

Electrical Shock Victim

Instructor's Copy

Behavioral Research Aspects of Safety and
Health Group (BRASH)
Institute for Mining and Minerals Research (IMMR)
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¹ This exercise was developed and field tested under U. S. Bureau of Mines research contract no. H0348040. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies or recommendations of the Interior Department's Bureau of Mines or the U. S. Government.

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Introduction

This document contains most of the materials needed to use the exercise. The main part of the document is the instructor's copy. It tells how to use the exercise, presents the objectives, the problem booklet, the master answer sheet, the scoring key, and discussion notes to be used following the exercise. Appendix A is the exercise problem booklet. This booklet can be duplicated locally. The booklets are reusable. One is needed for every person in the classroom. Appendix B is the answer sheet. Copies of this answer sheet must have the invisible ink answers that appear in Appendix C printed on them.² Answer sheets are consumable. One is needed for each group of 3 to 5 persons who work the exercise.

Exercise Summary

Read this section first. It determines if the exercise is appropriate for your classes. If you choose to use the exercise, examine the table of contents and review the remainder of this document.

Type:	Invisible ink
Length:	Ten questions (25 minutes for administration plus 25 for discussion)
Skills:	Safe work practices when using electrical hand tools First aid Removing a victim from a live electrical circuit Administering CPR
Location:	Float plant at a phosphate ore processing plant
Problem:	You and Lynwood are maintenance mechanics repairing a piece of equipment in the float plant. It is night shift. You are on the fifth level. It is dark and wet. No one else is around. You decide to use an electric impact wrench to break a coupling on an acid mixer. A nearby wall mounted 110V receptacle is dripping water. Because it is dark, Lynwood does not see the water dripping from the receptacle. You try to warn him, but he approaches the receptacle and plugs the wrench in. Then he convulses. You must decide what to do to help Lynwood and not get electrocuted yourself.

² You can do this yourself if you have the proper equipment, or you may obtain copies of preprinted answer sheets from NIOSH, Pittsburgh Research Laboratory, Pittsburgh, PA phone 412-386-5901, fax 412-386-5902 or email to minetraining@cdc.gov.

How to Use This Exercise

1. Look at the performance objectives. Decide if the exercise is relevant for your annual refresher class.
2. Work through the exercise with the developing pen and score your responses.
3. Read the master answer sheet for the exercise. Look at all the answers.
4. Read the "Instructor's Discussion Notes" for the exercise.
5. Become thoroughly familiar with the problem so that you can present it to your class without reading it. Put any maps or illustrations on an overhead projector so you can use these to help explain the problem.
6. When you present the exercise to the class:
 - Give each person a problem booklet, and one person from each group, an answer sheet and a developing pen.
 - Demonstrate how to select and mark answers using the developing pen.
 - Go over the instructions for doing the exercise with the whole group.
 - Explain the problem making sure everyone understands the problem situation.
 - Have the class members work the exercise.
 - When the class members finish, have them figure up their score using the instructions at the end of the exercise.
 - When everyone has finished, discuss the exercise. Let class members discuss the merits of each answer. Add your own ideas.

Performance Objectives for Electrical Shock Victim Exercise

Objective number	Capability verb(s)	Description of required performance and conditions under which it is to occur
1. FA/EE ³	Assess	The accident scene and immediate needs/risks for first aider and victim
2. FA/EE	Choose Judge	From among alternative actions effective means of gaining access to the victim without undue risk to the first aider
3. FA	Recall Conduct	A primary survey to check on airway and breathing
4. FA	Recall Apply	Methods of restoring breathing by opening and maintaining the airway and by administering artificial ventilation if needed
5. FA	Recall Apply	Methods for dealing with gastric distension during rescue breathing
6. FA	Recall Apply	Methods for dealing with a conscious victim with an obstructed airway

³ Skill and knowledge domain abbreviation:
FA = first aid
EE = emergency evacuation and escape

Master Answer Sheet for Electrical Shock Victim Exercise

Use this answer sheet to mark your selections. Rub the special pen gently and smoothly between the brackets. Don't scrub the pen or the message may blur. Be sure to color in the entire message once you have made a selection. Otherwise you may not get the information you need.

