To: NCI-Frederick Supervisors

From: Randall S. Morin, Dr. P.H.

Director; Environment, Health and Safety Program

Re: Safety Checklist / EHS Medical Surveillance Enrollment Form

As the supervisor of a new employee, you have the responsibility of providing all new employees with program specific safety training. This training is essential to the safety of all NCI-Frederick employees.

To help you in this task, EHS has provided all new employees with the attached checklist. Please set aside the time with the new employee to go over this checklist – it contains work-area specific safety training, which covers hazards that may be present in the employee's workplace that may not have been specifically addressed during orientation.

This checklist should be completed as soon as possible, and *returned within 10 working days to EHS.* EHS will review the checklist. If EHS does not receive an employee's checklist after 10 working days, supervisors will be informed and asked to follow up with the employee and return completed checklists as soon as possible.

You may also download the checklist at http://home.ncifcrf.gov/ehs/.

The EHS Medical Surveillance Enrollment Form must be completed and **returned to EHS**. Any questions call 301-846-1451.

EHS will be happy to answer questions, or assist in any way. When you contact EHS at 301-846-1451, you will be referred to the appropriate person to address your concern.

Thank you for making the NCI-Frederick campus a safe and healthful workplace.



NCI-FREDERICK NEW EMPLOYEE SAFETY CHECKLIST

Employee:	Employee #:
Starting Date:	Employer:
Supervisor:	Supervisor's Phone #

Please complete the checklist as soon as possible (within 10 working days). Please make a copy for the employee to keep and review, and <u>return the original to EHS, Bldg. 426</u>. Both employee and supervisor need to sign the last page acknowledging review and discussion of this document.

Safety & Health Policy Statement

The NCI-FREDERICK is committed to providing safe and healthful working conditions for all employees and preventing occupational accidents, injuries, and illnesses. Management will identify safety and health hazards and provide appropriate safeguards to the hazards with the provision of the proper physical environment, training, appropriate protective equipment, and proper administration of safety and health programs. All employees are expected to perform their work in a safe manner in accordance with prescribed work practices.

Responsibility for safety and health follows the normal line of supervision through all levels.

- All supervisors are responsible for protecting their employees from occupational hazards.
- Anyone who delegates responsibility maintains an overriding accountability.
- **Every** individual in the organization has a responsibility to accomplish his/her part of the safety program.
- Safety and health staff and committees are advisory groups to assist line supervision in carrying out their responsibilities.

Scientific research at the NCI-Frederick has the added hazard of the unknown. Precautions need to be taken to cope with the potential hazards inherent in all operations. All recognized problems must be anticipated and minimized. Additionally, the potential risks involved with routine work must also be considered at all times.

No work is so important that it should be undertaken in an unsafe manner. Every individual should understand the hazards associated with his/her work before starting and feel comfortable that the safeguards provided have reduced risks to an acceptable level. Anyone may question work he/she feels is unsafe or harmful.

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Safety Checklist: All Employees

This checklist is intended to aid the supervisor and employee in reviewing the safety policy and programs at NCI-Frederick, as well as determining hazards that may be present in the employee's workplace. This list may not provide sufficient inquiry into all work environments and tasks, and should not be relied upon as the sole means of evaluating or assessing hazards to which employees may be exposed.

Check each item as it is discussed:

Manual.

I. Saf	ety & Health Policy & Programs
	A. Review program specific safety policies and programs and relevant Safety Grams, found on the EHS website under the "useful documents" link: http://home.ncifcrf.gov/ehs/ . Ensure employee understands that safe work practices, being alert and anticipating hazards, preplanning, and obtaining safety information and/or instructions before beginning a job are of prime importance. B. NCI-Frederick's Operations and Compliance Manual is found at the EHS web site under "useful documents". Employee knows how to locate this document and has read pertinent chapters. C. Ensure employee has obtained safety eyewear and other necessary protective clothing and equipment. Employee knows how to use them before starting work. D. Review safety policy and programs and ensure employee understands that Occupational Health Services (OHS) is to be informed of changes in health status such as serious illness, pregnancy, or immune status. E. Encourage safety suggestions and prompt reporting of unsafe conditions. F. Emphasize Safety Principles: 1. Accidents are preventable 2. Safety is an integral part of job skills 3. Supervisor responsibilities
	4. Employee responsibilities
II. Ac	cidents, Injuries, Illnesses & Emergencies
	A. Injury or Illness
	 In case of a medical emergency, call 911. Immediately report ALL work-related accidents or injuries (no matter how minor) to supervisor and OHS. During non-working hours, report all incidents to Protective Services, 301-846-1091. Report to OHS, Bldg. 426, 301-846-1096 during working hours (8:15 am to 5:00 pm). If employee is expected to administer First-Aid & CPR, the employee must be trained and certified. Contact OHS for training schedule.
	B. Emergency Procedures
	 Employee knows and understands the emergency procedures to be followed in case of fire, medical, spills (chemical, biological, radiological), etc. See chapter B-1 in the EHS Compliance

