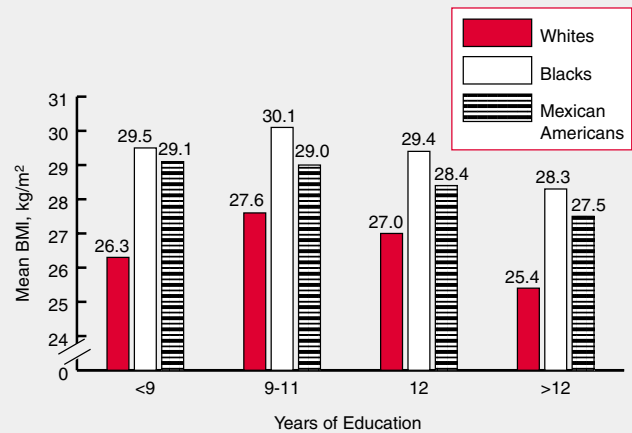
Prevalence of Overweight Among Students in Grades 9-12 by Sex and Race/Ethnicity
United States: 1999



Source: NHANES I (1971-74), BMI 95th percentile. Youth Risk Behavior Surveillance, United States, 1999, MMWR, Vol. 49, No. SS-5, June 9, 2000, CDC/NCHS.

Mean BMI for Women* Ages 25-64 by Education and Race/Ethnicity

United States: 1988-94

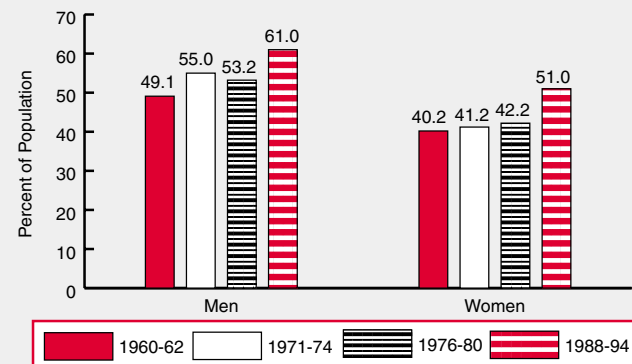


* For findings on men, see Winkleby MA, et al. Pathways by which SES and ethnicity influence cardiovascular disease risk factors. *Annals New York Academy of Science*. 1999;896:191-209.

Source: Winkleby MA, et al., Ethnic and socioeconomic differences in cardiovascular disease risk factors for women from the Third National Health and Nutrition Examination Survey, 1988-1994. *JAMA*. 1998;280:356-362.

Age-Adjusted Prevalence of Overweight* in Americans Ages 20-74 by Sex and Survey

United States: 1960-62, 1971-74, 1976-80 and 1988-94



* Overweight is defined as a BMI of 25.0 or higher.

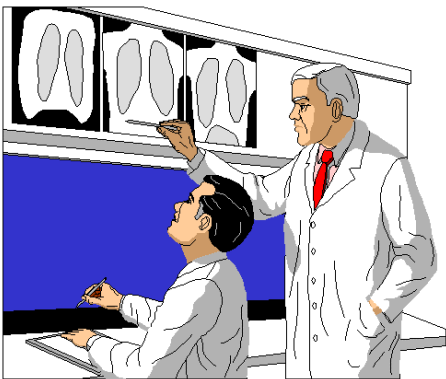
Source: Respective health examination surveys, CDC/NCHS and the American Heart Association.

B. Cancer

Laborers have a 13% higher risk of dying from cancer than the general population. In particular they have disproportionately high death rates from cancers of the lung, stomach, colon-rectum and thyroid. As with heart disease, the tendency to contract many cancers is inherited. However, still as with heart disease, many are also related to occupational exposures and behavioral risk factors common to Laborers, therefore, making them **preventable**.

General Cancer Information:

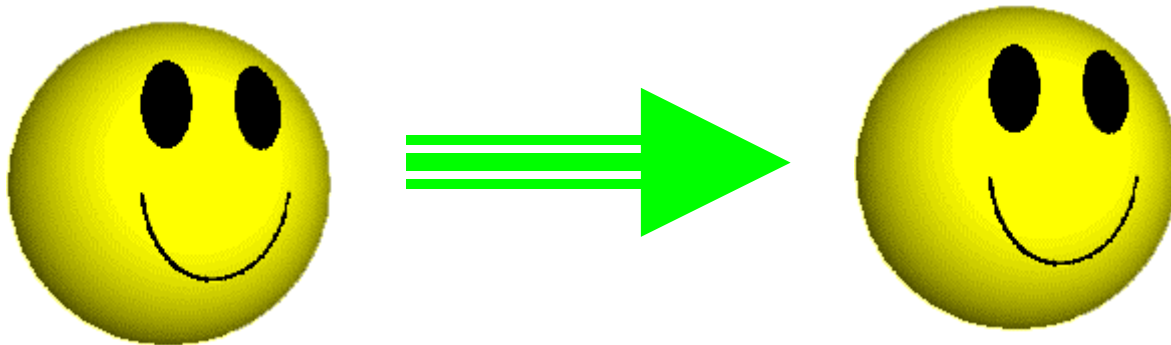
While most people are familiar with the fact that cancer is a deadly disease, most people don't realize what cancer is or how it is deadly. Once the Instructor describes it in a simplistic way, it is easier for members to understand how their behaviors and exposures contribute to the disease.



Cancer is actually more than 100 different diseases. All cancers involve the way that the body's cells grow and reproduce. Normal cells grow, divide and replace themselves in an orderly fashion. Your body naturally keeps this system under control. Sometimes, however, the body makes abnormal cells. These abnormal cells may be passed on from generation to generation – *inherited*, or result from exposure to a *carcinogen* which damages an otherwise healthy cell, such as radiation or tobacco-related carcinogens. The abnormal cells divide and reproduce themselves without order. As a result, a mass of cells (tumor) develops. The tumor is either *benign*, meaning a harmless mass, or *malignant*, meaning cancerous. Malignant, or cancerous, tumors cause damage to the body by invading healthy cells and destroying the body's affected organs (i.e., the lung, stomach, skin).

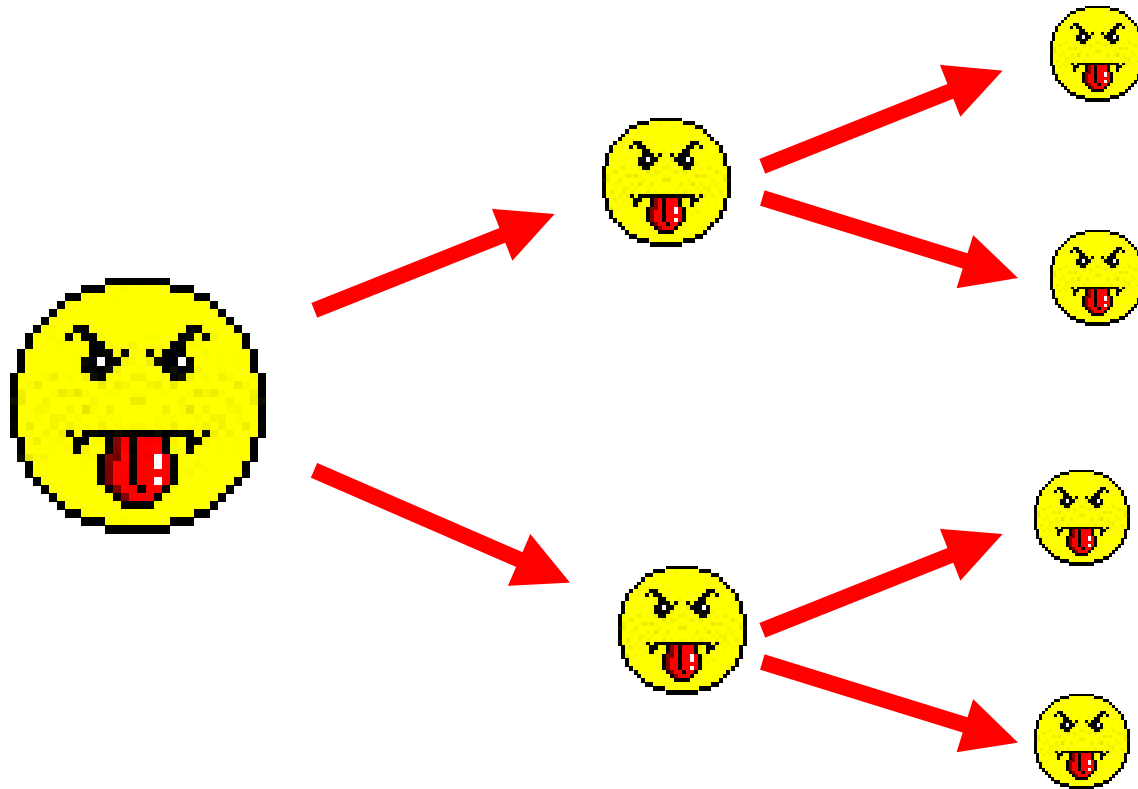
An additional danger is that a cancer that begins in one organ may spread (*metastasize*) through the blood stream to other body organs. That's why a disease like melanoma skin cancer is so deadly; in addition to damaging skin tissue, it metastasizes quickly and invades the cells of other vital organs.

Normal Cell Reproduction



Abnormal Cell Reproduction = Tumor

Genetic
defect or
carcinogen



Leading Sites of New Cancer Cases and Deaths—2002 Estimates*

Cancer Cases by Site and Sex		Cancer Deaths by Site and Sex	
Male	Female	Male	Female
Prostate 189,000 (30%)	Breast 203,500 (31%)	Lung & bronchus 89,200 (31%)	Lung & bronchus 65,700 (25%)
Lung & bronchus 90,200 (14%)	Lung & bronchus 79,200 (12%)	Prostate 30,200 (11%)	Breast 39,600 (15%)
Colon & rectum 72,600 (11%)	Colon & rectum 75,700 (12%)	Colon & rectum 27,800 (10%)	Colon & rectum 28,800 (11%)
Urinary bladder 41,500 (7%)	Uterine corpus 39,300 (6%)	Pancreas 14,500 (5%)	Pancreas 15,200 (6%)
Melanoma of the skin 30,100 (5%)	Non-Hodgkin's lymphoma 25,700 (4%)	Non-Hodgkin's lymphoma 12,700 (5%)	Ovary 13,900 (5%)
Non-Hodgkin's lymphoma 28,200 (4%)	Melanoma of the skin 23,500 (4%)	Leukemia 12,100 (4%)	Non-Hodgkin's lymphoma 11,700 (4%)
Kidney 19,100 (3%)	Ovary 23,300 (4%)	Esophagus 9,600 (3%)	Leukemia 9,600 (4%)
Oral cavity 18,900 (3%)	Thyroid 15,800 (2%)	Liver 8,900 (3%)	Uterine corpus 6,600 (2%)
Leukemia 17,600 (3%)	Pancreas 15,600 (2%)	Urinary bladder 8,600 (3%)	Brain 5,900 (2%)
Pancreas 14,700 (2%)	Urinary bladder 15,000 (2%)	Kidney 7,200 (3%)	Multiple myeloma 5,300 (2%)
All Sites 637,500 (100%)	All Sites 647,400 (100%)	All Sites 288,200 (100%)	All Sites 267,300 (100%)

*Excludes basal and squamous cell skin cancers and in situ carcinoma except urinary bladder. Percentages may not total 100% due to rounding.

©2002, American Cancer Society, Inc., Surveillance Research

Information specific to gender and ethnicity:

(see reference section for more detail)

Leading cancers for

Black men: Prostate (highest in the world)
Lung (higher than any other ethnic group)
Oral
Stomach

Black women: Breast (not as high as for white women)
Colon
Lung
Uterine
Cervix

Hispanics: Cancer sites are same as for other Caucasians but incidence is 30% lower. Hispanic women have higher rates of cervical cancer than non-Hispanic white women.

According to the American and Canadian Cancer Societies, the four most common (incidence) forms of cancer for men are cancers of the **skin, prostate, lung and colon-rectum**. The most common forms for women are those of the **skin, breast, lung and colon-rectum**.

The cancers men die from (mortality) are cancers of the **lung, prostate, colon-rectum and pancreas**. Women most often die from cancers of the **lung, breast, colon-rectum and pancreas**.

Questions to Generate Discussion:

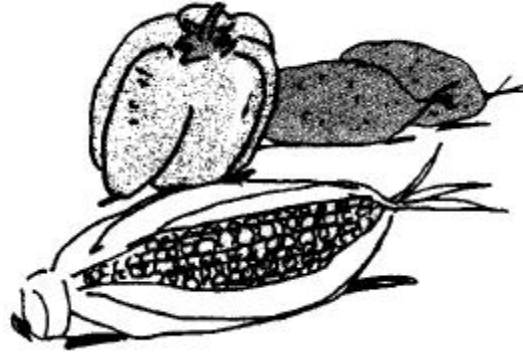
- 1. What cancers do you think are most common?*
- 2. What are some things you know of that cause cancer? (Match to appropriate cancer sites.)*
- 3. What are some behaviors you know protect you from cancer?*

Prevention:

As with the section on heart disease the Instructor can reference back to what the participants said that Laborers should do to change their behaviors in order to be more fit. As said earlier, many will be the same as with heart disease.

Laborers are at a higher risk of contracting cancer no doubt in part because of their occupational exposures that others don't experience, such as asbestos and hydrocarbons. While it is true that Laborers need to be particularly careful about protecting themselves from such exposures, don't underestimate the extent to which behavioral risk factors common to Laborers contribute to cancer.

While there are no guarantees in life, you can substantially reduce your risk of contracting cancer if you follow these do's and don'ts:



Do...

Eat more fiber/fruits and vegetables (colorectal, almost all others)

Exercise (colorectal)

Maintain a desirable weight (prostate, breast)

Use PPE at work (lung, various)

Use sunscreen or other skin shields (skin)

Avoid...

Tobacco products (lung, oral, colorectal, cervical, bladder)

High fat diets (prostate, colorectal, skin)

Heavy alcohol consumption (oral, breast, liver)

Cured foods (stomach)

Unnecessary radiation, including sun exposure (skin, lung)



Note that, while a third of all cancers are related to tobacco (and Laborers have a high prevalence of smoking and use of smokeless tobacco) your diet greatly affects your risk of getting cancer. It is as important to minimize the harmful things you might be eating (i.e. fatty, cured, or char-broiled foods) as it is to be sure that you are eating enough things that have preventive qualities (i.e. five fruits and vegetables a day, whole grains.)

Questions to Generate Discussion:

- 1. How many of these habits apply to you? Look at three of the most common cancers: lung, colorectal, and skin. You can prevent these cancers, by your own actions.*
- 2. You're probably careful about preventing exposures to carcinogens at work. Are you equally careful about your personal health habits?*
- 3. As with heart disease, a lot of what effects your risk of getting cancer is based on what you eat (or don't eat.) Are you careful about your diet or do you eat what tastes best or what is put in front of you?*

Prevent Your Risk of Cancer

*** Don't Smoke or Use Tobacco Products**



*** Eat More Fiber**

*** Reduce Fat Intake**



*** Control Weight / Exercise**

*** Drink Alcohol Only in Moderation**



*** Avoid Cured Foods**



Avoid Unnecessary X-Rays

*** Avoid the Sun**



*** Protect Yourself From Occupational Exposures**



Early Detection:

The Instructor should be aware that there are many people who are fatalistic about cancer and who think that if they get it they will die of it. They fail to distinguish between those cancers that are easily detected and cured versus those for which there is little hope. Some also have a genuine “fear of knowing.” Emphasizing the importance of early detection may influence some of these people to be more pro-active with respect to cancer treatment early enough to make a difference. Compare the difference in numbers of cancers incidence with mortality. Most prostate cancers don’t result in death because of ease of detection and cure. Lung cancer incidence and lung cancer deaths are close; difficult to detect and treat. However, if you’re going to treat it you have to detect it first.

Early detection plays a major role in the survival of many of those who contract cancer. Whether inherited or the result of years of bad habits, many major cancers respond well to early detection and treatment. The following are recommended by the American and Canadian Cancer Societies for early screening of cancers.

Self examinations for:

Testicular cancer (especially for young white men.)

Breast cancer (monthly)

Skin cancer (look for sores that don’t heal, marks that change in size, color or shape)

If you detect a lump in the testes or breast or have unusual markings on the skin, make sure you bring it to the attention of a doctor as soon as possible for further examination.



Professional examinations for:



Breast cancer:	Clinical exams at age 20, mammography every 1-2 years at age 40, annually at age 50.
Cervical cancer:	Pap smears at age 18 every 1-3 years
Prostate cancer:	Digital rectal exam at age 40, PSA at age 50
Colon-rectum cancer:	Digital rectal exam at age 40, stool test at age 50, sigmoidoscopy every 3-5 years at age 50
Oral cancers:	Examination of the oral cavity during dental or physician checkups

These are recommended guidelines for *asymptomatic* persons, meaning there are no symptoms or otherwise reasons to suspect cancer. There are other more complex tests that you can have if your doctor suspects cancer but these aren't recommended as part of a routine screening for an otherwise healthy person. Also, these are tests that the medical community defines as being suitable to accurately detect a cancer ***early enough to treat*** and therefore, improve the chances of survival. Note that there are no early detection tests for lung cancer, the most common cancer killer, because once lung cancer is detected (usually through an x-ray), the successful treatment options are minimal.

Questions to Generate Discussion:

1. *Some people don't like to have cancer related check ups because they are afraid what they might reveal. Would you want to know if you had cancer so that you could do what is necessary to treat it?*
2. *When you go to the doctors, do you ask for these (or other) medical tests or do you wait for your doctor to make a recommendation?*

Early Warning Signs of Cancer:

While it is important to follow good health practices to prevent and detect cancer, it is also important to look out for some of these more notable early warning signs of cancer. If any of these apply to you, see a doctor.

1. A sore that won't heal
2. Changes in a mole or other skin markings
3. Difficulty swallowing
4. Changes in bowel or bladder habits, such as constipation or painful or difficult urination
5. A lump or swelling
6. A cough that won't go away; hoarseness
7. Unexplained weight loss
8. Discharge or bleeding, especially in the stool, urine or breast.