Question A (Choose only ONE unless you are told to "Try again!")

1. [This is not the first thing to do. Try again!]
2. [Correct! This warning could save his life. Do the next question.]
3. [This won't solve the problem and he could be hurt. Try again!]
4. [Dry gloves are a good idea but this doesn't solve the problem. Try again!]
5. [You are too far away. Anyway, this is dangerous. Try again!]

Question B (Choose only ONE unless you are told to "Try again!")

6. [This wastes time and won't help. The motor power is locked out. Try again!]
7. [Lynwood needs your help now. Try again!]
8. [You receive a strong electrical shock. Try again!]
9. [You receive a strong electrical shock. Try again!]
10. [Lynwood doesn't let go and the cord stays plugged in. You receive a strong
[electrical shock. Try again!]
11. [Correct! The cord pulls out. Lynwood stops convulsing. Do the next question.]
12. [It is too far. Lynwood needs your help now. Try again!]

Question C (Choose only ONE unless you are told to "Try again!")

13. [Color pale. This wastes time. Try again!]
14. [Correct! Breathing is absent. Do the next question.]
15. [No bracelet is present. This wastes time. Try again!]
16. [Both pupils are dilated. This wastes time. Try again!]
17. [Airway appears normal. This wastes time. Try again!]

Question D (Choose only ONE unless you are told to "Try again!")

- 18. [His heart may be beating. You are not trained in CPR. Try again!]
- 19. [Lynwood needs your immediate help. Try again!]
- 20. [Correct! Do next question.]
- 21. [This wastes time. Try again!]

Question E (Choose only ONE unless you are told to "Try again!")

- 22. [This should only be done if you suspect foreign material is present. Try again!]
- 23. [Correct! This is all that was needed. Now his chest rises when you blow into
[his mouth. Do the next question.]
- 24. [This should only be done if you suspect foreign material is stuck in his
[windpipe. Try again!]
- 25. [This wastes time. Try again!]
- 26. [This wastes time. Try again!]

Question F (Select as MANY as you think are correct.)

- 27. [This may cause injury.]
- 28. [Correct!]
- 29. [This may cause him to vomit.]
- 30. [This wastes time.]
- 31. [Correct! This may improve the airway.]

Question G (Choose only ONE unless you are told to "Try again!")

- 32. [This may cause him more worry. Try again!]
- 33. [Correct! You should be honest, but also reassuring. Do the next question.]
- 34. [This may cause him more worry. Try again!]
- 35. [This would upset him, and it is probably not true. Try again!]

Question H (Choose only ONE unless you are told to "Try again!")

- 36. [This could harm him. Try again!]
- 37. [Lynwood may need help right away! Try again!]
- 38. [Correct! He needs medical attention and he might need CPR should his heart]
[stop. Do next question!]
- 39. [This could harm him. Try again!]

Question I (Select as MANY as you think are correct.)

- 40. [This is dangerous. The wrench might still be unsafe.]
- 41. [Correct! Inspections help spot hazards before they cause accidents.]
- 42. [Correct! Management would rather have a delay than an injured worker.]
- 43. [Qualified electricians and others are needed to make the repairs.]
- 44. [This would be foolish and dangerous.]

Question J (Choose only ONE unless you are told to "Try again!")

- 45. [This may harm her. Try again!]
- 46. [This should not be done at this time. Try again!]
- 47. [Correct! You need to dislodge the object in her windpipe. **End of Problem.**]
- 48. [This is dangerous she may die. Try again!]
- 49. [This is not the most effective thing to do. Try again!]