2. Employee knows the procedure for building evacuation: review evacuation routes, exits, and

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assembly points and the probable types of emergencies.

3. Emergency Telephone Number (Fire and Medical): 911

III. IVIE	edicai 5	urveillance & Prevention Programs
Yes	No _	A. Supervisor has completed the Medical Surveillance Enrollment Form, and the form has been sent to EHS, bldg. 426. See http://home.ncifcrf.gov/ehs/ehs.asp?id=35 , and click on Medical Surveillance Enrollment Form under the "Biosafety" heading. Note: If the employee's job duties may require immunizations or enrollment in various medical or safety surveillance programs please indicate and potential job hazards in the Medical Surveillance Enrollment Form referenced above.
IV. W	ork Are	a(s)
Yes	N/A	A. Tour work area(s) to review location of hazards, administrative controls, and location of equipment.
		B. Employee understands after-hours operation, including building access procedures
		 C. Review work area restrictions and ensure that employee is aware of: 1. Areas that have eating, and drinking restrictions 2. NCI-Frederick and DHHS locations are tobacco free. 3. Areas that require eye protection 4. Areas that contain toxic chemical and/or radioactive hazards 5. Areas that require clearance for safe egress, such as corridors and aisles 6. Types of safety equipment which should never be blocked (e.g. eyewash stations)
		D. Signal Systems: review types of alarms in area, how they are activated, what they mean & how to respond (e.g. equipment alarms, oxygen deficiency alarms, etc.)
		 E. Motorized company vehicles Seat belt use is required Forklift operation: requires NCI-Frederick training and certification before operating contact EHS at 301-846-1451 to schedule training. Vehicle operation requires valid driver's license.
V. Sat	fety & F	lealth Equipment
Yes	N/A	 A. Protective equipment: employee knows the location and operation of: 1. eye wash stations and safety showers 2. other (bench shields, special guards, etc.)
		B. Employee is trained in the proper use of chemical fume hoods; ensures that all inspections are current before use (see also Safety Gram # 143). EHS provides an instructional course on Engineering Controls (Biosafety Cabinets) upon request.
		C. Employee is trained in the use and proper decontamination of biological safety cabinets; ensures that all inspections are current before use (see also Safety Gram # 144)

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		D. Employee understands the correct operation of autoclaves			
VI. Lif	VI. Life Safety and Fire Prevention				
Yes	N/A	 A. Fire alarm systems 1. Employee recognizes audible and visual alarms, how to respond, and how fire alarms are activated 2. Fire Extinguishers: training is required if employee is expected to use fire extinguishers; employee knows the location, type, and correct use 			
		 B. Fire Emergency Action Plan 1. Review with employee. Available at the EHS web site under the Occupational and Environmental Hygiene department link, Life Safety and Fire Prevention: (http://home.ncifcrf.gov/ehs/uploadedFiles/EMERGENCY%20ACTION%20PLAN.doc) 2. Review any worksite specific procedures 			
		C. Fire Prevention Plan 1. Review with employee. Available at the Life Safety and Fire Prevention link. (http://home.ncifcrf.gov/ehs/uploadedFiles/Fire%20Prevention%20Plan%20Nov%2020031.doc) 2. Review any worksite specific procedures			
		 D. Building Evacuation Assembly Area Identify assembly area and evacuation route for work area. Assembly Areas available at the Life Safety and Fire Prevention link. (http://home.ncifcrf.gov/ehs/uploadedFiles/ASSEMBLY%20AREAS%20FOR%20BUILDING%20EVACUATIONS%20Sept%202003.doc) 			
		Hygiene. Employee understands:			
Yes	N/A	A. Specific hazards and properties of chemicals in the workplace			
		B. Location and availability of MSDS's (for web MSDS resources see http://home.ncifcrf.gov/ehs/ehs.asp?id=75)			
		C. Transportation rules for chemicals			
		D. Chemical storage: proper labeling, storage areas and segregation, volume limits			
		E. Proper handling procedures for flammable liquids, volume limits, use of safety cans, safety cabinets and storage rooms			
		F. Carcinogens that may be present in the workplace			
		G. Proper transportation, securing, and work rules for compressed gases			
		H. Procedures for use of controlled substances and accountable materials			