Environmental Cancer Risks: Chemicals

Known Carcinogens:



Benzene
Asbestos
Vinyl Chloride
Arsenic
Alfatoxins

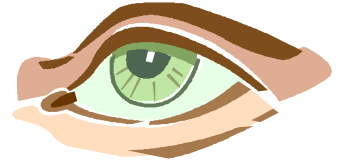
Probable Carcinogens:



Chloroform
DDT
Formaldehyde
PCBs
**Polycyclic
Aromatic
Hydrocarbons**

C. Diabetes Mellitus

Diabetes mellitus, or high blood sugar (glucose), results from a deficiency of insulin, a hormone produced by the pancreas. When the body doesn't produce insulin, or doesn't use it correctly, it can't make use of its main fuel sugar. Untreated, diabetes can lead to blindness, vascular disease, kidney disorders, neuropathy (loss of nerve tissue), and other problems. Too much glucose in the blood over many years can damage the eyes, kidneys and nerves. It also increases the risk for heart and blood vessel disease. The best defense against diabetes complications is to keep glucose levels under control.



There are two kinds of diabetes: Type 1 usually occurs during childhood or adolescence, and type 2, the most common, usually occurs after age 40. Type 2 diabetes is on a sharp rise in this country in all ethnic backgrounds. Diabetes is a chronic disease that has no cure. It is projected that by 2010, the number of people with type 2 diabetes will double.



Some of the diabetes warning signs or symptoms include: extreme thirst, occasional blurry vision, frequent urination, unusual tiredness or drowsiness, unexplained weight loss, tingling or numbness in the hands or feet, and cuts or bruises that are slow to heal.

Causes and risk factors of diabetes

Diabetes is caused by the following or a combination of the following factors: genetic factors, obesity, predisposing diets, smoking, and family history of the disease. Weight concentrated around the abdomen and hips, or an apple shaped body tend to be part of the picture. People with first degree relatives who have this disease have a 40% increased risk for type 2 diabetes. This disease affects laborers because as an industry, we tend to have poor diets, high obesity rates and poorer lifestyle habits in general.



Anyone can get diabetes, but the following factors may result in a greater likelihood of developing it:

- Being overweight
- Having a family history of diabetes
- Not exercising regularly
- Being over age 40
- Delivering a baby over nine pounds
- Being of African-American, Hispanic or Native American origin

Prevention and treatment

Because, as with other diseases, obesity is greatly associated with Type 2 diabetes, prevention of the disease is greatly focused on maintaining a desirable weight, eating right and exercise.

Likewise, treatment focuses on losing weight and improving diet. A doctor may prescribe medication and/or insulin shots.



Information specific to gender and ethnicity:

- Compared with whites, blacks have a 60% higher rate of developing diabetes; Hispanics have a 90% increased risk.
- Among African American women, 11.3 million or 7.9 percent of this group have diabetes. Diabetes is the fourth leading cause of death responsible for over 7,000 deaths and more the 5% of deaths from all causes. The health outcomes of African American women who have diabetes – 25% of this population group – are far worse than those of Caucasian women (15% who have this disease). These minority women are more likely to be blinded, become amputees, develop end-stage renal (kidney) impairment and die from diabetes than are their Caucasian counterparts.

- Among all Hispanic women, diabetes is the fourth most common cause of death, responsible for more than 2500 deaths, or 5.9% of deaths from all causes. Older Mexican American women are the second most likely racial/ethnic group to have diabetes. Almost one-third (30%) of these women suffer from the disorder. These older women have the highest incidence of this disease among all Hispanic women.
- Approximately 1.2 million or 10.6 percent of all Mexican Americans have diabetes. On average, Mexican Americans are 1.9 times as likely to have diabetes as non-Hispanic whites of similar age.
- Other Hispanic/Latino Americans: On average this group of Americans are almost twice as likely to have diabetes as non-Hispanic whites of a similar age.

D. Back Injuries

Back injuries are the leading compensable injury for Laborers. Many people mistakenly believe that back injuries are an unavoidable factor in a construction worker's job. The truth is that construction workers are not more prone to back injuries, they just have more opportunities to do things the wrong way than the average person.

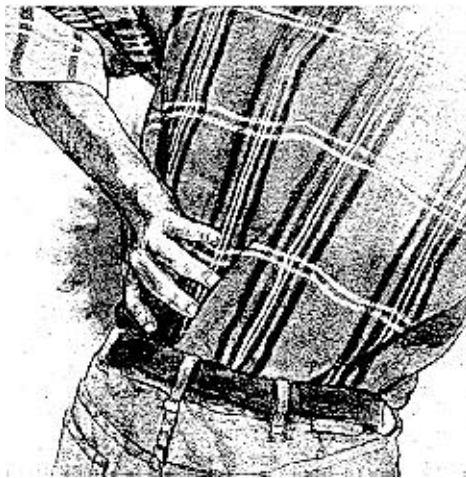
Questions to Pose

1. *What do you think causes Laborers to have back injuries?*
2. *How much do you think your actions off the job have an effect on your likelihood of getting a back injury?*
3. *When do you think the most back injuries occur? – early in the day because workers aren't properly warmed up.*
4. *What are the major muscles that support the back? -- buttocks, thighs, hips, stomach.*
5. *What should you do if you have a back injury?*

Back injuries prevention focuses on three major areas:

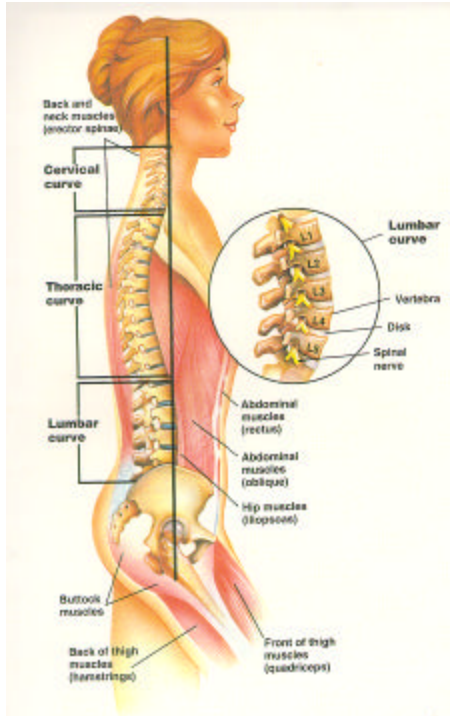
1. Good general health
2. Proper physical conditioning
3. Proper lifting techniques

Good General Health



The extent to which you take care of yourself will have an effect on your susceptibility to getting a back injury and your ability to recover from one.

Your *diet* affects the extent to which your body (including back muscles and bones) gets the proper nutrition to keep it healthy.



Poor posture can greatly aggravate a back problem or contribute to one. Your disks are aligned in an order intended to keep you properly balanced, with weight and pressure points evenly distributed. If you have poor posture, over time, your back disks gradually become out of alignment, putting more pressure on disks which apply pressure to muscles and your spinal cord (nerves)... and result in pain.

Keeping excess *weight* off your stomach and keeping your stomach muscles strong help provide sufficient support for your back. For every 10 pounds of excess weight on the stomach, you put an extra 100 pounds of pressure on the back.

Excess *stress* makes the muscles tense. When muscles are tense they are more susceptible to injury. Tension often builds up in the neck, which is the top part of the spinal cord. That is why people often experience back aches when they are under stress.

Proper Physical Conditioning

Workers who are generally fit have fewer back injuries. However, it is especially important to condition yourself before going to work. Warming up your body is similar to warming up your car's engine before driving it on a cold day. When muscles are "cold" and stiff, they are more likely to suffer trauma from the strain of working.

Conditioning includes both pre-job warm ups, then stretching. The warming up part is intended to get the blood flowing to the back muscles. The stretching is intended to loosen the muscles and make them more flexible.

Off the job, workers should focus on muscle development and conditioning. The muscles that support the back are those in the hips, thighs, buttocks and stomach. The stronger those muscles are, the better the back will be supported.

Proper Lifting

Laborers who keep in good condition and who lift correctly every time, will not have back problems. They have more opportunities to do the wrong thing and are often rushed into doing things that way in order to speed up the work process.

The steps to proper lifting are to:

- ◆ Assess the load. Can you lift it without help?
- ◆ Know where you are going with your load – any obstacles in the way? Is there a place to put it down?
- ◆ Bend first at the hips, then at the knees, don't bend at the back.
- ◆ Grip the load at the lower corners, with your hands under the load.
- ◆ Tighten the stomach muscles.
- ◆ Lift with your legs keeping in spine in its natural S shaped curve.
- ◆ Keep the load as close to you as possible.
- ◆ Turn by pivoting by the foot pointed in the direction you are turning. Do not twist while lifting.
- ◆ Put the load down in reverse order of lifting. Protect your hands.

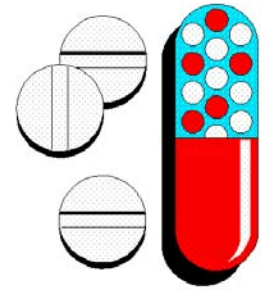


Back Pain Management

Most back injuries occur to soft tissue, the muscles, ligaments or tendons and recover on their own within a matter of weeks. They are most often not disk or skeletal injuries, which are more serious conditions. When Laborers have a back injury they should adhere to the following self-care guidelines:

- ◆ In the first 24 hours, apply cold, not heat. Heat creates swelling which might aggravate the situation, especially if there is muscle bleeding involved.
- ◆ Rest, but don't lie in bed for more than 1-2 days. Continuous bed rest results in the muscles atrophying. Your body needs the blood flowing to feed (oxygen and nutrients) your back muscles and keep them healthy.
- ◆ After resting, move around to the extent that it is tolerable.
- ◆ Avoid sitting as much as possible.

- ◆ Use anti-inflammatory drugs (aspirin, ibuprofen) or Tylenol for the pain. Avoid narcotic pain relievers or steroids. Remember that pain relievers only relieve the pain, although some also reduce swelling. But they don't "cure" the problem.



Seek medical care in the following situations:

- ◆ Extreme pain that doesn't subside
- ◆ Pain that worsens over time
- ◆ Bowel or bladder control problems
- ◆ Pain/numbness below the knee.

Gender Issues

The mechanics of proper lifting and back care in general are gender neutral. However, because they tend to have less natural upper body strength than men, women in particular need to be careful about:

- 1. Staying in good physical condition, particularly increasing muscle strength where possible.*
- 2. Lifting with their legs.*
- 3. Asking for assistance when faced with a load too heavy to carry on her own.*

E. HIV/AIDS

In the US, over 850,000 adults and children are estimated to be living with HIV/AIDS. It is a disease that affects everyone – it does not discriminate – anyone, man or woman, gay or straight, black or white, old or young, can get the disease if they engage in the behaviors that can transmit the virus from person to another. As the number of people affected continues to grow, almost every workplace will have to deal with a worker who is living with HIV or with AIDS. All workers should be educated on what the disease is, how to prevent it, and how to live with it.

For Student Participation Ask:

1. *What do the letters in HIV stand for? What do they mean?*
2. *Which STDs are bacteria and which are viruses?*

What is HIV?

Human Immunodeficiency Virus

1. **Human:** Only humans can be infected with HIV. It cannot be transmitted from an insect to a human or animal to a human being.
2. **Immunodeficiency:** HIV affects the immune system in that it no longer functions properly. When the immune system is deficient it cannot fight off infection and it allows people to get sick easier.
3. **Virus:** Lots of different things can make people sick. Two main things are bacteria and viruses. The difference is that bacteria can be cured, but viruses cannot. One you have a virus you have it for life. There is no cure for HIV.



There are other sexually transmitted diseases that fall into the category of bacteria and viruses.

Curable – Bacteria

Gonorrhea
Syphilis
Chlamydia

Not Curable – Viruses

Herpes
Human Papilloma Virus (Genital Warts)
Hepatitis B

It is important to remember that there are other sexually transmitted diseases that are serious and are transmitted the same way HIV is transmitted. Although bacterial STDs can be cured, both viral and bacterial STDs can cause serious infections and infertility if not treated promptly and properly.

Immune System

As indicated in the name, HIV damages the immune system so that it is no longer able to fight off infection properly. HIV attacks T-cells, a type of white blood cell, which ensures the production of cells and antibodies to attack specific germs that invade the body. As more and more of these T cell are destroyed the body's ability to fight invading germs weakens.

HIV Testing

To find out if someone has HIV, he or she would take an *HIV Antibody Blood Test*. This test looks for antibodies to HIV in the blood. It takes some time for the body to make antibodies to HIV once HIV has invaded the body. This period time is called the “Window Period” and lasts 6 weeks to 6 months from when a person was infected with HIV. People that have an HIV antibody test between the time of possible infection and 6 months from that time may get a false negative result. This means they may test negative when they are really infected and infectious (able to infect others).



After being notified of a positive test results, the following should be done:

1. **Access medical care** immediately
2. **Engage in healthy behaviors.** Otherwise a person could put themselves at further risk (more susceptible to infection with weakened immune system) and also put others at risk for transmission.
3. **Notify current or past partners** with or without the help of the health department.

OraSure Testing (oral testing)



There is now a new way of screening people for HIV called *OraSure* that does not involve taking blood or skin puncturing. A cotton swab is rubbed between the cheek and gums and used to collect antibodies from the tissue on the inside of the mouth. It is as effective as the blood test and, as with the blood test, it screens for the antibodies to HIV, not HIV itself.

Questions to Generate Discussion:

- 1. Let's say someone had unprotected sex at a party on Saturday, gets tested on Monday and waits two weeks for the test results. If the test came back "negative," could they be sure they were HIV negative? (Answer: No, because of the "Window Period.")*
- 2. If someone had shared needles for IV drug use in the beginning of February, at the end of February had unprotected sex, when should this person get tested for HIV to get the most accurate result? (Answer: End of August as long as this person did not engage in any other high risk behaviors after the end of February)*
- 3. What kinds of things would you do after finding out you are HIV positive to keep yourself healthy?*

What is AIDS?

For Student Participation Ask:

- 1. What do the letters in AIDS stand for? What do they mean?*

Acquired Immune Deficiency Syndrome

- 1. Acquired:** A person needs to do something to get AIDS. They need to engage in some kind of risky behavior in order to contract the virus.
- 2. Immune Deficiency:** Once a person has been diagnosed with AIDS, the immune system has been severely destroyed (see explanation under HIV).
- 3. Syndrome:** When a person has AIDS, there are a host of different infections that a person is susceptible to. These infections are called *opportunistic infections* because they take advantage of the "opportunity" of a person not having a working immune system to

attack that person's body. Opportunistic infections aren't things that people with healthy immune systems get. Examples include *Karposi's Sarcoma*, a skin cancer (purple blotches), or *Pneumocystis Carinii Pneumonia* (a type of pneumonia). There are about 30-40 opportunistic infections that people with AIDS can get.

AIDS is a diagnosis that a doctor makes. There is no AIDS test. A person doesn't get AIDS from another person and you can't tell by looking at someone that they have AIDS.

How AIDS is Diagnosed

AIDS is diagnosed by a doctor once an HIV positive person meets certain criteria. The criteria are as follows:

- If an HIV+ person has a **less than 200 T-cell** count, he/she is considered to have an AIDS diagnosis. A person with a healthy immune system has about 1000 T-cells. The 200 T-cells is just a mark-off point, and it doesn't necessarily mean that person is sick or looks sick.

OR

- If an HIV+ person has an **opportunistic infection**.

Either of these two things can qualify a person for an AIDS diagnosis. The person does not have to be sick to have an AIDS diagnosis, therefore there is no way to tell by looking at someone that he or she has AIDS or is HIV+.

The average time between when a person gets HIV until they get an AIDS diagnosis is 10 years. Therefore a person could get infected when he or she is 15 years old and might not show symptoms of opportunistic infections until the age of 25. Unfortunately most people aren't getting tested during the window period, or when they can first find out that they have HIV; they're getting tested when they start to get sick. A lot of people are infected and don't know it. They may be passing on the HIV to other people unknowingly.

Treatment and Medication

The earlier the diagnosis of HIV the sooner people can access new medicines called *Protease Inhibitors* or “cocktails.” They are called “cocktails” because the medicines often come in combinations, which makes them most effective.

HIV contains something called “protease” which causes HIV to spread in the person’s body. The protease inhibitors bind to and block HIV protease from working, thus helping to slow down the production of more of the virus and *may* slow the spread of HIV throughout a person’s body. The reason why we say **MAY SLOW DOWN** the virus is because the medications do not help some people. They do not work for everyone because some people grow resistant to the drug treatment therapies over time or they suffer severe side effects or negative reactions.

The protease inhibitors are not a cure. They are a treatment. A treatment is medicine or therapy that can help people with sicknesses by working to improve their health for an unknown period of time, but cannot cure their illness. A cure is medicine or therapy that heals a person of a specific ailment or sickness. Remember, HIV is a virus and **it cannot be cured**. Once you have it, you have it for life. Therefore you can only treat it.

HIV Transmission

For Student Participation Ask:

1. Which bodily fluids transmit HIV? Which do not?

HIV is transmitted through four different bodily fluids that can take HIV from one person’s body to another person’s blood stream. These fluids are:

1. Blood
2. Semen
3. Vaginal Fluids
4. Breast Milk

**** Please note that *urine, saliva, tears, and sweat* are not fluids that have been found to transmit HIV. *For example, saliva only contains fragments of the virus. It would take ten gallons of saliva from an HIV+ person injected into someone’s bloodstream for them to be infected with HIV.***

Blood can move from one person's body to another person's bloodstream by the following ways:

1. **Sharing needles:** When a needle is shared, no matter what it is being used for, there is a high risk of HIV transmission. If a person is sharing needles for body piercing, tattooing, injecting steroids, or infection IV drugs, they are putting themselves at risk for HIV infection.
2. **Transfusion:** Before 1985, transfusions were a way that a lot of people got infected with HIV. In 1985, they began using the HIV antibody blood test to screen the blood supply for HIV before transfusions. Now, the risk of getting HIV from a transfusion is 1/676,000.
3. **Cuts:** If an HIV infected person is bleeding, and that blood comes into contact with a cut on your skin, there is a potential for transmission of the virus. However, HIV cannot cross the skin alone – there must be an opening in the skin for it to get into another person's bloodstream.



Blood, semen and vaginal fluids can move from one person's body to another person's blood stream through ...