Finding your score

Number of "Correct" answers you colored in = (1)_____

37 minus number of incorrect answers you colored in = (2)_____

Add blanks one and two to get your total score = (3)_____

Highest possible score = 49

Lowest possible score = 0

Instructor's Discussion Notes for Electrical Shock Victim Exercise

Use the information presented here and on the master answer sheet, your own ideas and experience, and those of the miners in your class, to discuss the exercise after it is completed. Group discussion can strengthen knowledge and skills, correct errors, and relate the exercise content to the experiences of the miners. After they have worked the exercise, miners enjoy discussing the problem. They also frequently think of better ways to respond to a problem than those listed among the answers. The purpose of the exercise is to help miners think about and remember basic knowledge and skills they may someday need to deal with an emergency. The discussion following the exercise can contribute to this goal and tailor the exercise content to the needs of the group you are training.

It is helpful to show overhead transparencies of the master answer sheet during the discussion while the miners look at their problem booklets. This allows you to lead the group through the exercise and to disclose and discuss all the answers to each question. Most of the information about why particular answers are correct or incorrect is given on the master answer sheet.

The following notes provide additional information for you to discuss with your class. Read through and think about the notes before the class. Don't read the notes to the class members. This would be boring and ineffective. Rather, incorporate the ideas you find here with your own ideas and make these points at the appropriate place in the discussion of the exercise.

Question A - The correct answer is 2. Lynwood has not seen the water in the receptacle. He must be warned. Attempting to pull Lynwood away from the socket is not practical because you are too far away. By the time you grabbed Lynwood, he might be energized and you both could be electrocuted. Drying the receptacle with rags or wearing dry gloves and continuing with the work would not be effective and would endanger Lynwood. An electrician should be called, but at this point the first concern should be to prevent Lynwood from plugging the cord into the socket.

Question B - The correct answer is 11. Lynwood has become part of an energized circuit. Pulling the power cord from the receptacle will break the circuit. Wrapping a dry jacket around the wet power cord provides insulation that will protect you from electrocution. Answers 8, 9, and 10 require you to touch Lynwood while his body is still energized. This would endanger both Lynwood and you. If you are electrocuted, no one will be there to help Lynwood. The power to the mixer motor (6) has already been cut off. Going to get an electrician or the foreman (7), or going down four levels to cut the main power (12) would take too long. Lynwood would probably die. Lynwood must be removed from the electrical source immediately if he is to survive, but the rescuer must be careful not to become electrocuted while doing this. Can you think of other ways to save Lynwood and not endanger the rescuer?

Question C - The correct answer is 14. When encountering an unconscious victim you should: 1) check for responsiveness, 2) shout for help, 3) open the airway, and 4) check

for breathing. If the victim is in need of resuscitation any other activities will only waste time.

Question D - The correct response is 20. Finding that the victim is not breathing you should give two breaths mouth-to-mouth. Administering cardiac compressions is wrong because you don't know if his heart has stopped, and you are not trained in CPR. Leaving Lynwood to get help would probably lead to his death. Slapping his face is not likely to restore his breathing.

Question E - The correct response is 23. If difficulty in ventilating the victim is encountered during rescue breathing, you should first reposition the head because the most common cause of obstruction is the back of the tongue. Back blows are no longer recommended for adults with airway obstruction.

Question F - The correct answers are 28 and 31. Lynwood's abdomen is probably becoming distended with air which could decrease the volume of air he is receiving, and cause vomiting. In this situation the best responses are to reposition the airway, check that the chest is rising and falling during ventilations, and avoid using excessive ventilation pressure. Applying pressure to the abdomen with your hand will almost certainly cause vomiting and this material can then enter Lynwood's lungs. If ventilations are inadequate after the above maneuvers, the victim may be rolled on his side and abdominal pressure applied as a last resort. If the victim vomits at this time his mouth should be wiped out before ventilations are resumed.

Question G - The correct answer is 33. Lynwood is probably suffering from the memory loss which is often associated with strong electrical shocks. A good general rule for dealing with such questions from the victims of accidents is to be as honest as possible without frightening them. Victims can sense when you are telling the truth and in order for you to reassure them they need to trust you. Not knowing the truth may allow the victim to fantasize worse possibilities.