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		I. Spill response and evacuation procedures
VIII. B	iologic	al Safety. Employee understands:
Yes	N/A	A. The lab specific biosafety SOP/manual
		B. Relevant Institutional biosafety policies and standards
		C. Registration procedures with the IBC for work with infectious rDNA and other infectious materials, including human cell lines, and Tg/KO animals.
		D. Biohazard symbol and labeling requirements
		E. Work practices and knowledge of aseptic technique
		F. Specific biological hazards in the workplace
		G. Shipment protocols for infectious/biological agents
		H. Engineering controls
		I. Decontamination procedures, disinfection and sterilization of potentially infectious workplace materials.
		J. Area specific spill procedures for biological hazards
		 K. OSHA Bloodborne Pathogen Standard 1. Informed of the initial and annual training requirement and how to meet it 2. How to contact EHS for more information (301-846-1451) 3. The concepts of Standard Precautions and Universal Precautions 4. How to obtain the Hepatitis B (HBV) Vaccine 5. NCI-Frederick Exposure Control Plan
		L. Route of exposure/symptoms of exposure to infectious agent(s) employee will work with
IX. Pa	ckagin	g and Shipping Program. Employee Understands:
Yes	N/A	A. The proper procedures for processing shipment requests
		B. All shipments are classified by EHS.
		C. All material, correspondence, and equipment requires completion of the request for shipment form located at: http://web.ncifcrf.gov/campus/safety/wizard/
		D. Safe handling and transport of hazardous materials. Refer to Safety Gram ISM-158.

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X. Ra	diation	Safety. Employee Understands:
Yes	N/A	A. Radiation Program Protocol-Specific Training Document
		B. Radiation symbol and labeling requirements
		C. Work practices and shielding techniques
		D. Program specific radiation hazards
		E. Shipping requirements for radiological materials
		F. Radiological decontamination procedures
XI. Er	nvironm	nental Compliance and Pollution Prevention
Yes	N/A	 A. Does the new employee know how to dispose of: Recyclable material (e.g. glass, aluminum, paper, plastic, batteries, Tyvek, pipette tip trays, printer cartridges etc.; see http://home.ncifcrf.gov/ehs/recycling/) Non-laboratory waste (burnable or scrap metal) Medical waste (laboratory glassware, syringes, petri dishes, pipets, etc.) Autoclavable waste. (See http://home.ncifcrf.gov/ehs/ehs.asp?id=108) Non-hazardous liquids (sanitary sewer – see http://home.ncifcrf.gov/ehs/ehs.asp?id=115)
Yes	N/A	 B. Pollution Prevention. Does the employee know how to: 1. Reduce chemical waste generation 2. Avoid storm water pollution (indoor storage, secondary containment) 3. Support the NCI-Frederick Environmental Management System (EMS), if applicable
Yes	N/A	C. Hazardous Waste (Refer to Chapter D-1, Waste Management, of the EHS Operations and Compliance Manual). Is the employee aware of:
		 All procedures (including spills) that may generate hazardous waste? Requirements for hazardous waste in laboratories: Proper waste containers Containers always closed except when waste is added NCI-Frederick Hazardous Waste Disposal tag attached to container Log sheet updated as soon as waste is added to the container Less than 55 gallons of waste (or one quart acute waste) per collection site Waste segregation (flammable solvents, chlorinated solvents, oils, etc.)

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XII.	Other Occupational Hazards	
Yes	Yes N/A A. Will the employee perform work in permit-required confined spaces? (Relevant to and BDP employees – train employee on position-specific program S.O.P.)	
Yes	N/A	
[] (Relev	B. Will the employee use lockout/tagout procedures to control hazardous energy sources? rant to FME employees – train employee on position-specific program S.O.P.)	