Sex: During oral, anal or vaginal sex with an HIV infected person, there is risk for infection with the HIV virus.

Perinatal Transmission

HIV can also be transmitted from mother to child (*Perinatal Transmission*) if a woman infected with HIV has a child. Transmission can occur while the baby develops in the uterus (because it shares a blood supply with the mother) or during childbirth. In addition, HIV can be transmitted during breastfeeding. There is a high concentration of T-cells in breast milk. However, a drug called AZT is now given to pregnant women with HIV to reduce the risk of transmission to the baby. Now, only one out of four babies will be infected if their mother is infected.

Protection and Prevention

For Student Participation Ask:

1. Based on what you know about the causes of HIV, what are things people can do to protect themselves?

** Make sure the three areas below are addressed.*

In terms of **sharing needles**, individuals can protect themselves by the following:

- Don't use needles
- Don't share needles
- If needles are being shared, clean them and any equipment that's being used with bleach and water (see chart)
- If planning on getting body piercing or tattoos, make sure it is at a reputable place that uses new needles for every customer. Ask about the tattooers/piercers clientele bill of rights.



In terms of **sex**, individuals can protect themselves by the following:

- Not having sex. Otherwise known as postponement or abstinence. This is the only 100% effective way of protecting yourself from getting HIV through sex.
- Having a mutual monogamous relationship with a partner who is not HIV positive.
- Use of latex condoms for people who chose to be sexually active. Latex condoms will only reduce the risk of transmission if used consistently (every single time) and correctly. Condoms are NOT 100% effective because they can slip off and they can break, which leaves you as if you didn't use a condom at all. This is why it is important to learn how to properly use a condom.
- Talk to your partner before engaging in sexual activity. Discuss methods of protection.

On the **worksite**, workers can use the following ways to protect themselves:

- Use *universal precautions*. Treat all body fluids, whether blood or not, as if it is contaminated regardless of who it comes from.
- Remove dirty gloves properly, one at a time by turning them inside out.

- Don't rub your eyes, nose or mouth after handling blood. Use an eye shield or face mask to protect from splashes or while giving first aid.
- Disinfect surfaces or equipment that have come into contact with blood (or other bodily fluids) using paper towels/disposable cloths PLUS antiseptic hand wipes, soapy warm water, disinfectants or 1 part bleach in 9 parts water.
- Wash your hand thoroughly when done.

Questions to Generate Discussion:

1. *What are some of the ways people have put themselves at risk for becoming infected with HIV?*
2. *How can you bring up the topic of HIV/AIDS and testing to your partner?*
3. *What methods can be used on the construction site to keep from getting infected with HIV?*
4. *How can getting drunk or high put you at risk for HIV? (Answer: People that are high or drunk are not thinking straight and may make decisions that they wouldn't make if they weren't high or drunk. These decisions might include behaviors that can put them at risk for HIV)*
5. *If a co-worker gets hurt on the job and is bleeding, what can you do to protect yourself while helping this person?*
6. *Someone you are intimate with does not want to use a condom. You know that this person has already had unprotected sex with other people. If you have unprotected sex with this person, what are your chances of getting HIV? (Answer: The chances are high)*
7. *You have just heard that a co-worker has HIV. What are your chance of getting HIV from working near this person? (Answer: HIV cannot be transmitted by working near an infected person)*

Information specific to ethnic groups:

- African Americans and Hispanics have been disproportionately affected by HIV. This doesn't mean that being black or Hispanic makes you more likely or puts you at risk to get the disease, however, studies show that more and more people in these racial groups are getting it for a variety of reasons



- The numbers for these two minority groups continues to rise. Over time the number of AIDS cases among whites has been decreasing, while it has increased among blacks and Hispanics. In 1999, 32 % of reported AIDS cases were white, 47% were black, 19% Hispanic, 1% Asian/Pacific Islander, and less than 1% American Indian/Alaska Native.
- Over half of all AIDS cases reported in the US were among Blacks and Hispanics. And more than $\frac{3}{4}$ of women with AIDS were black and Hispanic.
- In 1994,
 - HIV was the leading cause of death among all men ages 25-44.
 - HIV became the third leading cause of death among women aged 25-44.
 - HIV was the leading cause of death for black women (5th leading cause for white women).

Questions to Generate Discussion:

1. Why do you think more and more blacks and Hispanics are getting HIV? Potential issues they may raise:

- * *“denial”*
- * *messages not getting through*
- * *cultural issues / taboo topics*
- * *educational barriers*
- * *not understanding/language barrier*

F. Hepatitis

Bloodborne pathogens are disease- and infection-causing micro-organisms carried by blood or other potentially infectious materials. You can't tell by looking at someone if they are infected with a bloodborne pathogen, therefore it is important to understand the hazards and the ways to avoid exposure. Hepatitis and HIV are two of the most common bloodborne pathogens.

What is Hepatitis?



Hepatitis is the general name for any inflammation of the liver. This condition can be caused by toxins such as alcohol, drugs (prescribed or over the counter), chemicals in aerosol sprays, paint thinners and other environmental pollutants. In addition, hepatitis viruses A, B, C, D, & E, and possibly others not yet identified, cause inflammation of the liver.

Hepatitis causes the liver to stop functioning properly, which in turn causes problems in the following:

- Food digestion
- Production of clotting functions to stop cuts from bleeding
- Production of proteins needed to build muscles
- Filtering harmful bacteria from the blood stream
- Production of immune factors that protect the body against germs and viruses
- Removing toxins and poisons from everything we eat, breath and absorb through our skin

Four of the types of Hepatitis are bloodborne pathogens – B, C, D & G.

Hepatitis A

Hepatitis A is usually transmitted through ingestion of fecal matter. This can happen by drinking or eating contaminated water or food. It is important to keep areas (especially eating areas) clean and hygienic to avoid Hepatitis A. The disease is usually accompanied by flu-like symptoms, including fatigue, nausea, vomiting, pain in the liver area, dark urine or like colored stool, and

fever. The virus survives for 3-4 hours. Other sources of infection include contaminated shellfish, equipment for IV drug use and sexual contact. There is a preventative vaccine available to help protect against Hep A.

Hepatitis B

Hepatitis B is more common, and more contagious than HIV. It may develop into a chronic (more than 6 months) disease in up to 10% of the newly infected people each year. If untreated, it can develop into cirrhosis (scarring of the liver) and liver cancer (most common cause). Hep B is transmitted through infected blood, semen, vaginal fluids, breast milk, tears, saliva and open sores. Vaccines are available to prevent Hep B.

Your exposure risk goes up if:

- Your work brings you into contact with contaminated blood
- You have multiple and/or high-risk sexual partners
- You live (or have sex with) an infected person
- You use injection drugs and/or snort cocaine (and share blood-contaminated equipment)
- You have a medical condition, such as hemophilia, that requires blood transfusions
- You visit (or were born in) parts of Africa, Southeast Asia, the Amazon Basin, the Pacific Islands, or the Middle East, where hepatitis B is more common
- You were born to an infected mother
- You require hemodialysis



Hepatitis C

Hepatitis C is a bigger problem than the others because in contrast to them, more than 80% of Hepatitis C infections become chronic and lead to liver disease. It is rarely diagnosed and not usually recognized until in its chronic stages when there has been severe liver damage. It is transmitted *most often by blood*. Any source of blood or blood products is capable of carrying the virus, even indirect sources like razors and toothbrushes. Therefore, it is more transmissible than most other bloodborne pathogens. A small number of infections are a result of having sex with an infected person. A mother can also pass it on to her newborn. There is no cure and no vaccine available to prevent Hep C.

How are Laborers at Risk?



Laborers are at no higher risk for Hepatitis and bloodborne pathogens than the general population unless they engage in any of the risky behaviors previously mentioned. Health professionals and those attending to first aid victims should practice universal precautions. There is no reason to panic if you are at work with someone who mentions that he/she has one of these viruses. It is important to know how these viruses are transmitted and not to engage in any of the high risk behaviors mentioned.

Information specific to gender and ethnic groups:

- Studies show that African-Americans and Hispanics have the highest rates of chronic hepatitis C, and a higher mortality from liver disease in general, than whites.
- Once infected with hepatitis C, the chance of chronic hepatitis is greater in African-Americans (86%) than in Hispanics (74%).
- Women are affected differently than men with liver diseases, and have different rates of and types of liver disease. The role of hormones such as estrogen as a factor in these gender differences is being investigated.
- Men are more likely to have the chronic form of hepatitis C (2.5% of the general population) than women (1.2%). In African-Americans, the difference is greater. Of those infected with hepatitis C, 86% of men will develop chronic hepatitis C, while only 70% of African-American women will.

A. Alcohol

Members tend to acknowledge the dangers drinking on the job and of inebriation (e.g. drunk driving.) However, they often underestimate the extent to which alcohol use has both short and long term health effects. The following outline provides the Instructor with information on the health effects of alcohol, which can be supplemented with additional handouts. The Instructor should encourage the participants to examine their own drinking patterns and consider how alcohol use may be affecting their health, their personal lives and their work.



Heavy alcohol use is more prevalent among construction workers than among the general population, largely due to the demographic make up of the industry (young males.)

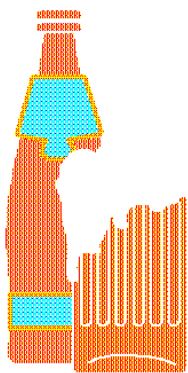
Heavy alcohol use is defined as five or more drinks on five or more occasions within a 30 day period. Heavy alcohol use is used to address the issues of the health effects of alcohol. It is not necessary reflective of *alcohol abuse* or *alcoholism*.

Impairment:

The extent to which alcohol impairs you primarily depends on your weight and the amount of alcohol consumed within an hour.

The Instructor should refer the participants to the alcohol wheels or BAC chart to gauge the extent to which they would be affected by alcohol under differing circumstances.

How Alcohol Works:



- ◆ Alcohol is a Central Nervous System Depressant
- ◆ It is absorbed directly into the bloodstream through the stomach, which is why one shouldn't drink on an empty stomach.
- ◆ Alcohol is processed through the liver at a rate of about 1 drink per hour. Neither coffee, cold showers, nor fresh air will speed up this process. Also because of the burden that alcohol places on the liver, it's important to avoid being a daily drinker and give your liver a periodic break.
- ◆ Men have a more effective alcohol processing enzyme than women. That's why they recommend that women *average* no more than one alcoholic drink per day, and, for men, no more than two alcoholic drinks per day.

Short Term Health Effects:

- ◆ Alcohol is a diuretic, which leads to dehydration (already a potential problem for construction workers who sweat a lot.)
- ◆ As a CNS depressant, alcohol slows your motor skills and reaction time as well as affects coordination (all potentially dangerous if working under the influence of alcohol.)
- ◆ As a CNS depressant, it lowers inhibitions, which can result in inappropriate conduct, arguments and fights.
- ◆ Alcohol consumption temporarily leads to increases in blood pressure, which may already be a problem for members as a result of other factors (see section on cardiovascular health.)
- ◆ Alcohol affects your ability to sleep effectively. Even the person who gets drowsy or passes out after drinking is not getting the proper level of sleep and will feel fatigued the next day.

Long Term Health Effects

- ◆ Cardio/stroke problems due to prolonged high blood pressure.
- ◆ Enlarged heart (especially among Blacks).
- ◆ Liver damage (cirrhosis).
- ◆ Oral cancer (especially when combined with tobacco use).
- ◆ Malnutrition. Alcoholics prefer to drink rather than eat. Alcohol calories are empty calories; they have little nutritional value.
- ◆ Reproductive disorders (male impotence; female menstrual disorders, as well as the potential for fetal alcohol syndrome (FAS) or developmental disorders).

Medical Interactions



Because many Laborers also take medications it is important to be aware of the problems associated with combining over-the-counter or prescribed medications with alcohol. In some instances, the combination compounds potential

problems. In other circumstances, alcohol renders the medication less effective. Common medications that Laborers use that shouldn't be taken in combination with alcohol are:

- ◆ Ibuprofen, aspirin and pain relievers/anti-inflammatory drugs: accelerates stomach bleeding.
- ◆ Acetaminophen (Tylenol): in combination can cause liver damage
- ◆ Antihistamines, narcotics, tranquilizers or sedatives: all are CNS depressants which, if combined with alcohol, another CNS depressant can be fatal.
- ◆ Antibiotics, anti-seizure medications, cardio medications and diabetic medications: in all cases, alcohol will alter the effectiveness of the medication.

Alcoholism vs. Alcohol Abuse

Many people have a difficult time distinguishing the difference between having an alcohol problem (alcohol abuse) and being an alcoholic (alcoholism.) Those who don't recognize themselves as fitting the profile of an alcoholic consider themselves as not having an alcohol problem. While different, both have serious potential for short term and life threatening consequences.



Alcohol Abuse is defined as having repeated social consequences as a result of alcohol consumption. Examples would include inappropriate behavior in social settings, bouts with the law (DWI's), difficulty maintaining personal relationships, missing work because of hangovers/over sleeping, getting in fights or engaging in domestic abuse.

Alcoholism is a clinical condition where the person needs alcohol to function. Persons who are alcoholics feel they are unable to refrain from drinking, even when they want to. Their lives are centered on and scheduled around drinking. As with any truly addicting substance, abstaining results in physical withdrawal symptoms.

Information specific to gender or ethnicity:

- Men are more inclined to be heavy alcohol users (11%) than women (2.5%) (particularly at a young age).
- Among working people, black non-Hispanics (4.4%) have heavy drinking rates which are only half of that of white Hispanics (9.8%) and Caucasian non-Hispanics (8.1%).
- While not as heavy drinkers, African-American men suffer worse health consequences due to alcohol use than their white counterparts.
- Growing evidence links alcohol to breast cancer.
- Women suffer from the health consequences of alcohol over shorter time spans than for men.

ALCOHOL ABUSE VS ALCOHOL DEPENDENCE

Not all alcohol *users* are *abusers*. Not all alcohol *abusers* are *alcoholics*. Alcohol abusers drink to excess resulting in sociological problems. Alcoholics are more seriously addicted to alcohol and cannot control their drinking even if they want to.

☐ ALCOHOL ABUSE – DIAGNOSTIC CRITERIA

A pattern of alcohol use leading to clinically significant impairment of distress as manifested by one or more of the following occurring within a 12 month period:

- Recurrent drinking resulting in failure to fulfill major role obligations at work, school or home
- Recurrent drinking in situations in which it is physically hazardous
- Recurrent alcohol related legal problems
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol

Plus, no symptoms of alcohol dependence as defined below:

☐ ALCOHOL DEPENDENCE (Alcoholism) – DIAGNOSTIC CRITERIA

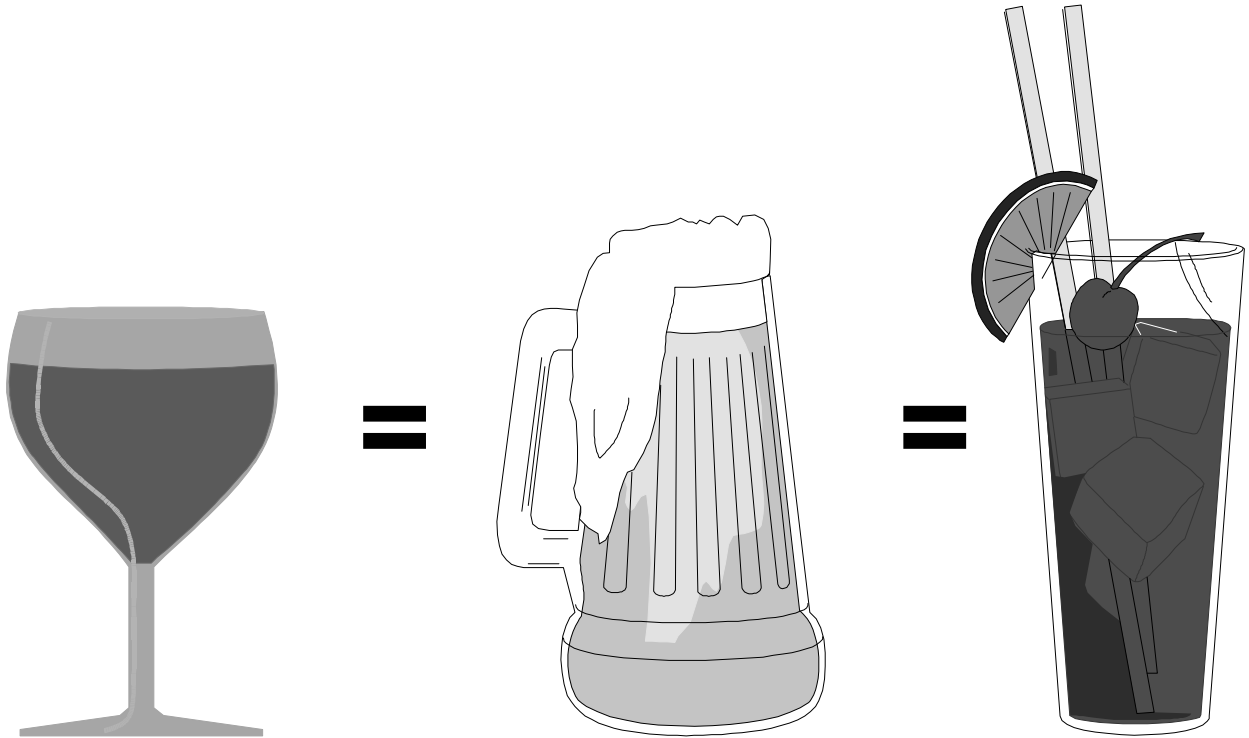
A pattern of alcohol use leading to clinically significant impairment or distress as manifested by three or more of the following occurring repeatedly within a 12 month period:

- Need for more alcohol to achieve the same effect
- Withdrawal symptoms upon ceasing to drink
- One or more unsuccessful efforts or persistent desire to cut down/control use
- Drinks more or for longer amount of time than intended
- Important life activities avoided or lessened because of drinking
- More time spent pursuing activities for the purpose of drinking or recovering
- Continued drinking despite knowing of recurrent problems caused by drinking

Source: Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association

HOW MUCH IS ONE DRINK?

Some people mistakenly believe that hard liquor is worse for you than wine or beer. Your liver doesn't know the difference!