Question H - The correct answer is 38. Lynwood now is breathing by himself. You must leave to get help. His heart beat is irregular. He needs prompt medical attention. Since Lynwood may be suffering the after effects of insufficient oxygen he should not be encouraged to walk. Staying with him until help arrives will delay his treatment because it may be a long time until someone comes by. The plant is too noisy for others to hear your calls for help. If Lynwood's heart were to stop, you could not help him because you are not trained in CPR. Even if you were, you would soon tire if you had to administer CPR by yourself.

Question I - The correct answers are 41 and 42. Inspecting the work area for hazards and reporting dangerous situations that need to be corrected before beginning a job are standard safe work practices. Only qualified electricians should repair or test electrical equipment.

Question J - The correct answer is 47. This hypothetical victim is showing signs of an airway obstruction. She should be treated with abdominal thrusts until the object is displaced, or until she becomes unconscious. If she were coughing strongly, you should

not interfere with her attempts to expel the object. Back blows are no longer recommended for the adult victim with an airway obstruction.

References

- American Heart Association. (1986). Standards and guidelines for cardiopulmonary resuscitation (CPR) and emergency cardiac care (ECC). Journal of the American Medical Association, 255 (21), 2914-2954.
- Bergeron, J. D. (1982). First responder. Bowie, MD: Robert J. Brady Company.
- Investigation report, underground coal mine, fatal electrocution accident. (1984, November). Kentucky Department of Mines and Minerals Bulletin, pp. 6-7.
- Mine Safety and Health Administration. (1980). First aid book. Washington, DC: U.S..Government Printing Office.

Scoring Key for the Electrical Shock Victim Exercise

The correct answers are marked with an asterisk.⁴

Question	Answer Number							
A	1	2*	3	4	5			
B	6	7	8	9	10	11*	12	
C	13	14*	15	16	17			
D	18	19	20*	21				
E	22	23*	24	25	26			
F	27	28*	29	30	31			
G	32	33*	34	35				
H	36	37	38*	39				
I	40	41*	42*	43	44			
J	45	46	47*	48	49			

⁴ This page may be duplicated and used as an overhead transparency following the exercise.

Appendix A: Problem Booklet

Duplicate this copy of the problem booklet for use in your classes. **Booklets should be printed on only one side of the paper.** Each person in your class should have a problem booklet while they are working the exercise. The problem booklets are reusable. To save effort and money, ask the trainees to avoid marking in the booklets and collect all the booklets after the class.

You may obtain a copy of the problem booklet from NIOSH, Pittsburgh Research Laboratory, Pittsburgh, PA phone 412-386-5901, fax 412-386-5902 or email to minetraining@cdc.gov.

Electrical Shock Victim Exercise

Problem Booklet

Instructions

Read the problem described on the next page. Then answer the ten questions. Do them one at a time. Don't jump ahead, but you may look back to earlier questions. The first question tells you to choose only one answer unless you are told to "Try again!" Other questions may tell you to select as many answers as you think are correct. Follow the directions for each question.

After you have selected your choice to a question, look up the number for that choice on the answer sheet. Rub the developing pen between the brackets for that choice. A hidden message will appear that tells you if the choice is correct and provides you with additional information. When you finish you will learn how to score your performance.

Lynwood Puckett Exercise

Background

You and Lynwood are maintenance mechanics. You are replacing a coupling on an acid mixer.

The mixer is located on the 5th level of the float plant. The plant is operating and it is very noisy.

The mixer you're working on has been properly locked out. It is 10:15 P. M. and you and Lynwood are alone.

Six other plant workers are gathered on the ground floor awaiting shift change.

The main electrical power supply shut-off to the area in which you are working is four levels below you.

Neither of you is an electrician.

You are not trained in CPR.

You are trained in basic first aid and artificial respiration.