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LABORATORY SAFETY CHECKLIST

Will the employee work in a laboratory*? Yes No *If yes, please complete the following checklist. If no, skip this page.			
A. Do	oes you N/A	r worker:	
		1. Understand the safety hazards and your program-specific SOPs for equipment used in his/her duties	
		2. Understand the signs to warn others of hazards in the lab and personal protective equipment (PPE) requirements	
		3. Keep storage areas and labs neat and clean	
		4. Restrict lab work to the lab	
		5. Use puncture-resistant containers for the disposal of sharps	
B. La Yes	borato	ry Chemical Hygiene. Does your worker:	
		1. Know how to access and is familiar with the on-line version of the Chemical Hygiene Plan: http://home.ncifcrf.gov/ehs/uploadedFiles/C-1 Chemical Hygiene Plan.pdf	
		2. Have access to and utilize SOPs for hazardous chemicals in work area	
		3. Check labels/Material Safety Data Sheets (MSDS) before each new job to determine potential hazards, incompatible substances, engineering controls, PPE, etc. (see http://home.ncifcrf.gov/ehs/ehs.asp?id=75 for MSDS links). If chemicals are removed from their original container, properly label the transfer container (unless under direct control at all times)	
		4. Understand the risks of each hazardous chemical present in work area	
		5. Store acids and bases in separate areas/drip trays?	
		6. Understand that no chemical storage is permitted at greater than 6 feet above the floor surface?	
		7. Understand the risks of each hazardous chemical present in work area	
		8. Treat any unfamiliar substance as potentially hazardous	
		9. Assume any mixture is at least as hazardous as its most hazardous component	
		10. Regularly review chemical supplies for excess or deteriorated stock	
		11. Keep hazardous substances in unbreakable containers whenever practical	
		12. If breakable containers must be used, keep them in chemical resistant trays	

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Yes	N/A	13. Date containers of peroxide forming chemicals and dispose of within one year if unopened and 6 months if opened (e.g., ether).
C. Ra	diation	Safety. Does your worker understand:
Yes	N/A	Safe handling of radioactive materials
		2. The NCI-Frederick radiation training requirements
		3. Personal surveillance
		4. Laboratory monitoring
		5. Proper disposal for liquid wastes, solid wastes, and vials
		6. What to do in case of a radiological spill?
	es your ainst:	worker understand and follow NCI-Frederick prohibitions/recommendations
Yes	N/A	1. Eating, drinking, tobacco use, and storing food/drinks in the lab
		2. Performing mouth pipetting
		3. Wearing lab coats, gloves, or other facility designated PPE (e.g., scrubs) outside the lab
		4. Using damaged glassware
		5. Wearing open-toed shoes when using hazardous hiologicals or chemicals

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CHECKLIST FOR ANIMAL CARETAKERS, TECHNICIANS AND OTHER ANIMAL CARE PERSONNEL

	Will the employee work with animals*? *If yes, please complete the following checklist. If no, skip this section.			
<u>Work</u>	Practic	<u>es</u>		
		s to minimize exposure to hazards are outlined in detail by animal species in the SOPs. In ollowing procedures are used to minimize risk:		
YES	N/A	The Employee: 1. Has access to and understands the safety hazards and program specific SOP's for equipment and hazardous chemicals used in the workplace		
		2. Understands the risks of each hazardous chemical/biological present in work area		
		3. Treats any unfamiliar substance as potentially hazardous		
		4. Knows to check labels/MSDSs before new procedures/chemicals used to determine proper PPE, incompatibilities, engineering controls, etc. See http://home.ncifcrf.gov/ehs/ehs.asp?id=75 for links to MSDS sites.		
		5. Knows the program specific SOP for waste disposal		
		6. Utilizes personal hygiene practices to reduce exposures by direct/indirect contact		
		7. Eliminates the use of sharp objects whenever possible		
		8. Uses approved puncture-resistant containers for the disposal of sharps		
		9. Handles animals with care and proper restraint to prevent scratches and bites		
		10. Uses practices to reduce exposure by ingestion - never mouth pipettes		
<u>Work</u>	<u>Areas</u>			
YES	N/A			
		Employee is familiar with: 1. Work areas that have restricted access		
		2. Work areas that have posted warnings of hazards and advice about special requirements		
		3. Ergonomic hazards, which can be minimized with proper education, engineering controls, and administrative controls		
		4. Autoclave hazards		
		5. Animal dander and allergen risks		
		6. Aerosolization potential from changing bedding		

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YES N/A 1. Ventilation system(s) provide directional airflow and are checked regularly by FME 2. Emergency response plans are posted in all animal care facilities and include phone numbers of principle investigators, animal care staff, security, OHS and EHS

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ASSESSMENT OF EMPLOYEE'S WORK AREA FOR HAZARDS/POTENTIAL HAZARDS

ALL EMPLOYEES MUST COMPLETE THIS ASSESSMENT

Many work environments at NCI-Frederick are associated with situations that require safe practices to protect workers from physical and chemical hazards. Physical, chemical and protocol-related hazards that are likely to be associated with work at NCI-Frederick need to be identified. Safeguards necessary to protect employees involved in potentially hazardous work should be followed. Furthermore, for research involving chemicals of unknown hazard or the use of infectious agents, safety considerations need to be incorporated into the design of protocols.