ONE 5 oz. GLASS OF WINE = ONE 12 oz. GLASS OF BEER = ONE 1 ½ oz. SHOT OF LIQUOR

BREATH ALCOHOL CONCENTRATION (BAC) CHART

If you drink, it's important to know your limits. After three drinks a 100 lb person is impaired while a 220 lb person is barely affected. Most persons are considered legally drunk after 4 drinks in one hour (between .08 and .1 BAC).

NO. OF DRINKS*	BODY WEIGHT (LBS.)								EFFECTS ON FEELINGS AND BEHAVIOR	EFFECTS ON DRIVING ABILITY
	100	120	140	160	180	200	220	240		
1	.04	.03	.03	.03	.02	.02	.02	.02	Absence of observable effects. Mild alteration of feelings, slight intensification of existing moods.	Mild changes. Most drivers seem a bit moody. Bad driving habits slightly pronounced.
2	.08	.06	.05	.05	.04	.04	.03	.03		
3	.11	.09	.08	.07	.06	.06	.05	.05		
4	.15	.12	.11	.09	.08	.08	.07	.06	Feeling of relaxation. Exaggeration of emotions and behavior. Wild sensation. Slight impairment of motor skills. Increase in reaction time.	Drivers take too long to decide and act. Motor skills like braking are impaired. Reaction time is increased.
5	.19	.16	.13	.12	.11	.09	.09	.08		
6	.23	.19	.16	.14	.13	.11	.10	.09	Difficulty in performing gross motor skills. Uncoordinated behavior. Definite impairment of mental abilities, judgment and behavior	Judgment seriously affected. Physical and mental coordination impaired. Physical difficulty in driving a vehicle.
7	.26	.22	.19	.16	.15	.13	.12	.11		
8	.30	.25	.21	.19	.17	.15	.14	.13		
9	.34	.28	.24	.21	.19	.17	.15	.14		
10	.38	.31	.27	.23	.21	.19	.17	.16	Major impairment of all physical and mental functions. Euphoric. Irresponsible behavior. Some difficulty standing, walking and talking.	Distortion of all perception and judgment. Driving erratic. Driver in a daze.
11		.40	.34	.30	.27	.24	.22	.20		
12			.38	.33	.29	.26	.24	.22		
13			.40	.36	.32	.29	.26	.24		
14				.38	.34	.31	.28	.26		
15					.37	.33	.30	.28	At .40 most people have passed out. Hospitalization is probable at BAC of .40 or above, and death is imminent.	Hopefully, driver has passed out before trying to get into the vehicle.

* A "drink" equals 1½ oz. of 80 proof liquor or 12 oz. of beer or 5 oz. of wine. Subtract one drink, from the number consumed for each hour of drinking after the first hour.
Source: National Safety Council

B. Drugs of Abuse

As with alcohol abuse, Laborers are familiar with the problems associated with drug impairment. This section is intended to emphasize the short term and long term health effects of using drugs. Unlike alcohol, which is a legal substance and more heavily abused, drug use has a stigma attached to it, which makes it less open to discuss.

In American workplaces, the biggest way drug use can impact a Laborer's Fitness for Duty, is a failed drug test will preclude him or her from working.



Construction workers have high rates of illicit drug use, again, a factor of the industry having a heavy concentration of young and male workers.

Different drugs have different health effects based on which drug class they are:

CNS Stimulants (cocaine, amphetamines):

- ◆ Overly alert
- ◆ fights fatigue; leads to sleep deprivation and ultimately exhaustion
- ◆ increases heart rate, blood pressure and respiratory rate
- ◆ loss of appetite results in weight loss; leads to malnutrition
- ◆ sense of concentration and timing is altered
- ◆ cocaine use in particular can result in heart attack

CNS Depressants (sedatives, tranquilizers, inhalants)

- ◆ health effects similar to alcohol; lack of muscle coordination, slurring, stumbling
- ◆ slowing down of respiratory system; can lead to respiratory failure and death
- ◆ barbiturates are highly addicting

Narcotics (morphine, codeine, heroin, OxyContin)



- ◆ deadens pain; absence of pain can result in danger
- ◆ severe slowdown of the body systems
- ◆ cold to the touch because of circulatory system shut down
- ◆ highly addicting, often unintentional due to use of prescribed narcotics
- ◆ fatal in large doses or combined with alcohol

Hallucinogens (LSD, PCP, designer drugs)

- ◆ distorted feelings and irrational behavior
- ◆ risk taking; danger due to doing things a rational person wouldn't do
- ◆ flashbacks later
- ◆ long term results in altered perception and judgement
- ◆ PCP can result in psychosis
- ◆ Designer drugs can lead to permanent brain damage

Cannibus (marijuana, hash)

- ◆ raised heart rate and blood pressure, even though feeling of being mellow
- ◆ increased risk of lung and oral cancers
- ◆ suppressed immune system; leads to colds and infections
- ◆ memory loss

Information specific to gender and ethnicity:

- Men (8.7%) have higher rates of current illicit drug use than women (4.9%).
- The misuse of psychotherapeutic drugs is similar between genders (close to 2%).
- American Indians/Native Alaskans have the highest rate of illicit drug use (11.2%), particularly among teens.
- Rates of illicit drug use among whites (6.6%), Hispanics (6.8%) and blacks (7.7%) are similar.
- Pregnant women who use drugs expose the drug to their unborn child.

COMMONLY USED DRUGS OF ABUSE

(Summary Chart)

DRUG FAMILY	TYPES	TRADE NAMES	SLANG NAMES	TOLERANCE & DEPENDENCE	POSSIBLE EFFECTS
DEPRESSANTS	Barbiturates Benzodiazepines Sedative-Hypnotics	Seconal, Nembutal Tuinal, Phenobarbital Valium, Librium Quaalude	Barbs, Reds, Red Devils, Yellow Jackets, Downs, Tranqs Ludes, Sopors	All are physically & psychologically addicting.	Lowered pulse rate and blood pressure, slurred speech, disorientation, poor muscle coordination, loss of inhibition, relaxation.
STIMULANTS	Amphetamines Cocaine-Crack	Dexodrine, Benzedrine, Methedrine	Uppers, Speed, Black Beauties, Bennies, Meth Coke, Snow, Toot	Tolerance - yes Physical - possible Psychological - yes	Increased pulse rate & blood pressure, alertness, loss of appetite, insomnia, "being wired." False sense of confidence and elevation of mood. Paranoia and hallucinations. Damage to nasal tissue with snorting of cocaine. Risk of HIV/AIDS for those who inject.
INHALANTS	Commercial Solvents, Glue, Gas, Nail Polish Remover	Amyl nitrate & Buytl nitrate	Poppers	Tolerance - yes Physical - possible Psychological - yes	Increased heartbeat, euphoria, excitement, "drunken-like" behavior. Possible organic damage and death due to suffocation.
HALLUCINOGENS	Mescaline, Peyote Psilocybin		Mushrooms	Tolerance - yes Physical - no Psychological * - no	Altered perception of time and sensory experience, unpredictable mood changes. Dilated pupils, rise in blood pressure and heart rate, disorientation and hallucinations.
	LSD		Acid, Barrel, Blotter	Tolerance - no Physical - no Psychological - no	Altered perception of time and sensory experience, disorientation and hallucinations.
	PCP		Angel Dust, Killer weed, Loveboat	Tolerance - no Physical - no Psychological - no	Feelings of invulnerability and aggression resulting in bizarre violent behavior.
CANNABIS	Marijuana		Pot, grass, reefer, dope, joint	Tolerance - yes Physical - no Psychological - moderate	Increased blood pressure and heart beat, dilated pupils, impaired coordination and judgment, distortion of perceptions, confusion, silliness, reddening of eyes, difficulty in concentration.
	Hashish		Hash	Tolerance - yes Physical - no Psychological - moderate	Same as above. May affect short-term memory, reproductive organs, cause lung damage.
NARCOTICS	Opiates	Morphine Heroin Codeine	Smack, Jungle, Horse, China White	Tolerance - yes Physical - yes Psychological - yes	Absence of pain. Lethargy, drowsiness and slow pulse rate. Constricted pupils. Risk of HIV/AIDS for those who inject.
	Opioids	Methadone Darvon Demerol		Tolerance - yes Physical - yes Psychological - yes	Absence of pain. Lethargy, drowsiness and slow pulse rate. Constricted pupils.

UNDERSTANDING “FITNESS FOR DUTY”

Instructor’s note: As an introduction to the topic of workplace substance abuse, use Part 1 of the training videotape “Orientation to Drug Testing” which provides basic information about substance abuse and related worksite safety issues. Following the viewing of Part 1, review the reasons to be “fit for duty” with participants and how this concept relates to worksite safety.

You should know

Workplace substance abuse is a growing concern in all America’s workplaces. Jobsites where Laborers are employed are no exception. More and more, LIUNA’s signatory employers are declaring their worksites to be **drug-free** and expecting workers to be **fit for duty as a job requirement** ~ and frequently use workplace drug and alcohol testing to verify this requirement.

The increase in drug testing on LIUNA jobsites follows nationwide trends in employment practices in many industries.

Members of LIUNA should understand the following reasons to be "fit for duty":

- ✓ To protect our members and promote safety on the jobsite;
- ✓ To uphold LIUNA's reputation and maintain union status with contractors;
- ✓ To ensure the LIUNA hiring hall can keep our members employed;
- ✓ To promote the health and well being of our members and their families.

Instructor’s note: Use the information in the next section, “DRUG AND ALCOHOL TESTING ON THE JOB” to discuss how jobsite testing is increasing in today’s job market. Briefly chart the historical growth of workplace testing programs. Note the current almost universal acceptance of testing policies, procedures and drug testing results by the courts, employers and labor unions as accurate and legal--when performed correctly under negotiated guidelines. Avoid any discussion of the “pros and cons” of worksite testing issues and how the technology can be “beaten” until after presenting the remainder of the factual information in the training program.

DRUG AND ALCOHOL TESTING ON THE JOB

Did you know?

- ✓ Today, about **half** of all US workers are tested for drugs or alcohol at work.
- ✓ About **one-fourth** of construction workers are subject to some form of workplace testing.
- ✓ Testing is often required by signatory contractors, government agencies or owners before hiring or as a pre-job requirement.

You should know

- ✓ Working on jobsites which are covered by federal regulations often means you will **be required** to submit to drug and/or alcohol testing. These include:
 - 1) Workers in "safety-sensitive" jobs under **Department of Transportation (DOT)** rules, for example: pipeline workers, commercial vehicle drivers, and related functions;
 - 2) Workers on hazardous waste, environmental clean-up or nuclear sites regulated by the **Department of Energy (DOE)** or **Nuclear Regulatory Commission (NRC)**; and
 - 3) Workers on jobs for **Department of Defense (DOD)** contractors.
- ✓ Non-regulated, private employers are not subject to federal regulations or guidelines. However:
 - Many private employers model their policies after federal standards.
 - Some states have laws which address workplace drug testing.

Instructor's note: Informally "poll" participants to survey how many have ever been personally tested for drug and/or alcohol use. Continue by asking how many are currently working in jobs or on jobsites where testing programs are in place. Note the prevalence of testing in the particular job sector or geographic area where the trainees will likely be working.

Ask yourself

- ✓ Is drug and alcohol testing required where you work?
- ✓ If your answer is yes, how much do you know about what is required?

GROUNDS FOR DRUG AND ALCOHOL TESTING

Instructor's note: Using the information below, review with trainees the five different types of circumstances under which workers might be tested in the workplace. Trainees should expect to encounter Pre-job or pre-employment testing before beginning a job, and For-cause, Random, Post-accident, and Return to Duty testing on LIUNA jobsites that have drug testing programs in place. When assigned to a job, members should be provided this information.

You should know

Grounds for drug or alcohol testing vary on different jobsites, and can depend on:

- ✓ If the job is subject to federal regulations; or
- ✓ If the job is in a state that regulates drug testing; or
- ✓ What the union contract states; or
- ✓ What the employer's (or owner's) testing policy states.

The five types of testing that Laborers or Laborers' apprentices may be subject to include:

1) Pre-job or Pre-employment testing

- ✓ These tests may be required **before** the member can be hired, allowed on the jobsite or allowed to perform certain duties.
- ✓ This is the most common type of testing.

2) For Cause or Reasonable Suspicion testing

- ✓ These tests are conducted when an employer believes a worker is using, possessing, trafficking in drugs or is under the influence of drugs or alcohol.
- ✓ Depending on the policy or contract language, "for cause" testing could be based on something as simple as a rumor. Ideally, "**for cause**" testing should be based on **facts**, such as observed behavior that can be documented and corroborated.
- ✓ Reasonable suspicion **may include a combination of things** ~ appearance, behavior and work-related actions such as chronic lateness or absenteeism, decreased job performance or mistakes.

The DOT says that the decision to test someone based on reasonable suspicion "... must be based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech or body odors ..." by someone who is trained in recognizing the signs and symptoms of substance abuse.

GROUNDNS FOR DRUG AND ALCOHOL TESTING, cont.

3) Post-accident testing

- ✓ Workers may be tested for alcohol or drug use following an accident on a jobsite, or while on duty in a company vehicle, on company property, or for a 'near - miss.'
- ✓ Depending on the policy, an accident may be defined as any incident resulting in property damage or an injury requiring medical attention. Sometimes a dollar threshold is used, for example, \$1,500 in property damage.
- ✓ Care should be taken to ensure that even upon a positive post-accident drug test other contributing factors to the accident are not overlooked.

4) Random testing

- ✓ Random testing means **all the members** in a job's "testing pool" **have an equal chance** of being selected at any time for a drug or alcohol test. The purpose of random testing is to discourage casual drug use, since a worker never knows when he or she might be tested. Most random testing policies require the worker to report to the collection site within two hours of being selected.
- ✓ Even after a worker is randomly tested, he or she still has the same chance of being selected for testing again. This means it is possible that some workers on a jobsite **could be tested several times in a row** before others would be tested even once or not at all.

5) Return to duty testing

- ✓ This type of testing is frequently used for **workers who have previously tested positive** for drugs or alcohol; for workers who have been referred to counseling, or who have received substance abuse treatment (rehabilitation) and are returning to duty.
- ✓ This type of testing may be required for workers returning to a job after an extended period of absence for any reason.

Ask yourself

- ✓ What type of testing or substance abuse policy is in effect on my current job?
- ✓ Where would I find out this information if I didn't know?

Instructor's note: Review the importance of knowing the specific grounds for testing on jobsites. Trainees may mistakenly believe that once they have passed one type of drug test they won't be subject to further testing.

WHAT DRUGS WILL BE TESTED FOR?

Instructor's note: Emphasize to participants that it is their responsibility to be informed about which substances they will be tested for on a particular job and to be responsible about the use of any substances which might affect his or her "fitness for duty." Suggested teaching aids to use in these discussions are:

- a) the following table entitled "WHAT DRUGS WILL BE TESTED FOR?" which provides information on various substances included in testing programs and approximate detection times; and**
- b) LHSFNA brochure "It's Your Choice..." which discuss alcohol and drugs along with health and safety information for each.**

Did you know?

The types of drugs included in a worksite drug testing program are normally defined by the established policies and procedures or listed in the negotiated agreement. Many worksite testing programs (for example, in those industries which are covered by federal drug testing rules and regulations) use a standardized urine drug testing panel for the following five drugs (often called the "NIDA 5.") The drugs in this panel have all been assigned standard "cut-off levels" which indicate a positive result and the laboratories are subject to rigorous inspections and blind sampling to ensure accuracy. This testing panel has been in use for over ten years and if all the current federal standards for sample collection, testing procedures and medical review of positive results are followed completely, the accuracy of these methods and practices are extremely high. The five drugs in this group are:

- Marijuana** (Street name: Weed, Reefer, Pot)
- Cocaine** (Street name: Coke, Snow, Crack)
- Opiates** (Street name: Heroin, Smack)
- Amphetamines** (Street name: Speed, Crystal)
- Phencyclidine** (Street name: PCP, Loveboat, Angel Dust)

Note: The club drug Ecstasy (MDMA) and its variations (MDA and MDCA) will likely be added to this panel in 2001. It is currently not tested for.

WHAT DRUGS WILL BE TESTED FOR?, cont.

On certain jobsites, including those with workers in safety-sensitive positions, such as those designated by the Department of Transportation, the Nuclear Regulatory Commission and other government regulations, testing is included in many Post-accident, Random, and in For cause situations for

- **Alcohol**

Alcohol testing methods typically use a breath or saliva testing procedure, but in some cases urine or blood test methods may be included.

You should know

That some worksites may test for up to five more substances (including some common prescription medications) **in addition** to the five drugs and alcohol previously listed. In some cases, the substances that can be tested for on a jobsite are not specified in an employer's testing policy or negotiated agreements. Other workplace testing programs **may require workers be tested for any or all of the following additional substances depending on the circumstances of the testing procedure. These additional substances are:**

- **Barbiturates** (Major tranquilizers, sleeping pills)
- **Benzodiazepines** (Valium, Librium and other minor tranquilizers)
- **Methadone** (A treatment medication for heroin addicts)
- **Propoxyphene** (Darvon, a pain medication)
- **Methaqualone** (A discontinued prescription tranquilizer)

WHAT DRUGS WILL BE TESTED FOR?, cont.

DETECTION TIMES AND MEDICAL USES OF DRUGS

Drug or Category	Alcohol	Marijuana	Cocaine	Amphetamines (Speed)	Opiates (Heroin)	PCP	Methadone	Benzodiazepines (Tranquilizers)	Barbiturates (Tranquilizers)	Propoxyphene (Darvon)
Detected after intake	3-8 hours	3-28 days	2-4 days	1-2 days	2 days	1-8 days	3 days	3 days	3-21 days	2 days
Legal or Legitimate use	Yes	Rare	Rare	Rare	Yes	None	Yes	Yes	Yes	Yes

You should know

Occasionally, some positive urine drug test results may have a medical or other explanation. Some examples of this are:

- ✓ A prescribed pain medicine containing opiates can cause a positive test result. Normally, a subsequent medical review with a medical explanation and no signs of narcotic abuse can resolve this problem.
- ✓ Some over-the-counter liquid cold remedies (like Nyquil) and mouthwashes (like Listerine) contain alcohol. If these liquids are used soon enough before a breath alcohol test, these substances can give a positive reading. Workers using such substances before a breath alcohol test may risk being considered "**unfit for duty.**"

Using medicines prescribed for others is considered "**illicit drug use**" and, if detected by a positive drug test, could result in disciplinary action. In these cases, the positive test result could be due to a legitimate prescription medication, **but the use of the substance is considered illicit, which may lead to a policy violation and disciplinary action.**

WHAT ARE DRUG TESTS AND WHAT DO THEY "PROVE?"