Problem

An acid mixer on the 5th level of the plant has broken down. You and Lynwood have been called to repair it. When you arrive you find the lighting to be very poor. It is dark and difficult to see. The steel grate floor and hand rails are dripping wet. You decide to use an electric impact wrench to break a coupling on the mixer. Lynwood complains that this is the last time he will work under these bad conditions. Then he approaches a wall mounted 110V receptacle with the electrical cord and the wrench in his hand. Suddenly you notice water dripping from the receptacle. Turn the page and answer the first question.

Question A

Because it is dark, Lynwood doesn't notice the water dripping from the receptacle. He starts to plug the wrench cord into the socket. You are about 10 feet from him. (See Figure 1 on the next page.) What should you do now? (Choose only ONE unless you are told to "Try again!")

1. Leave and call an electrician.
2. Yell to Lynwood to stop and warn him about the water.
3. Tell Lynwood to dry the receptacle with rags.
4. Tell Lynwood he'd better put on his dry gloves.
5. Run to Lynwood and pull his hand away from the socket.

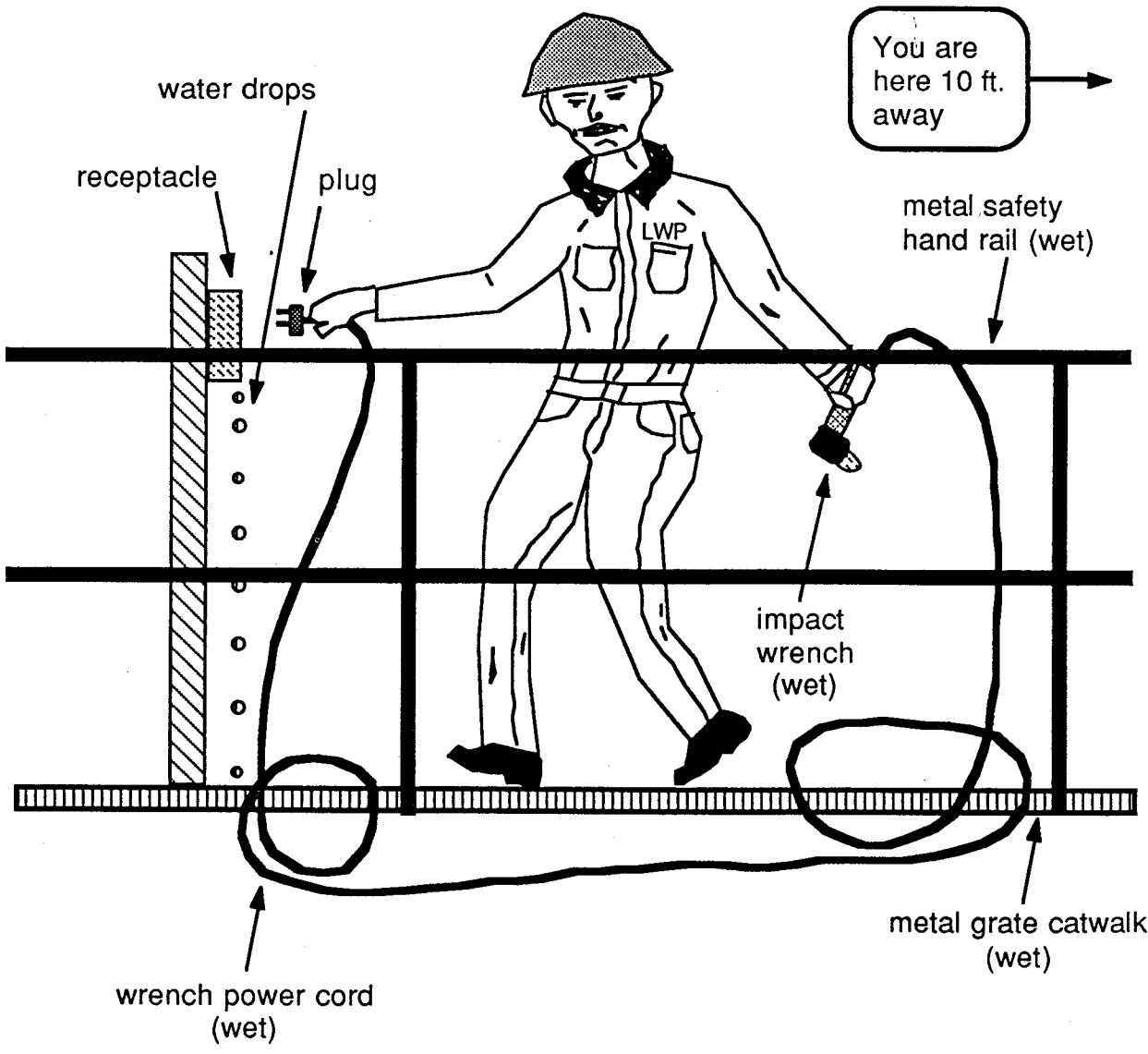


Figure 1: Lynwood starts to plug power cord into the wet receptacle

Question B

Your warning is too late. Lynwood plugs the wrench cord into the socket. Immediately his whole body stiffens and begins to twitch. (See Figure 2 on the next page.) Now what should you do? (Choose only ONE unless directed to "Try again!")

6. Run to the motor control center and shut off the power to the motor on the mixer.
7. Go find the nearest electrician or foreman.
8. Pull the wrench from Lynwood's hand.
9. Take Lynwood's pulse at the wrist.
10. Tackle Lynwood and pull him away from the cord and socket.
11. Keep clear of Lynwood, wrap your dry jacket around the power cord, and yank the cord from the socket.
12. Run to the main power switch four levels down and cut the power.