If the employee is exposed to the following on a regular basis, check yes. If not, please check no.

	Yes	No
Ergonomic hazards in workstation layout		
Glare		
Hazardous liquid splashes		
Volatile chemical exposures		
Airborne particulates		
High pressure vessels such as compressed-gas cylinders, high		
pressure washing, equipment, steam generators and autoclaves		
Electrical hazards		
Machinery with moving parts		
Projectiles		
Falling objects		
Sharp objects/tools		
Crush/pinch hazards		
Heat and high temperatures		
Ultraviolet Radiation		
Lasers		
Ionizing Radiation		
Noise levels interfering with normal conversation		
Animal dander		
Zoonoses		
Animal Bites and Scratches		
Carcinogens		

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Hazard Assessment, Continued

Personal protective equipment (PPE)

PPE provides a physical barrier to hazardous materials that have the potential to come into contact with skin, eyes, mucous membranes or clothing. PPE includes gloves, protective clothing (such as lab coats, aprons, and gowns), respirators, hearing protection, face and eye protection (safety glasses, goggles, face shields), and safety shoes.

Do you have available in your wo	ork area PPE that:	Yes	No		
Protects against hazards identified in previous assessment					
Offers varied sizes to appropriately	fit all workers				
Does your worker know:					
Specific work conditions requiring t	he use of PPE				
Which specific type PPE to use for	specific hazards				
How to put on and adjust PPE prop	perly				
How to remove and dispose PPE a	ppropriately				
How to store PPE properly					
Limitations in PPE protection and u	ıseful life				
Chemicals will eventually permeate any glove material					
Latex allergy can result from repeathrough skin contact or inhalation.	ted exposures to proteins in latex				
Do gloves match identified hazar	rds:				
- Insulated gloves for heat or cold					
- Rubber gloves with insulated liner	rs for electricity				
- Leather gloves for handling jagged materials or heavy objects					
- Neoprene or nitrile rubber gloves for corrosives					
- Gloves designed to protect agains	Gloves designed to protect against specific chemical hazards				
Print Employee Name	Employee Signature	Date			
Print Supervisor Name	Supervisor Signature	Date			

PLEASE MAKE A COPY FOR THE EMPLOYEE TO KEEP AND REVIEW, AND RETURN THIS ORIGINAL TO ENVIRONMENT, HEALTH AND SAFETY BLDG. 426, ROOM 118

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EHS Medical Surveillance Enrollment Form

SUPERVISORS: Please complete this form for all employees and submit to EHS.

Please <u>print</u> when completing this form

Employee Name:		Employee#:
□ New Hire (Start Date) Annual Update	☐ Job Transfer
Job Title:		Assigned Bldg/Rm:
		Date:
Job Hazard Assessment (Call EHS at 301-846-1451 for guidance to complete this form). JOB CATEGORY (Department or function) Administrative Functions Only (not in a lab)		
BIOLOGICAL HAZARDS HUMAN MATERIALS: Blood Body fluids Cell Lines (Interpretation of the property of the prop	human) RIAL: Adenovirus + H Herpes Simplex Lentivirus Polio SIV Toxoplasma good Retrovirus Produssis Other-s	IIV ☐ Influenza ☐ Rabies ☐ Vaccinia ☐ Varicella ☐ XMRV ndii ☐ H1N1
CHEMICAL/GENERAL SAFETY HAZARDS □ NOISE EXPOSURE > 85dBa for 8 hrs □ FORKLIFT OPERATOR □ RESPIRATOR Required – specify		
RADIATION HAZARDS CLASS IIIB OR IV LASERS X-RAY MACHINES, ELECTRON MICROSCOPES, IRRADIATORS – specify RADIOACTIVE MATERIALS – specify isotopes		

Please return to EHS BUILDING 426 or fax to 301-846-6619

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