Instructor's note: The information below is a review of the different testing methodologies used in workplace testing programs.

Urine Drug Testing

A urine drug test result shows evidence of specific **drug or drug metabolites** in the urine. Drug metabolites are **residues of drugs** that can remain in the body, sometimes long after the drug's effects have ended. To receive a positive result the amount of **drug or drug metabolites** in the sample must be over a certain "cut-off" level. Thus, the presence of a sufficient amount of a **drug or drug metabolites** in a urine sample is considered to be proof of recent past illegal or illicit drug use by the person providing the sample.

- ✓ A positive drug test shows recent (up to a month) past use of the drug, but does not prove a person was impaired by the drug at the time the test sample was given, nor when or how much was consumed.

Breath Alcohol Testing

Breath alcohol tests by a breathalyzer can indicate current impairment. These test results are given as a number ~ known as Breath Alcohol Concentration (BAC.) Most testing procedures include a second test immediately following as verification. The breath alcohol testing technology has been used by law enforcement agencies for many years and is considered highly accurate.

- ✓ A positive breath alcohol test can show a person is under the influence of alcohol at the time of the test.

Oral/Saliva Testing

A person places a swab in his or her mouth. When the collection pad is saturated, the test subject places the swab in a collection vial, snaps off the handle, seals the container and hands it over for analysis. Results show more recent use than urine tests, picks up a positive test more quickly than a urine test will show and will not linger as long as urine tests do (i.e. about 36 hours). Saliva tests are currently used for alcohol testing programs. They have not been subject to extensive clinical trials for accuracy in detecting drugs yet.

Hair Follicle Testing

Measures metabolites within the hair. The hair is tested within specified length from the root (i.e., quarter of an inch). Results show long-term drug use but not recent drug use.

Sweat Testing

A patch is used to collect perspiration from the subject. The patch is then tested for drug metabolites. This method is not yet approved for federal drug testing programs.

You should know

- ✓ That **testing** for **alcohol** on jobsites is less common than drug testing, but many worksite policies do include testing for **alcohol** during Post Accident, For Cause or Reasonable Suspicion procedures.

WHAT HAPPENS IN A URINE DRUG TEST?

Instructor's note: This section reviews the steps that are typically taken during the urine drug testing process. These procedures are based on the U.S. Department of Health and Human Services Mandatory Guidelines for Federal Workplace Drug Testing (1994- due to be updated in 2001). Even though these are the guidelines for federally mandated programs, many non-regulated employers and laboratories adhere to these standards.

The Instructor should emphasize to Employer and Union Representative Trainees that they should insist on these standards within their drug testing policies. Emphasize to Worker Trainees to be alert in the event any of these steps are missing or appear to be followed incorrectly and to notify a representative. It may be important later upon receipt of the test result.

The drug testing process can be divided in three stages:

- ✓ Collection: the worker provides the sample
- ✓ Analysis: the lab analyzes the result
- ✓ Verification: the test result is reviewed for accuracy

Stage 1: The Collection Process

In some classes, if a substantial number of trainees have been drug tested, it is often useful to ask them to describe the testing process. This is the only stage of the process that most trainees will be already familiar with.

- 1) The individual reports to the collection site as directed and shows proof of identification.
 - Proof of identification is necessary to prevent someone from having another person take the test.
 - If the worker doesn't have a picture id, sometimes a supervisor is asked to verify identification.
- 2) The individual fills out information on the "chain of custody" form (**distribute the form**)
 - This form follows the sample for the entire testing process. Each time the sample is handled it must be signed to show an unbroken chain from one person to the next.
- 3) The individual is provided an opportunity to make a list of the medications he or she is taking
 - This list is supposed to be retained *only* by the worker and not given to anyone else before or at the time the test is given.

WHAT HAPPENS IN A URINE DRUG TEST? (cont)

- Requiring the worker to give this information to another person is a violation of DOT drug testing rules and may be a violation of the Americans with Disabilities Act.
 - The list is intended to jog the worker's memory in case he or she needs to discuss the use of legitimate medications *after* having a positive test result.
- 4) The individual is asked to empty his or her pockets, remove excess clothing or set aside tool boxes, lunch boxes, purses, back packs or other similar items.
- This is intended to prevent persons from bringing in adulterants or "pre-packaged" clean urine samples.
- 5) The individual provides his or her urine sample into a container, normally in private.
- Either no water is provided in the stall area or the water is colored blue to prevent dilution of the sample.
 - If the worker has difficulty providing a sample, he or she is given water to drink over a three hour time period.
 - Direct observation is usually done only if there is reason to believe a person has tampered with a test in the past.
- 6) The collector immediately takes the sample and inspects for appearance, smell and temperature.
- The collector is checking for signs of adulterants (usually acids or soap products) or signs that the urine did not come from the person's body (too hot or too cold).
- 7) In many programs, the sample is split into two containers.
- The first portion is used for testing, the second is saved for re-testing if requested by the worker after a positive test.
 - The DOT mandates split sample testing for all its covered workers.
- 8) The collector seals the container(s) in the worker's presence.
- The individual signs or initials a label which is used to seal the container(s)
 - The individual signs the chain of custody form verifying the sample is his/hers and that it was sealed in his/her presence.
 - The seal must remain unbroken until it reaches the testing lab.
- 9) The sample is delivered or sent to the testing laboratory for the actual analysis for the presence of drugs.
- Only laboratories that are certified for the federal government (SAMHSA) can be used for federally mandated programs.
 - Non-regulated employers can protect themselves by using federally certified labs, as they are continuously tested as to their accuracy and use of proper procedures. Using non-certified labs leaves the test results subject to challenge.

WHAT HAPPENS IN A URINE DRUG TEST? (cont)

Stage 2: The Analysis Process

- 1) The testing lab personnel inspects and makes note of any irregularities in the packaging of the sample.
- 2) The testing lab tests the first sample for the following:
 - The presence of drugs or drug metabolites
 - Adulteration (additives intended to mask accurate results)
 - Substitution (substances which don't come from human urine)
 - Dilution (insufficient concentration of urine to test)
 - ✓ If drugs or drug metabolites are found in the initial screen in excess of a specific amount, the sample is re-tested using a more advanced confirmation test (GC/MS). If the second test is above the confirmation cut-off level, the test is considered positive.
 - ✓ If the sample is found to be adulterated or substituted, it is considered to be a "refusal to test". "Refusals to test" are often treated the same as a positive test, although some employers treat adulteration and substitution even more seriously than a positive test.
 - ✓ If the sample is found to be dilute, the test is thrown out and the person may be asked to provide another sample, possibly under direct observation.
- 3) Depending on the workplace policy, the confirmed positive test is reported to the employer by the lab, or, the test result is sent to a Medical Review Officer for final verification.
 - DOT and all federal drug testing programs *require* the use of a Medical Review Officer (MRO).
 - Many non-regulated employers often use a MRO to protect themselves and their employees from misleading test results.

WHAT HAPPENS IN A URINE DRUG TEST? (cont)

Stage 3: The Verification Process

- 1) The MRO physician reviews all of the documents supplied by the laboratory, including the “chain of custody” form, to ensure that appropriate procedures were followed.
- 2) Someone from the MRO’s office notifies the individual of a positive test result and offers the worker an opportunity to discuss the results with the MRO.
 - The purpose of this step is to allow workers to provide “legitimate medical explanations” for a positive result, such as a prescription for a pain reliever.
 - The MRO must make an effort to reach the person, and if necessary, ask the employer to locate the person. If the person can’t be reasonably located, the MRO can declare the test as a “non-verified positive” result.
 - If the worker provides an acceptable explanation, the test is reported to the employer as negative.
- 3) If the test is verified as “positive,” the MRO informs the worker of his or her right to have his split sample (or, if applicable, a portion of the original sample) re-tested at another certified lab.
 - The individual must make this decision within 72 hours of being notified of the positive result.
 - Under new federal standards to be released in 2001, workers will have the right to have samples that are found to be substitute or adulterated re-tested at another certified lab.

Note: As indicated previously, the MRO verification process and the opportunity for samples to be re-tested are requirements within the federal guidelines for drug testing procedures. Non-regulated employers *are not required* to offer MRO services or opportunities for re-testing positive results. However, many employers, particularly in unionized settings, adhere to these procedures in the interest of all parties involved. Employers who do not provide these opportunities for verification and recourse open themselves up to challenges.

This is another reason why it is important for employer and union representatives, as well as workers, to know what rules and worker rights apply to their workplaces in advance.

MEDICAL EXPLANATIONS FOR DRUGS OF ABUSE

Instructor's note: The following information is only provided in the Instructor's Guide and Workplace Leadership Guide to assist in answering participants' questions regarding the possibility of certain substances with medical uses that may contribute to positive test results. Emphasize to participants that it is each worker's responsibility to be informed about any medical conditions and/or prescription medications he or she is using which may affect his or her fitness for duty or become evident in a workplace drug test and to discuss any concerns with a qualified medical practitioner.

For Drugs Tested Under Federal Requirements, i.e., DOT, NRC, DOE

AMPHETAMINES / METHAMPHETAMINES (SPEED):

Description: Central nervous system stimulant

Legitimate uses:

- Treatment of Attention Deficit Disorder (ADD)
- Treatment of Obesity (appetite depressant)
- Treatment of Narcolepsy
- Inhalers for bronchial tube dilation (methamphetamine)

Other notes: Immunoassay screen may cross-react with several over-the-counter drugs, but confirmatory test (Gas Chromatography/Mass Spectrometry method) will detect and identify.

COCAINE (CRACK):

Description: Central nervous system stimulant and narcotic

Legitimate uses:

- Applied anesthetic in dental procedures; trauma or emergency treatment
- Typically applied in ear, nose and throat surgical procedures, if at all

Other notes: Legitimate uses are uncommon but possible; can be verified by medical review procedure. Use of other topical analgesics (like benzocaine) are occasionally offered as explanations for a cocaine "positive" but have no chemical structural similarity. Reported ingestion of certain herbal teas may result in possible positive results. Secondary (inadvertent) inhalation is not a probable explanation for a positive test result.

MEDICAL EXPLANATIONS FOR DRUGS OF ABUSE, cont.

MARIJUANA / HASHISH (POT, GRASS):

Description: Tetrahydrocannabinol (THC) is the psychoactive ingredient which acts as a central nervous system stimulant or depressant; is also considered a hallucinogen

Legitimate uses: -Experimental glaucoma treatment for relief of ocular pressure; not FDA approved
-Experimental prescribed anti-nausea treatment in conjunction with chemotherapy; not FDA approved
-Marinol is a newly developed synthetic THC drug treatment for anorexia and “wasting syndrome” in AIDS patients that has FDA approval; Gas Chromatography/Mass Spectrometry method can detect and identify.
-Medical marijuana laws are still subject to federal court challenges and are not considered an acceptable excuse for federal testing programs.

Other notes: THC can be stored in the body’s fat cells, allowing for a longer detection period than other illegal drugs. Although passive inhalation is a possible explanation for positive test results, given the current initial and confirmatory cut-off levels in use, to receive a positive result exposure must be intensive and prolonged, thus, it is not accepted as a legitimate explanation. Previous reports of cross reactivity (“false positives”) with ibuprofen (“Advil”) using the earlier version of the EMIT immunoassay screening methodology were documented, but the current EMIT test in use has been modified to eliminate this.

OPIATES (HEROIN/MORPHINE/CODEINE):

Description: Narcotic derived from the poppy plant

Legitimate uses: -Morphine/codeine: Prescription pain medication often used following surgery
-Heroin has no legitimate medical use. Possible positive results associated with ingestion of poppy seeds. Medical review procedure should determine.

Other notes: A specific confirmatory test to positively identify the heroin metabolite (6-MAM) is now being used by HHS certified laboratories which provides conclusive evidence of recent heroin use.

PHENCYCLIDINE (PCP):

Description: Hallucinogen/Veterinary Tranquilizer

Legitimate uses: None in humans

MEDICAL EXPLANATIONS FOR DRUGS OF ABUSE, cont.

Other Drugs of Abuse in Expanded Worksite Testing Panels

BARBITURATES (MAJOR TRANQUILIZERS; SEDATIVES):

Description: Central nervous system depressant

Legitimate uses: - Prescribed for sleep
- Prescribed to prevent epileptic seizures; anti-convulsant
- Prescribed for tension headaches
- Phenobarbital included in some over-the-counter drugs for stomach disorders

Other notes: Due to high abuse, overdose and addiction potential, physicians are currently prescribing Barbiturates less often in favor of less powerful Benzodiazepines.

BENZODIAZEPINES (MINOR TRANQUILIZERS; i.e., VALIUM):

Description: Central nervous system depressant

Legitimate uses: - Prescribed as a minor tranquilizer; anti-anxiety drug

Other notes: One of the more widely prescribed classes of drugs
Although potential risk of abuse and addiction, legal use dwarfs illicit use

METHADONE:

Description: Synthetic narcotic

Legitimate uses: - Treatment in rehabilitation for heroin addiction

Other notes: Requires a separate screening test from opiate screening
Has potential for illegal use and is considered addictive

METHAQUALONE (QUAALUDES):

Description: Central nervous system depressant

Legitimate uses: - None (No longer legally available in United States)

Other notes: Formerly used as a prescription sedative, but given widespread potential for abuse and availability of safer drugs, was removed from US market in 1983

“TAMPERING” AND DRUG TEST RESULTS

Instructor’s note: This information is only provided in the Instructor’s Guide to assist with questions regarding tampering and test results. As drug testing becomes more common, attempts are made to “beat the system.” This has resulted in increased quality control efforts at collection sites, testing laboratories, and in the medical review procedure. Emphasize that those who try to “beat” the tests or refuse to believe they will get caught only fool themselves--often at the risk of their jobs. Unions will have a tough time defending workers knowingly using drugs or alcohol in a testing environment. Some of the more common tampering attempts and their possible consequences are:

SAMPLE SUBSTITUTION

- Switching donors
 - the sample collection site usually requires a photo ID or other positive verification
 - possible risk of the “donor substitute” having drugs in his/her system
- Submitting synthetic urine (freeze dried) or substituting another product (i.e., lemonade)
 - labs now routinely test to determine if urine is real or not
 - freeze dried urine requires access to water
 - temperature check can usually detect if a urine sample comes from outside the body
- Submitting “clean” urine from another source or individual at the collection site
 - a routine temperature check will detect if sample comes from outside the body
 - concealment hampered by required removal of excess garments and items
 - assumes the source or the other individual’s urine is “clean”

INGESTION OF VARIOUS SUBSTANCES TO AFFECT THE SAMPLE OUTCOME

- Consumption of large quantities of water to dilute the sample
 - can reduce detection time by accelerating release of urine; no guarantee of negative result
 - will result in lower than normal levels for specific gravity and creatinine (dilute sample)
 - too much water can result in over-hydration - a dangerous health risk
- Urine acidification (by consumption of lemon juice, vinegar, etc.)
 - increases rate of elimination
 - can increase concentration of drug metabolites, especially for amphetamines and PCP, thus converting what would have been a negative test result into a positive one
- Diuretics
 - same effect on urine as above relative to increased elimination
- “*Golden Seal*” Tea
 - reported to mask opiate residues if Thin Layer Chromatography screening method is used
 - not effective in masking other illegal or illicit drug metabolites
 - many labs do not employ TLC method, if using TLC, lab may check for presence in sample

“TAMPERING” AND DRUG TEST RESULTS, cont.

EXTERNAL ADULTERATION (ADDING SUBSTANCES TO SAMPLE TO CHANGE RESULT)

Generally, with the current drug testing technology, any added abnormal elements not normally found in human urine will be detected during the testing process. Drug testing laboratories are continually developing and utilizing methods to detect such adulterants. Attempts at adulteration also assume donors can successfully bring adulterants into the sample collection area undetected.

- Household Products
 - sodium chloride: may cause false negatives with EMIT method; increases sample specific gravity
 - bleach: may cause false negatives
 - Drano: may cause false negatives with EIA methodology; increases sample pH level
 - liquid soap: may cause false negatives with EIA methodology; increases sample pH level
 - sodium bicarbonate: may cause false negatives for opiates; increases sample pH level
- Commercial Adulterants
 - *Urinaid*: interferes with detection of THC with immunoassay methodology; reported to block detection of other drugs as well; basic ingredient glutaraldehyde (not normally found in urine) Some laboratories are now beginning to test samples for presence of glutaraldehyde.
 - *Mary Jane Superclean 13*: the basic ingredient is similar to soap; similar reaction as with household cleaners

MRO RESPONSES TO LAB REPORTS OF UNUSUAL SAMPLES UNDER DOT REGULATIONS

- If sample is too diluted (low specific gravity or creatinine):
 - will declare test as “dilute”
 - will advise employer to collect next sample under observation
- If sample is not suitable for testing:
 - may be due to non-steroidal anti-inflammatory drugs and other prescription drugs interfering with the test result, usually lab reports a ‘no result’ or ‘inconclusive’ finding
 - if no explanation exists for a ‘no-result’, the MRO may request collection of another sample under direct observation
- If sample is found to be adulterated or substituted, worker is removed from a safety-sensitive function.