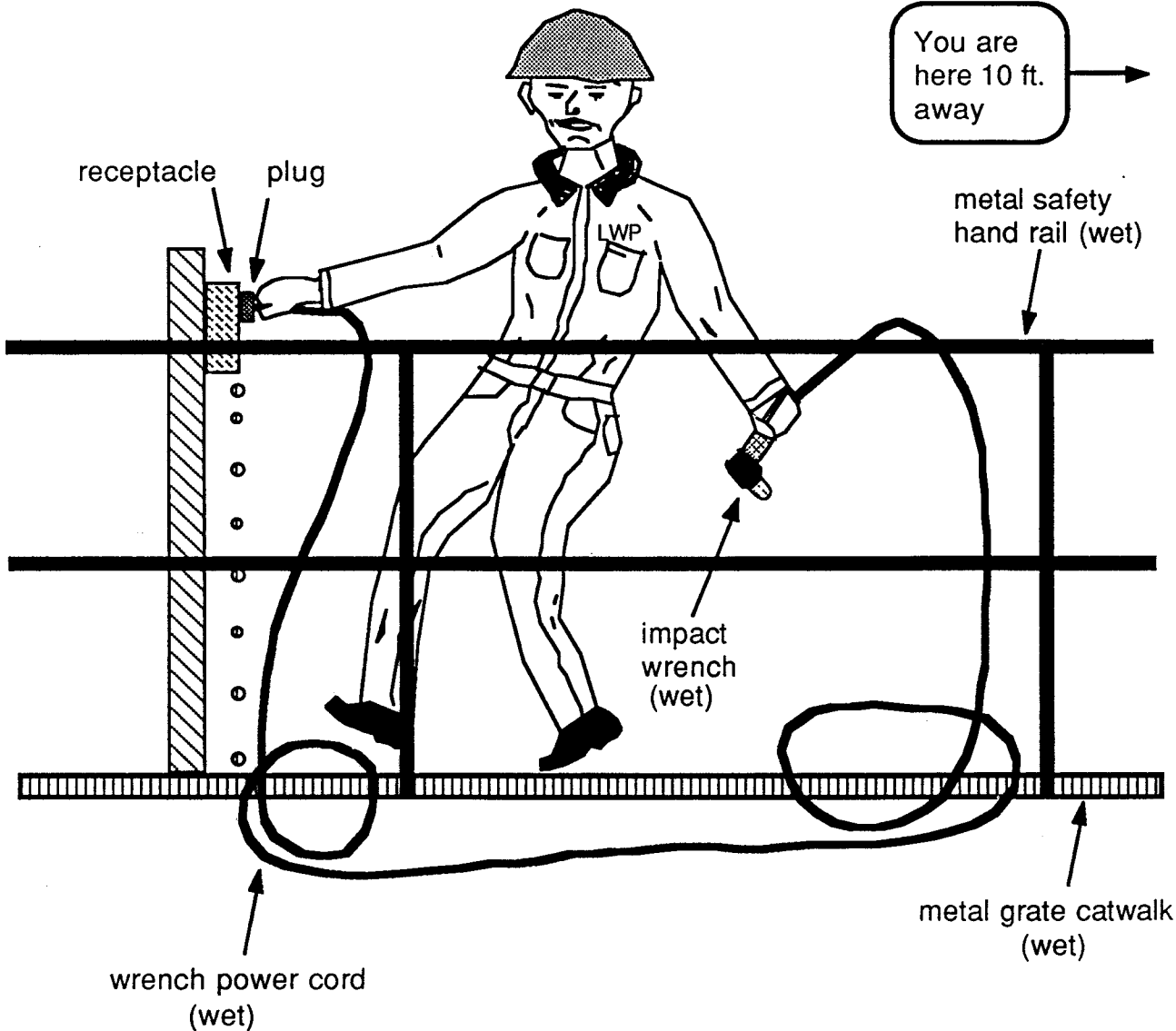


Figure 2: Lynwood's body stiffens and twitches after he inserts the plug

Question C

Lynwood is now lying on the metal grate floor near the mixer. He doesn't respond to voice or shaking. You shout for help, position Lynwood on his back, and open his airway. You should now check for the presence of: (Choose only ONE unless you are told to "Try again!")

- 13. Abnormal skin color
- 14. Breathing
- 15. Medical alert bracelet
- 16. Pupil dilation
- 17. "Swallowed" tongue

Question D

After checking Lynwood and finding no breathing the first thing you should do is:
(Choose only ONE unless you are told to "Try again!")

- 18. Begin cardiac compressions.
- 19. Go get help.
- 20. Give two breaths mouth-to-mouth.
- 21. Slap Lynwood's face several times.

Question E

You are attempting to give Lynwood a breath using the mouth-to-mouth method but even though you generate high pressure his chest does not rise. The first thing you should do now is: (Choose only ONE unless you are told to "Try again!")

22. Clear Lynwood's mouth using a finger sweep maneuver.
23. Reposition Lynwood's head by lifting his chin and tilting his forehead back.
24. Perform 6 to 10 "abdominal thrusts."
25. Turn Lynwood on his side and hit him on the back 4 times.
26. Gently compress his upper abdomen.

Question F