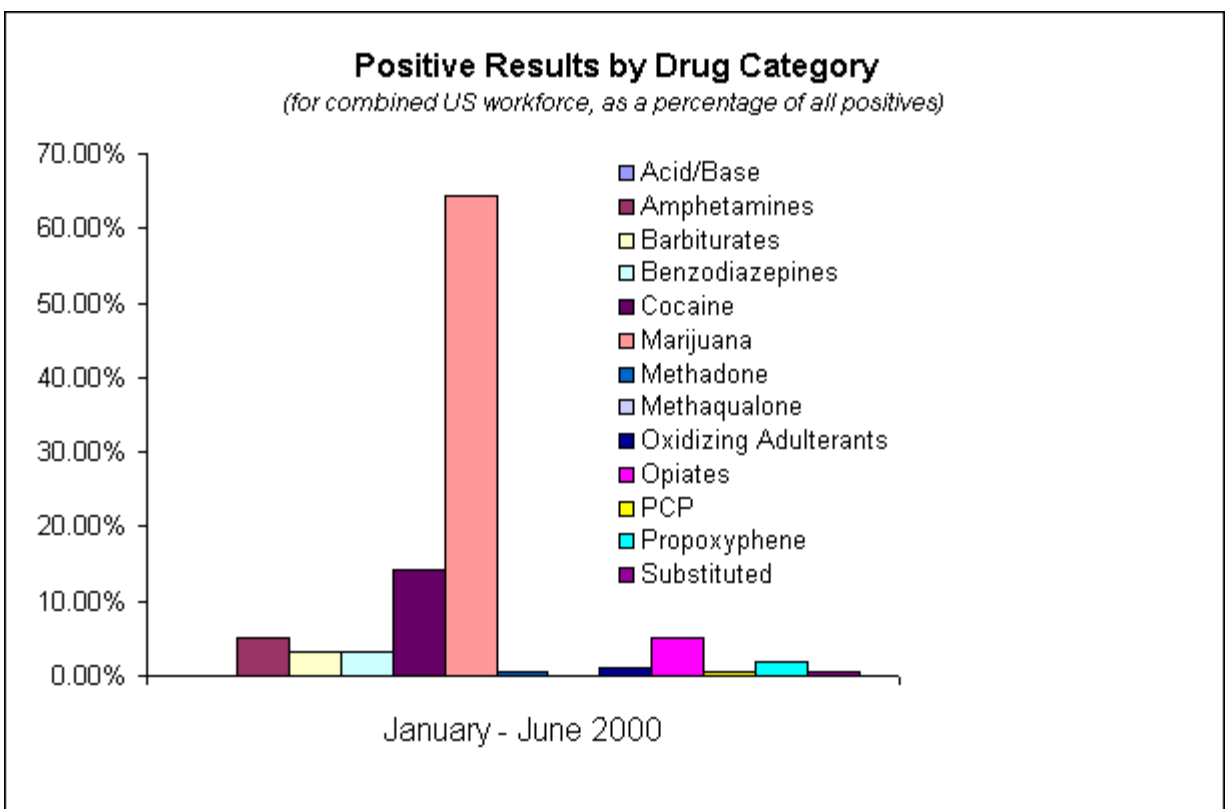
Instructor’s note: In discussions about the dangers of tampering with or attempting to adulterate a specimen, it is important to point out to participants that when a laboratory reports a sample as having been suspected of being tampered with or adulterated, many workplace testing policies will treat individuals accused of such attempts in the same manner as a refusal to test, or as a positive test result, and similar or more severe disciplinary actions may be taken.

WHAT DRUGS ARE MOST OFTEN POSITIVE?

- ✓ Based on approximately 3 million tests conducted by Quest Diagnostics Laboratories, the overall percentage of positive drug test results for all samples was 4.7 % in the first half of 2000.
- ✓ Marijuana continues to be the drug detected most frequently. More than 60 % of positive test results were positive for Marijuana.

Positive Drug Test Results

Overall Positive Rate = 4.7% of 3 million tests



Source: Quest Diagnostics , released December 2000.

Instructor's note: Clearly, one of the most important points to emphasize with participants is the large portion of Marijuana positive test results—more than 60% of the total positive test results. The explanations for this include both Marijuana's relative popularity with substance abusers and the comparatively long detection time for Marijuana metabolites in the urine.

WHAT HAPPENS IF A DRUG TEST IS POSITIVE?, cont.

Instructor's note: Review with participants that the specific employer, owner or contractor policies in place at each worksite or company will largely determine the exact action taken or consequences of receiving a positive test result. For this reason, it is important for members to be knowledgeable about testing policies, to practice responsible behavior, and to ask questions if they have concerns about collection and testing procedures.

You should know

Some consequences of positive drug and alcohol test results are:

Pre-job -

- ✓ A positive test result means an individual may not be hired for this particular job; and
- ✓ On some jobs, an individual may be barred from that job site for a certain period (6 months, 1 year, or even permanently).

On the job -

- ✓ On some jobs, a positive test is a clear violation of work rules, and workers may be warned, disciplined, suspended or fired. On DOT and DOE regulated jobs, workers in safety sensitive positions who receive a positive drug or alcohol test result must be removed from duty.
- ✓ On some jobs, workers will be referred to a Member Assistance Program (MAP), Employee Assistance Program (EAP), or similar type of program for counseling following a positive test result. After counseling (and further treatment, if needed) the worker may return to work at the same location.

WHAT IF A MEMBER THINKS A TEST RESULT IS WRONG?

Instructor's note: The information below is intended to give participants information about valid reasons for disputing results. In some cases, a retest of the original sample may be indicated – in others, questions about why result is being disputed may determine collection and testing procedures were properly followed and there is little chance the disputed test result is incorrect. Here, education, counseling and further help for substance abuse may be a more appropriate suggestion than encouraging members to file a grievance, or to otherwise refute the positive result.

Obtaining a second negative test result from a new sample in order to disprove the first result is typically insufficient to refute the earlier positive result.

Questioning a positive test result

- ✓ The options open to a worker who wishes to contest a positive test result will be largely determined by the established worksite drug testing policy and procedures. Where testing programs follow rigorous federal (or equal) standards, the accuracy rate is extremely high. In these cases, the question of whether the positive test result is accurate or not ~ is rarely the issue.
- ✓ Questions may be raised however, about any possible irregularities in the workplace drug testing policies and practices, or the sample collections, testing and notification procedures.
- ✓ A properly confirmed and verified positive urine drug test result is very difficult to successfully challenge. Since 1989, the federal government has set tough accuracy standards for urine drug testing and sample collection procedures, which have held up in many legal challenges. The current alcohol breath testing technology has been utilized for many years by police agencies and is considered an accurate measure of recent alcohol use, or in some cases, alcohol impairment.

To determine if a positive test result will be able to be successfully challenged or disputed, the following questions need to be considered.

- What is the current testing policy in effect for the worksite?
- Were all the established policies and procedures followed correctly?
- What kind of drug or alcohol testing was done?
- Was it pre-job, random, post-accident, for-cause, or return to duty?
- For which drug or drugs was the test result positive?
- Where was the sample collected and which laboratory was utilized for testing?
- Were the federal guidelines for collection and testing of samples used?
- If not, which collection and testing procedures were utilized?
- Did the test result include a review by a qualified MRO?
- Was the individual informed of the chance to have the sample retested?
- Did the individual request that the sample be retested?
- What was the result?

C. Tobacco Use

Questions to Pose:

- 1. What percent of Laborers do you think smoke?*
- 2. In what ways do you think tobacco use affects Laborers?*

Smoking rates for construction workers are even higher than for other blue collar workers. 45% of construction laborers in the U.S. smoke compared to 39% of all blue collar workers and 24% of white collar workers. The health and fitness of a laborer is very important for continuing a career in construction. With diseases affecting the heart and lungs and their functions, construction workers who smoke will have a shorter career than non-smoking laborers. (See Section 2 on Heart Disease and Cancer.)

The deaths of many Laborers are caused by smoking related diseases:

- Smoking causes 20% of heart disease deaths, which is the leading cause of death among laborers.
- Smoking causes 90% of lung cancer deaths and laborers run a 20% higher risk of dying from lung cancer than others.
- Smoking causes 30% of cancer deaths. Laborers are at an increased risk of lung cancer as well as cancers of the lip, oral cavity and pharynx, due to the combination of worksite exposures and smoking.
- Smoking causes 80% of emphysema and chronic bronchitis deaths.



Many Laborers also use smokeless tobacco which can cause many health problems including:

- **Cancer** of the mouth (lip, tongue, cheek) and throat
- **Pre-cancerous patches** on the inside of the mouth where the tobacco is held (Leukoplakia)
- **Heart Disease** due to constricted blood vessels which can also slow down reaction time and cause dizziness
- **Gum and Tooth Disease**, including bad breath, receding gums, tooth decay and loss, cavities, and sores

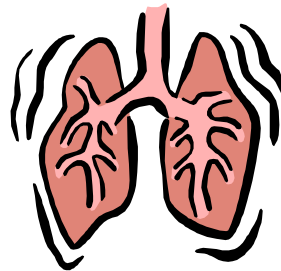
Health Effects – Smoking and Worksite Exposures

Smoking affects the lung's ability to do its job and protect you against toxic substances which may be present on the job:

- Chemicals in tobacco smoke make it harder for the lungs to get rid of asphalt, coal tar, treated wood, and other substances which may cause chronic conditions like bronchitis, asthma and other lung diseases.
- Welding and vehicles on a construction site produce carbon monoxide, as does tobacco smoke. Carbon monoxide levels can increase to 10-20%.
- Exposure to carbon monoxide weakens the heart.
- Chemicals, like lead and cadmium, can collect on your cigarette and can be inhaled when you smoke a cigarette.

Exposures on the construction site combined with tobacco smoke make the consequences much worse:

- For example, if exposed to **asbestos** alone, construction workers' risk of lung cancer is multiplied by 5 times. If construction workers smoke, their risk of lung cancer is multiplied by 11 times. But, if a construction worker smokes and is also exposed to asbestos, the risk of lung cancer is multiplied by 53 times – this is referred to as a *synergistic effect*.
- Other materials that multiply the risk of getting cancer include:
 1. Welding materials
 2. Coal
 3. Grain
 4. Silica
 5. Petrochemicals
 6. Aromatic amines
 7. Pesticides
 8. Cotton dust
 9. Ionizing radiation



What smoking does to your body

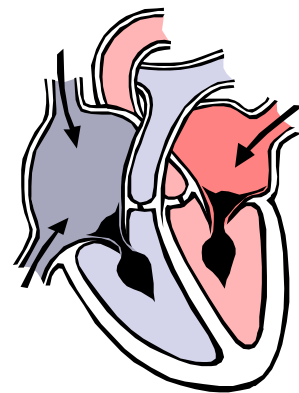
Questions for participants:

- 1. How do you think your body reacts when you smoke?*
- 2. How about using chewing tobacco?*

The chemicals found in cigarette smoke cause the lungs to stop functioning normally. Below are some examples of what happens to your lungs and heart when they are affected by the substances contained in cigarette smoke:

Carbon Monoxide weakens the heart and other muscles.

- It is a poisonous gas that cuts down the blood's ability to carry oxygen.
- When the blood has less oxygen than normal, your muscles get tired faster and you have lower physical endurance.
- Carbon Monoxide can also damage the heart by forcing it to pump harder to make up for the lack of oxygen, also causing chest pain.



Nicotine raises the blood pressure.

- Nicotine is the addictive agent in cigarettes. It is a strong poison, more toxic than arsenic and cyanide.
- It causes the heart to beat faster and irregularly, constricting blood vessels and raising blood pressure.

Hydrogen cyanide damages the lungs.

- It is the gas known to be used to execute prisoners in some states.
- Hydrogen cyanide along with phenols and formaldehyde (also found in cigarette smoke) destroy the cilia that line the airways and sweep mucus and debris from the lungs.
- Without the cilia to protect the airways, the lungs are left vulnerable and impurities are able to accumulate, creating a breeding ground for infection or lung damage.

Smoking also damages the alveoli or air sacs that are used for exchange of oxygen and carbon dioxide.

- These tiny air sacs in lungs eventually collapse due to smoke damage reducing the lung surface area and the ability to transfer oxygen efficiently into the blood.
- This causes the lungs to over-inflate and breathing gets progressively harder. This is what has typically happened to someone who is diagnosed with *emphysema*.

WAYS TO HELP LABORERS QUIT SMOKING

Questions for Participants:

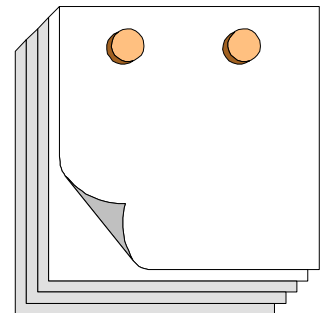
1. *How many of you who are smokers want to quit?*
2. *How many smokers have tried to quit but failed?; What made them relapse?*
3. *How many of you are ex-smokers?*
4. *Ask ex-smokers to share their experiences with quitting and what worked best with them.*

Quitting Tips

Most successful “quits” are broken down into three stages.

Stage 1: Getting Ready to Quit:

- **Set a date for quitting.** You can even get a friend or co-worker to quit at the same time.
- **Notice when and why you smoke.** Try to find things in your daily life that you often do while smoking (such as drinking coffee or driving a car). *See pamphlet “Why Do You Smoke?”*
- **Change your smoking routines.** Keep cigarettes in a different place. Smoke with your other hand. Don’t do anything else while smoking. Think about how you feel when you smoke.
- **Smoke only in certain places,** such as outdoors.
- **When you want a cigarette, wait a few minutes.** Think of something else, drink water, or chew gum.
- **Buy one pack of cigarettes at a time.** Or switch to a brand that you don’t like.



Stage 2: On the Day You Quit:

- **Get rid of all your cigarettes.** Put away all your ashtrays.
- **Change your morning routine.** Don't sit at the same place at the breakfast table. Stay busy.
- **Do something else** when you get the urge to smoke.
- **Carry other things to put in your mouth.** Like gum, candy, or a tooth pick.
- **Reward yourself** at the end of the day for not smoking. See a movie or go out for your favorite meal.

Stage 3: Staying Quit:

- Don't worry if you are **sleepier or more short-tempered** than usual; these feelings will pass.
- **Try to exercise more.**
- **Consider the positive things about quitting** – the health benefits for you, your family, and your co-workers; how much better your body feels; etc.
- When you feel tense, **keep busy.**
- **Eat regular meals.** Feeling hungry can sometimes be mistaken for the desire to smoke.
- **Start a money jar** with the money you save by not buying cigarettes.
- **Tell others that you quit** – most people will support you.
- If you slip and smoke, don't be discouraged – **try again.** Many former smokers tried to stop several times before they finally succeeded.



Products

Most smokers who have quit, did so on their own. They decided to quit without the use of aides such as the nicotine patch or gum.

Fortunately, in addition to cessation classes, now there are a variety of products that can be used to help smokers quit that have been proven to be effective. Smokers should talk to their physicians about which products would be the best for them.

Nicotine Patch:

- Available over the counter
- Nicotine is absorbed through the skin
- Can gradually reduce dose
- Convenient to use (once-a-day)

Nicotine Gum:

- Available over the counter
- Good for those who smoke for oral gratification
- Convenient to carry and use anytime

Zyban:

- Nicotine-free pill
- Reduces urge to smoke and withdrawal symptoms
- Need prescription from physician

Nicotine Inhaler:

- Need prescription from physician
- Reduces the cravings to smoke
- Repeats the hand-to-mouth ritual of smoking a cigarette

Mint Snuff:

- Used to quit smokeless tobacco use
- Made of mint instead of tobacco
- Contains no salt, no sugar, no nicotine, no tobacco
- Helps people deal with the look and behavior of chewing

Statistics specific to gender and ethnicity:

(See graph on tobacco use breakdown by demographics.)

Gender issues

- Women have lower smoking rates than men but are increasing their use at a faster rate, particularly at younger ages.
- Smoking has a damaging effect on women's reproductive health: reduced fertility, early menopause and low birth rate. There is also a possible connection to SIDS (Sudden Infant Death Syndrome).
- Children develop asthma at two times the rate when their mothers smoke.
- Smoking is associated with cervical cancer.
- The average weight gain after quitting smoking is only five pounds.

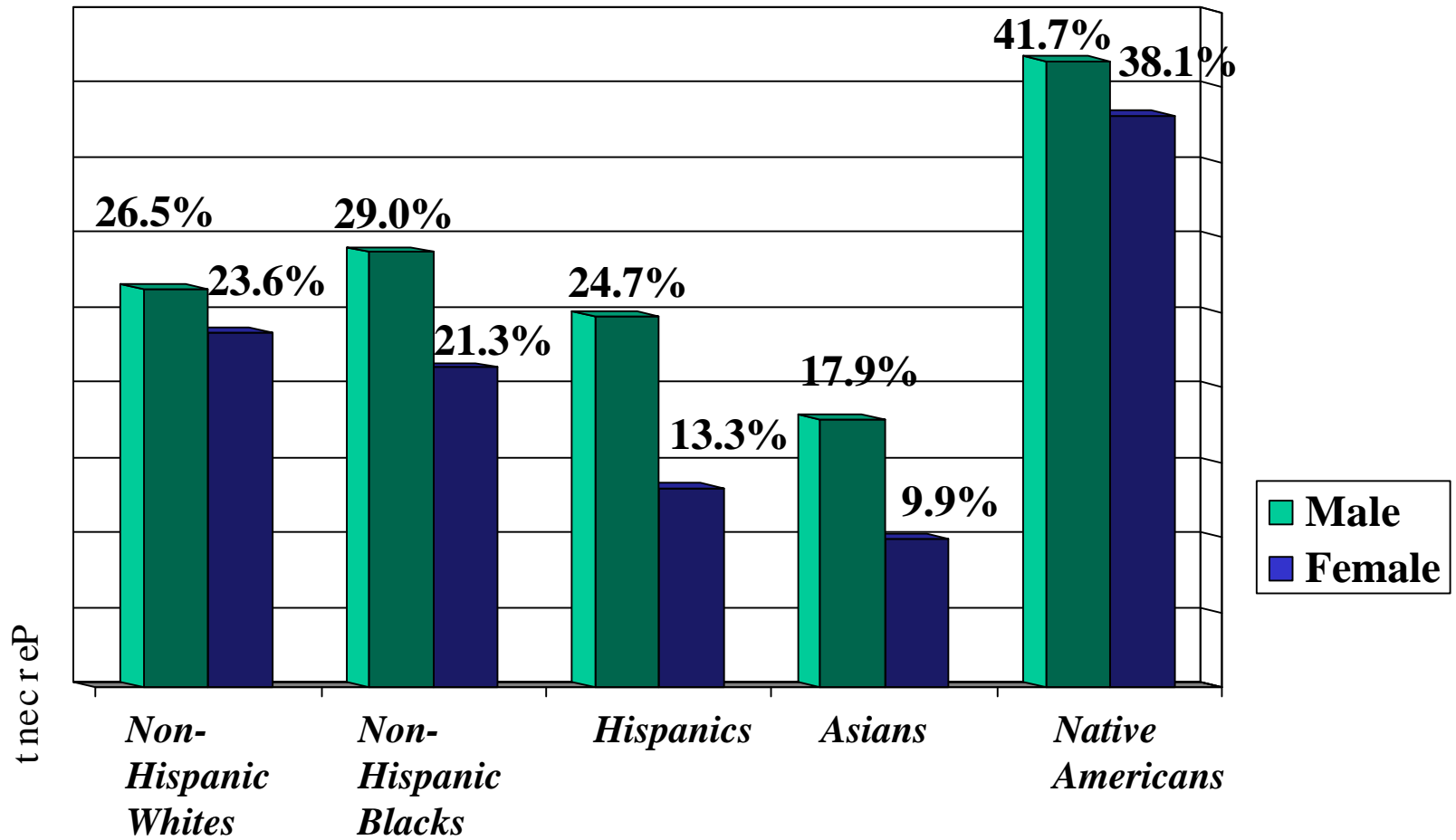
African-Americans

- Males are 50% more likely to get lung cancer than white men.
- Stroke is two times more common in black men and women.
- Smoking rates are lower for black teens but starting to grow.
- Preference for menthol may facilitate the absorption of harmful agents.
- Use chewing tobacco at half the rate of white men.
- Quitting rates are higher among whites than blacks.
- There is widespread evidence that the tobacco industry has targeted African-Americans.
 - Advertising
 - Financial support of cultural events, educational institutions, etc.

Hispanics

- Among men, smoking rates for Hispanics are similar to whites. Hispanic women have smoking rates much lower than Caucasian non-Hispanic women.

Current Cigarette Smoking Rates by Gender and Race/Ethnicity 1998



Source: CDC

D. Exercise

Questions to Generate Discussion

- 1. Don't Laborers routinely get enough exercise in their work?*
- 2. What are the different types of exercise?*

Fitness is very much associated with exercise. Even in moderation, exercise positively affects several major health conditions of importance to Laborers including:

- ◆ heart disease
- ◆ cancer
- ◆ weight control
- ◆ back care

Laborers get more exercise than most people do, but do they get enough of the different types of exercise? Depending on what kind of work they do, they may get enough of one type of exercise, but less of the other two. All are important and should be added to your routine at home if you aren't getting enough of it at work.

Cardiovascular Exercise (aerobic)

- ◆ Your body needs fuel (food) to burn and oxygen with which to burn it.
 - fuel can be stored for later (fat)
 - oxygen can't be stored, need to supply it as needed

⇔ Aerobic (meaning “with air”) fitness is when your heart and lungs supply your muscles with sufficient oxygen for them to do their job.

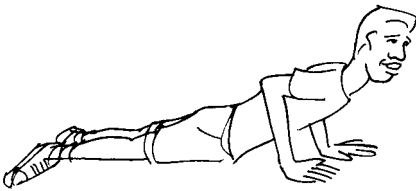
⇔ The less the heart muscle has to work to get that supply of oxygen to the muscles, the more aerobically “fit” you are.



⇔ Defining an exercise as aerobic depends on the **F.I.T.** principle:

- **Frequency:** at least 3 times per week
- **Intensity:** increasing your heart rate so you can talk but not sing
- **Time:** for twenty minutes at a time

Flexibility (Stretching)



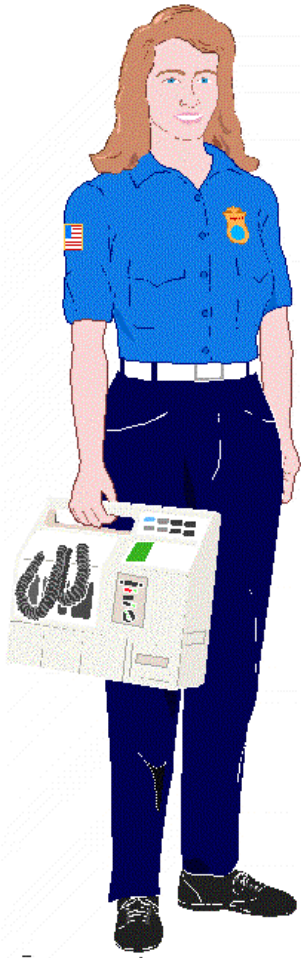
- ◆ Flexibility is currently getting more attention as an important exercise and is probably under-appreciated by Laborers who focus more on muscle building, rather than muscle stretching.
- ◆ It's important to warm up the muscles before any exertion; before muscle building, or aerobic exercise, including manual labor. Compare warming up the muscles before working to warming up an engine before driving.
- ◆ Flexible muscles minimize injuries, tight muscles lead to pain (Drop a rubber ball and it will bounce. Drop a glass and it will shatter.)
- ◆ Flexibility improves coordination, an important job safety factor.

Strengthening (muscle building; calisthenics)

- ◆ In addition to allowing you to lift more, strong muscles are better used to support the body's skeleton.
- ◆ Muscles are built through contracting them to the point of exhaustion. Then you let them rest (heal) and do it again.
- ◆ For construction workers, it is particularly important to have strong muscles of the legs, abdomen and stomach (see section on back care.)



The Instructor should review the following axioms:



“It is the nature of all organisms to avoid pain.”

- ◆ *No one should pursue an exercise regimen that they don’t enjoy or that hurts them. Otherwise, they will avoid doing it.*
- ◆ *Find an exercise or routine that you can live with (literally!)*

“Your fitness of the past affects your fitness today only to the extent that you continue to do what you did in the past.”

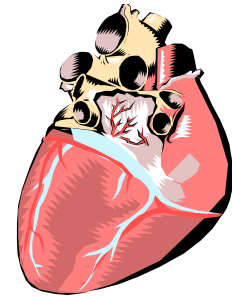
- ◆ *Some people who were athletic or “fit” in the past mistakenly believe that they can “store” up the benefits of the exercise or fitness. This is a common belief of ex-sportsmen and ex-construction workers who may now have leadership jobs.*
- ◆ *Unlike health habits related to diet, carcinogenic exposures or substance abuse, which build up over time, the benefits of exercise begin to diminish almost immediately upon stopping.*
- ◆ *The positive side of that is that the benefits of exercise begin to accrue immediately.*

Group Exercise

Depending on time constraints, put the three categories of exercise on the board. Ask the participants to identify some exercises, sports activities or work tasks that fit in each of the categories. Explain why some may fit in one category but not another.

Three Types of Exercise

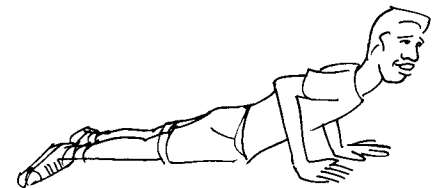
1. **Cardiovascular -
Aerobic**



2. **Strengthening -
Muscle Building**



3. **Flexibility -
Stretching**



IV. Using the Health Care System

A. Being a Good Health Care Consumer

Note that some of these issues about communicating with the doctor are section, it is worth raising as a separate issue as it is extremely important to emphasis good communications and proactive use of the health care system.



Men are notoriously bad health care consumers. In addition to the problem of them not seeking preventive health care or waiting too long to see a doctor, once they get there, their objective is to get out as fast as possible, preferably with a prescription.

Women are better users of the health care system because of their roles as care givers to their children. Also, they make routine use of the health care system at an earlier age than men.

Even so, women who feel rushed by the system or confused by what doctors say (or don't say) may be getting less out of their doctors' visits than they could.

Questions to Generate Discussion:

- 1. When was the last time you went to the doctor for a wellness check up?*
- 2. What's it like going to the doctors? Is it a pleasant place to be?*
- 3. How well do you and your doctor communicate? Do you ask a lot of questions or volunteer information? Does he/she?*
- 4. What are you like in the doctor's office?*
- 5. Do you ask a lot of questions?*
- 6. Do you try to get as much out of the doctor as possible?*
- 7. What's it like on the receiving end of the health care system that makes it non-user friendly?*

Men may acknowledge that, in an effort to talk as little as possible, they provide scant information on their medical condition/history and only when specifically asked. And, asking questions is out of the question.

As a consumer of health care services, you may be put off by the fact that:

- patients have to fill out a lot of apparently redundant paperwork.
- patients have to wait once they get there
- doctors are often rushed between patients and don't spend much time communicating with you.
 - ◆ when they do communicate sometimes it's in technical terms most people don't understand.
 - ◆ the conversation is often one way and the doctor may not do much to elicit more info from the patient.

Taking Control



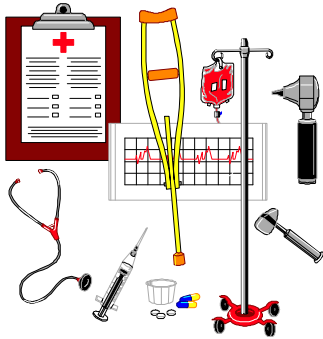
Those who take their health seriously (and in construction, this means taking their *careers* seriously) must be more proactive in this process. While some doctors may not volunteer extra time, most will be responsive to questions and concerns.

When going to the doctor's office, be prepared to do the following:

[If necessary, write down your symptoms and questions. Often when you get to the doctor your mind is a blank.]

1. Explain signs and symptoms of any illness you believe you have, including how long you've had them, including the circumstances under which they come and go.
2. Explain your working conditions. They may be related to the problem that you have. Doctors don't know what construction work is like.
3. Be honest about your health behaviors. Your doctor isn't there to judge you. He/she can't help you if you aren't up front about what you may be doing that will aggravate your situation.
4. Ask questions about anything you don't understand. Sometimes doctors forget they are talking to a layperson because they are used to talking to other health professionals all day long. It doesn't make you look stupid; it will make you better.
5. If the doctor prescribes medication, ask what the potential side effects are.

Occupational and Family Medical History



Note that the medical questionnaires doctors use often don't sufficiently address the occupational exposures of a construction worker. There may be a single short line that asks what kind of job you have. The medical professional needs to know the extent to which you are or have been exposed to chemicals, sunlight, or hard working conditions on a daily basis (including exposures from the past.)

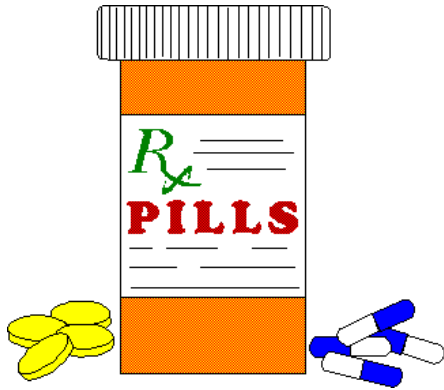
Typical medical questionnaires are better at capturing information about your family history. A lot of health conditions are hereditary (see sections on cancer and heart disease). So it's important that you be familiar with your own family health history, meaning blood relatives, not adoptive parents or spouses. For most conditions, the information is most important relative to your parents and siblings.

Many health professionals believe that the medical questionnaire, or what you volunteer to the doctor about your exposures and health history is the most important part of diagnosing a health problem.

About prescription drugs

This is also an opportunity to discuss the issue of medication side effects with the doctor, especially if you are put on high blood pressure medicine, cholesterol medicine etc. Be prepared to look for the side effects and request adjustment if necessary.

Sometimes doctors are too quick to prescribe medications to correct health conditions that require behavioral change. If prescribed a medication, ask the doctor's opinion as to what (if anything) can be done to correct the problem without medicine. Also ask the likelihood of getting off the medication in the future.

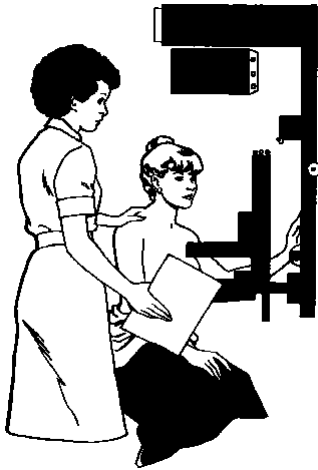


Regardless, always follow the procedures for taking medications. Don't determine on your own that you no longer need them. Also, don't decide on your own that it is okay to take more than the prescribed amount or more frequently than indicated. If you don't like your doctor's advice, get another *medical* opinion.

B. Undergoing Preventive Screening

As much as they may hate to do it, Laborers, men in particular, need to take advantage of the number of preventive screening opportunities which exist today.

The prognosis for disease improves with early detection.



Men (stereotypically) avoid going to the doctor until they are in pain or have something visibly serious that needs correction. They then adhere to treatment until what is obvious (the pain or symptoms) goes away. Women typically undergo more preventive tests taken than men, but still should make sure they use all appropriate tests for them, especially those that may be work related.

Using the health care system in the absence of problems is as important (if not more important) to maintaining good health as is seeking treatment when you are “sick.”

Questions to Generate Discussion:

- 1. How many people have seen a health care professional in the last two years for a “wellness” check up?*
- 2. ...for any medical screening?*
- 3. Why wouldn't you/don't you see a doctor for a wellness check up? -- Responses will likely focus on time, money, fear/dislike of doctors, presumption of being healthy.*

Preventive Screening Tests

Not all medical screening tests are useful for everyone. Some tests that you may be familiar with are better for people with specific symptoms or conditions, or for people who are in high risk categories.



The following rule of thumb is used to determine whether a test is good for screening people on a wide scale basis:

- Test is applied in the absence of obvious signs or symptoms. Where signs or symptoms exist, then it becomes a *diagnostic* test.
- Test must be able to detect disease at an early enough stage to make a difference. Example, chest x-rays not useful screening tool for lung cancer because by the time you see a spot, it's too late to do much more about it.
- The cost of the test should not be so great as to make it impractical to recommend to people. Example, colonoscopies are good at screening for colon cancer but too expensive to recommend on a routine basis to everyone.
- The test is good at accurately detecting disease or, as important, accurately determining that disease is not there. False positives lead to fear and expensive additional tests. False negatives lead to a false sense of security; possibly death.
- The test may not be necessary for the general population, but may be warranted for a certain population; people in particular high risk categories.

Following are recommended screening tests for the general population, including Laborers:

Clinical examination:

- ◆ Blood Pressure measurement
- ◆ Clinical breast exam (for women)
- ◆ Pelvic exam/pap smear (for women)
- ◆ Testicular exam (for men)
- ◆ Digital rectal exam (annually after age 40)

Lab Work

- ◆ Blood Urea Nitrogen (blood chemistry test to determine liver and kidney function... done every 5 years)
- ◆ Cholesterol (done every 2-5 years depending on previous results)
- ◆ Complete blood count (checks for anemia, bone marrow function and nutritional factors, such as iron deficiency... done every 5 years)
- ◆ Urinalysis (detects blood and bacteria in the urine that may be caused by tumors or infection... done every 5 years)
- ◆ Fecal occult blood test (checks blood in the stool...annually after age 40)
- ◆ Prostate specific antigen (PSA) test for men ... (looks for signs of prostate cancer ... done annually after age 50)
- ◆ Glucose test (for those at risk of diabetes)

Diagnostic Tests

- ◆ Mammogram (for women... every 1-2 years after age 40)
- ◆ Sigmoidoscopy (looks inside the colon for signs of colon cancer ... done annually after age 50)

Additional tests may be appropriate still in *asymptomatic* people depending on their work exposures, family history or other risk factors (smoking, dust exposure, sun exposure.) For Laborers, these include:

- ◆ Total skin exams (skin cancer)
- ◆ A baseline chest x-ray (lung disease)
- ◆ Audiometry (hearing)
- ◆ A baseline electrocardiogram (stress on the heart)
- ◆ Oral exam (oral cancers if a heavy smoker and drinker)
- ◆ Spirometry (lung function test)

Well Known Tests Not Suitable for Screening

The Instructor should review the following tests that participants may be familiar with and believe are necessary but are not recommended for routine screening. See if they can identify why certain tests are not good for screening. Adhere to the guidelines for what defines “s

- ◆ Spine x-ray:
 - Spinal x-rays do little to reveal the potential for back problems. Many people have some spinal imperfections, yet never experience back pain or back problems.
 - The medical community can rarely rely on them to identify the cause of back pain when the person has symptoms.

- ◆ Chest x-ray:
 - Chest x-rays are good for identifying where disease exists (spots on the lung, pneumonia, etc.) That is, it is a good diagnostic tool but not a good screening tool.
 - For respiratory illnesses or heart disease, persons will likely already be experiencing symptoms.
 - For lung cancer, it is usually too late to do much about the disease.

- ◆ Colonoscopy (used to examine the large and small intestine for cancer)
 - While accurate it is very expensive (would bankrupt a health plan if used on a mass screening basis.)
 - Is not without its own dangers, given its invasive nature (can rupture the intestine needlessly if there is no disease present anyway.)
 - More useful after other less expensive tests have shown an indication that cancer may be present. Again, good as a diagnostic tool but not necessary for mass screening on asymptomatic people.

- ◆ Stress EKG (used to measure heart function under stress)
 - Often test results are inconclusive, therefore, what is the point of doing it? Better when other signs of heart disease are present

Components of a Physical Examination (Asymptomatic Laborers)

Key: A = cover
B = cover under special circumstances (age, risk factors, etc.)
C = do not cover for routine screening

Preventive Medical Services:

CPT codes **99381-99317** do not include counseling, risk factor reduction interventions or immunizations.

CPT codes **99401-99412** include counseling and risk factor reduction intervention.

NOTE: The following are a given and should be part of the clinical part of the physical exam:

- ◇ height / weight
- ◇ pulse
- ◇ visual acuity
- ◇ inspection of HEENT
- ◇ feel of lymph nodes / thyroid gland
- ◇ auscultation of the heart / lungs (stethoscope)
- ◇ abdominal check (hernia)
- ◇ liver / kidney check
- ◇ neurological / reflexes

Clinical (note that most of these tests do not use CPT codes as they are part of the physical exam.)

A **Blood pressure.** Measures the “pressure” or force of blood in the arteries. Two numbers indicate pressure when the heart is contracting (upper) and when it is at rest (lower). High blood pressure is a major risk factor of heart disease and stroke.

The USPS Task Force recommends periodic screening for all persons age 21 and older. The optimal interval has not been determined and is left to clinical discretion. Other medical organizations recommend checks every 1-2 years. The Canadian Task Force on Periodic Health Examination recommends checking upon every visit to a physician.

A **Breast exam, clinical.** An examination of the breast by a medical professional to detect abnormalities in the appearance or feel of the breast.

The USPS Task Force recommends routine CBE (clinical breast exam) every year for women ages 50 to 69 in conjunction with a mammogram. The American Cancer Society (and several other medical organizations) recommend annual CBE after age 40 but periodic checks (every 3 years) after age 20.

B **Digital rectal exam.** A test where the physician feels for polyps in the rectum (colon-rectal cancer) and for prostate enlargement, an early sign of prostate cancer.

The USPS Task Force finds the evidence to be insufficient to recommend for or against routine DRE and does not recommend it to detect prostate cancer. The American Cancer Society recommends DRE for both diseases annually beginning at the age of 40.

A **Oral cavity exam.** A review of the interior of the mouth to detect changes/abnormalities of the tissue of the mouth lining, tongue and throat for early signs of cancer.

The USPS Task Force finds insufficient evidence to recommend for or against oral screening in asymptomatic persons by a primary care physician. The American Cancer Society recommends a checkup that includes an oral examination every three years for persons over the age of 20 and annually for those over age 40. Other medical organizations suggest screening for those who have risk factors, such as consumers of alcohol and tobacco products. Because Laborers have a high rate of alcohol and tobacco use, they should probably be screened more so than the general public.

A **Pelvic exam / pap smear (88150-88155).** An inspection of a woman's cervix and a laboratory test of the cells of the cervix. Abnormal cells are an early indication of cervical cancer.

The USPS Task Force recommends regular (at least every three years) screening for all women when they become sexually active. The ACS and other medical organizations recommend beginning screening after 18 (or earlier if sexually active). These groups indicate that annual screening can be reduced to once every 2-3 years after having gotten 3 consecutive normal results. Screening can be discontinued or reduced in periodicity in later years (sixties).

A/B **Skin exam, complete.** A review of the entire skin surface to detect suspicious lesions which may be pre-cancerous or cancerous. Physician notes changes in moles and other markings.

The USPS Task Force does not recommend for or against routine screening for skin cancer by primary care physicians. It does recommend that clinicians be alert to lesions with malignant features and that high risk individuals be referred to skin cancer specialists. The ACS recommends physician skin exams every 3 years at age 20 and annually at age 40. The American Academy of Dermatology and NIH recommend regular screenings. Because most Laborers are at increased risk of skin cancer they should be routinely screened. This is less important for Laborers/family members who do not have risk factors (e.g., those who are African American or who have not had a lot of sun exposure in their lifetime).

A/B **Testicular exam.** Examination of the testicles to detect lumps or swelling that may be an indication of cancer. Testicular cancer is most common among white males between the ages of 15 and 40.

The USPS Task Force does not recommend for or against routine screening for testicular cancer. Patients who are at increased risk should be informed of the risk and about screening options. The ACS recommends a testicular every three years for men over age 20 and annually over age 40. Because of the large percent of young males in the LIUNA population, they testicular exams should be included in the physicians exam.

Lab Work

(Automated multi-chemical test or multiple clinical chemistry test(s): BUN, Creatinine, Cholesterol, Glucose, Uric Acid (8002-8005) 2-5 clinical chemistry tests)

A **Blood Urea Nitrogen (BUN) (84526) / Creatinine (82565-82570,75;82545).** A test of the blood chemistry. Abnormal levels detect kidney, liver and certain intestinal disorders.

Every 5 years in adulthood.

A **Cholesterol & Tryglicerides (84478)** (fasting). Measures lipid (fat) levels in the blood. Fasting cholesterol allows a breakdown of good cholesterol (HDL), bad cholesterol (LDL) and tryglicerides. High cholesterol and trygliceride levels are major risk factors of heart disease.

The USPS Task Force recommends periodic cholesterol screening for all men over age 35-65 and women age 45-65 at intervals left to the physician's discretion. Other risk factors (obesity, smoking family history of heart disease) would be warrant earlier/more frequent testing. Other medical organizations recommend cholesterol screening of all adults after age 20 at least once every 5 years.

A **Complete Blood Count (CBC) (85031).** Several tests on the blood cells to check for anemia (low red blood cells), bone marrow function [white cell count, blood clotting ability and nutritional factors (e.g., iron efficiency)].

Every five years in adulthood.

B **Fecal Occult Blood Test (82270).** Looks for blood in the stool, an early warning sign of colon cancer.

The USPS Task Force, the American Cancer Society and other medical organizations recommend stool screenings annually after the age of 50.

_B___ Glucose Test (82947,48,51). Measures levels of blood sugar. A very high level is evidence of diabetes mellitus.

The USPS Task Force finds insufficient evidence to recommend for or against routine screening for diabetes in asymptomatic people. They do recommend that physicians screen individuals who are at high risk of contracting diabetes, such as obese individuals over age 40, those with a family history or members in certain ethnic groups (Native Americans, Hispanics and African Americans). The American Diabetes Association recommends screening all individuals first with a careful risk history and issuing a fasting glucose test on those with identified risk factors.

_B___ Prostate Specific Antigen (PSA) Test (84153). A blood serum test which looks for elevated levels of a biomarker (PSA). High levels of PSA are associated with prostate cancer and other prostate illnesses.

The USPS Task Force and the Canadian Task Force recommend against routine PSA testing. However, if screening is going to be done, it should be done in combination with a Digital Rectal Exam. The ACS and the American Urological Association recommend annual PSA screening for men beginning at age 50 (40 for African American men and those with a family history) in conjunction with an annual DRE which should begin at age 40.

_B___ Rubella Titer (86280). A test to determine whether a woman has a low level of immunization against Rubella. Rubella, while not serious to the adult, can cause major complications in a fetus.

The USPS Task Force and other organizations recommend routine screening of susceptibility of contracting Rubella for women of childbearing age. Susceptible non-pregnant women should be offered vaccination; susceptible pregnant women should be vaccinated after delivery.

_C___ Uric Acid Test (84550,55,60). A test of the urine. High levels of uric acid are associated with gout and arthritis (a painful joint disorder) as well as kidney problems.

Not warranted for screening purposes in asymptomatic persons. Pain associated with gout will be evidenced.

_A___ Urinalysis, routine and microscopic. (8100,81002,81005,81007,81015) Detects blood and bacteria in the urine that may be caused by tumors or infections. Sugar in the urine may be a sign of diabetes. Other portions of the test indicate ability of proper kidney function.

Every 5 years as an adult; every 2 years after age 60.

Diagnostic

B Audiogram (92506). Evaluates and measures hearing in each ear and both ears together, used primarily to detect hearing loss over time.

The USPS Task Force does not recommend for or against audiometry in adults except for those exposed to excessive occupational noise levels. Because many Laborers are exposed to excessive noise over their working lives, they are candidates for audiometry.

C Spinal x-ray (72010,72020,72040). An x-ray of the spinal cord to check for structural or disease problems in the vertebrae.

Not useful in detecting back abnormalities. Many (more than 1/2) of MRI's will indicate disc abnormalities in patients with no back pain; does not show indication of a back problem. Not reliably useful for alignment problems; too subjective.

C Chest x-ray (71010,72020,72030). An x-ray of the chest cavity targeted at the respiratory system (lungs and heart) to detect tumors, infection and other abnormalities.

No medical organization recommends routine screening of the general population or smokers for lung cancer using chest x-rays. An outstanding tool for evaluating patients with chest symptoms, but will not pick up lung cancer early enough to treat it. Required in certain industries (asbestos/hazardous waste) for medical surveillance purposes (baseline).

B/C Colonoscopy, flexible (45378). Examination of the entire colon, upper and lower, to detect signs of colon-rectal cancer.

The USPS Task Force finds insufficient evidence for or against routine screening for colon cancer with colonoscopy. However, both the USPS and the Canadian Task Forces find that colonoscopy may be appropriate for persons in high risk groups (family history of colon cancer, personal history of ovarian/breast cancer, personal history of polyps and colitis). The ACS does not recommend routine screening using colonoscopy. For most people, it is probably more appropriate to do upon evidence of colon cancer through other screening measures (DRE, Stool Hemoccult). Costly and painful.

C Coronary angiography (75750). A liquid contrast agent is injected into the coronary arteries through a catheter. The liquid contrast shows up on an x-ray indicating if there are any blockages in the artery. This process provides the doctor with a “roadmap” of the coronary arteries.

Not appropriate for routine screening absent symptoms (e.g., chest pain). Expensive and invasive; requires hospitalization.

B Electrocardiogram (EKG), resting. (93000) Records the electrical activity of the heart while at rest. Provides information about heart rate, rhythm, presence of heart damage and inadequate blood/oxygen supply to the heart muscle.

The USPS Task Force finds EKG to be suitable for men with 2 or more cardio risk factors and for those who work in occupations where a sudden heart attack can be dangerous to others (e.g., bus drivers). Overused as a screening tool for asymptomatic people with no chest pain. Useful for baseline testing at age 35-40 to make comparisons should future symptoms arise. Required in some occupational examinations requiring respirator clearance (asbestos/hazardous waste).

C Electrocardiogram (EKG), exercise/stress. (93075) Records the electrical activity of the heart while exercising, i.e., on a treadmill intended to note heart abnormalities when under physical duress.

Too expensive and misleading for routine screening. Accurately reports people without disease 90% of the time., accurate reports people with disease 70% of the time.

B Mammogram (76092). An x-ray of the breast tissue to detect lumps which may be cancerous.

The USPS Task Force and all other medical organizations recommend annually for women after age 50. The ACS further recommends annual mammograms after age 40. other medical organizations, including the National Cancer Institute and the AMA, recommend mammograms every 1-2 years after age 40.

B Sigmoidoscopy, flexible (45330). Examination of the lower segment of the rectum and large intestine with a hollow lighted tube to check for polyps and other indicators of colon-rectum cancer.

The USPS Task Force recommends sigmoidoscopy at age 50 at unspecified intervals. The ACS and other groups recommend at age 50 and every 3-5 years thereafter. The Canadian Task Force does not recommend sigmoidoscopy for colorectal screening. Particularly useful where there is a family history or other risks/signs of colon cancer. Misses about 40% of the cancers which occur in the upper portion of the colon. Costly and painful.

B Spirometry (94010-94070). A lung function test that indicates signs of obstructive and restrictive lung disease.

May be indicated for adults based on smoking and occupational history. Required for environmental workers. Probably useful for most Laborers.

B Tonometry (92100). A test to determine pressure within the eyeball. High pressure is an early sign of glaucoma, a leading cause of blindness. This more sensitive test is performed by an ophthalmologist. Early detection cannot reverse loss of eyesight but can slow down further deterioration.

The USPS Task Force finds insufficient evidence for or against screening for glaucoma by primary care clinicians. However, it does recommend referring high risk persons (those with diabetes, family history, African Americans) to eye specialists for screening, as does the American Optometric Association. The American Academy of Ophthalmology recommends a comprehensive eye examination, including glaucoma screening, by an ophthalmologist, for all adults beginning at age 40 with periodic re-examination thereafter. African Americans should be tested every 3-5 years beginning at age 20.

Immunization

All recommendations below based on USPS Task Force.

B Hepatitis B (90746). A serious form of viral liver infection most commonly contracted upon exposure to contaminated blood.

Vaccine is recommended for young adults who have not previously been immunized and for all susceptible adults at high risk of infection (e.g., injecting drug users, health care workers, people with multiple sexual partners, prison workers, those in close household contact with infected persons, etc.).

B/C Hepatitis A (90730). A highly infectious form of hepatitis and the most common. Transmitted mainly through food or water that has been contaminated by human excrement. The vast majority of people recover quickly.

Vaccine is recommended for high risk persons, such as travelers to geographic areas with poor sanitation, Native Americans, people who use contaminated needles, men who have sex with men, women with bi-sexual partners, certain health care workers, institutionalized persons (e.g., prisons).

A/B Influenza (90737). Immunization every year against different strains of the flu.

Annually for persons age 65 and older and in selected high risk groups. High risk groups are those with suppressed immune systems, chronic heart/lung disease, around others in high risk groups, or who cannot afford to be sick for several days. Worth pursuing for Laborers who, if out of work, will lose compensation.

B/C **Pneumonia.** Fatalities associated with pneumonia most common among elderly and those with other illnesses. In recent years, drug resistant strains have emerged.

Recommended for those over age 65 and for those who are at high risk of contracting pneumonia, such as those with cardio-pulmonary disease and Native Americans. Re-vaccination is not necessary. Not essential to the exam of most Laborers unless health plan covers retirees.

A **Tetanus (90724) – Diphtheria (90719). (combined: 90702)** Although uncommon, tetanus remains a serious infection with death occurring in about 1/3 of the cases. Both infections have been substantially reduced in modern times.

Recommended for all adults who have not had the primary series with period boosters every 10 years thereafter..

V. Conclusions

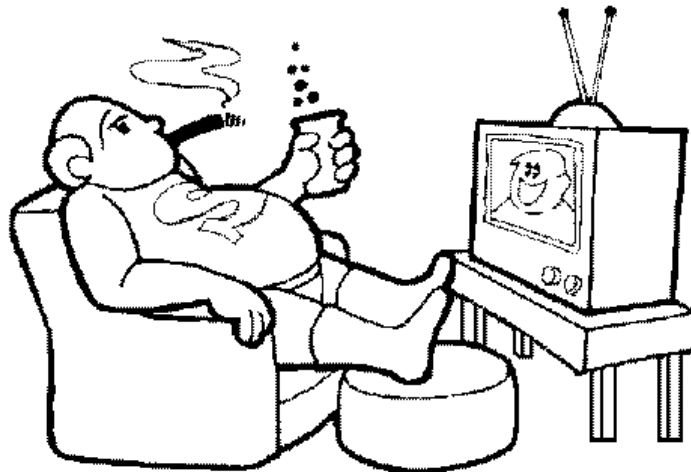
The Instructor has a variety of options for concluding this session, depending on the nature of the group, time constraints and the Instructors desires. Following are options for ending this session.

A. Self Assessment and Action Plan

Get each of the class participants to focus on identifying where he/she is falling short with respect to being good health:

- are there lifestyle issues that could improve?
- should he/she start doing self examinations?
- what type of screening tests are being neglected.

If time permits, ask the participants to write down their own personal action plans. Even if they are reluctant to change, making them write something down will force them to think about what is currently missing from their “maintenance” schedule. Alternatively, they should give themselves credit for the things they are doing right.



B. Reduced Life Expectancy

To end the session on a humorous note, you can distribute the listing of conditions, activities and other situations that reduce days of your life. Pose the question, “What is the condition that leads this list for cutting days off your life expectancy?” With cancer and heart disease covered, it will be difficult for them to come up with any serious responses, although some will be humorous. The answer?:

■ **Being an Unmarried Male: 3,500 days lost**

There are a variety of potential explanations for this phenomenon (which is the result of an actual study.):

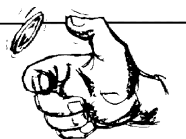
1. No one at home to look out for them or to set a good example for them
2. Presence of some medical or mental health problems that preclude them from having a relationship
3. No one they need to worry about being left behind should they be reckless with their own health; no “survivors” to be concerned with

In any case, study after study reveals that people (males and females) who have relationships, marital or otherwise, live longer lives than those who are loners. In fact, in all honesty, **Being an Unmarried Female** is ranked fourth on the list (1600 days lost) but to have included it on the sheet would have given the answer away.

The Instructor can look back on what the participants answered as to the behaviors Laborers should avoid or take up to live longer lives. Some may have said jokingly to “get divorced” as a way to improve their health. This can be a humorous, yet accurate, way of addressing what they identified.

A quicker way of doing this that may be easier on the participants is for the Instructor to ask them as a group what they think the single biggest condition or circumstance might be, rather than handing out the sheet. This method works as well, sometimes better, than handing out the sheet first.

Note that the group has to have a sense of humor for the Instructor to pull this off successfully.



C. Survival of the Fittest: Prevention Index

This is a way to get the group to be interactive and learn from what was covered in the class. At the beginning of the class, the Instructor asks the group to look around the room and identify (in their minds) who they think the “fittest” person in the room is. They can use whatever standards they want to make this determination. The expectation is that they will pick someone young and muscular.

At the end of the class, say you are going to identify the person who is most fit, or at least will be expected to outlast the others. Ask everyone to stand up. Go through each item on the Prevention Index, which only the Instructor has. Allow each participant to stay standing if they can say they engage in the health-promoting behavior stated. Skip number 2 (regarding smoking in bed), as it doesn’t make sense after responding to number 1 (regarding smoking in general.)



Eventually one person will remain standing. That is your “most fit” laborer. Usually it is a person in their 40’s of medium build. Ask the class if anyone picked that person. If there is an obvious “muscle-man” in the group, ask to see how many persons picked that person. He may have been eliminated after the question about smoking or seat belt use.

An alternative to this process is to have the participants compute their own fitness index. The one with the best numbers is the winner. This is more personal to them however it is less engaging. Regardless, the participants should be encouraged to compute their Prevention Index to get a self assessment of their wellness.

This chart demonstrates the extent to which certain circumstances can reduce your life expectancy. It is intended to show the relative “seriousness” of behaviors (smoking), diseases (cancer) or unhealthy life situations (being poor).

What do you think cuts the most number of days off one’s lifespan? It could be an activity, situation, disease or accident. You may or may not be surprised.

Expected Decrease in Life Expectancy From:

<u>Activities & Situations</u>	<u>Days Lost</u>	<u>Disease & Accidents</u>
What’s Number One?	????	What’s Number One?
Smoking Cigarettes	2250	
	2100	Heart Disease
Coal Miner	1100	
	980	Cancer
20% Overweight	900	
Being Poor	700	
	520	Stroke
Army in Vietnam	400	
Eating 100 Extra Calories / Day	210	
Driving a Car	207	
	141	Pneumonia, Flu
	130	Alcohol
	90	Homicide
Misuse of Legal Drugs	90	
	41	Drowning
	39	Falls
	6	Medical X-rays
Coffee	6	
Using Oral Contraceptives	5	
Diet Sodas	2	

Decreased Life Expectancy From ...

Days Lost

3500

*Being an
Unmarried
Male*