After repositioning Lynwood's head you are able to give him two deep breaths. You check his pulse and find that it is present. You continue rescue breathing but you notice that his abdomen is becoming distended. You should now: (Select as MANY as you think are correct.)

- 27. Apply continuous pressure to his abdomen with one hand while continuing rescue breathing.
- 28. Decrease the force of your breaths slightly.
- 29. Gently compress his upper abdomen, then continue rescue breathing.
- 30. Perform a "tongue-jaw lift" and finger-sweep his mouth.
- 31. Reposition his head and elevate his chin.

When you have made your selection(s), do the next question.

Question G

You and Lynwood are still alone. After a few minutes of mouth-to-mouth, Lynwood starts breathing on his own, and he comes to. He says, "What happened to me?" What would you tell him? (Choose only ONE unless you are told to "Try again!")

- 32. Tell him you don't know, so he won't worry.
- 33. Tell him you think he got a shock that stopped his breathing, but that he is OK now.
- 34. Tell him that he passed out but he is OK now.
- 35. Tell him his heart stopped and he is lucky to be alive.

Question H

You and Lynwood are still alone. No one has responded to your shouts for help. Lynwood is weak and confused, but talking to you. He says his chest feels funny and he is cold. You take his pulse and find it to be fast, weak, and irregular. You know the other miners are gathered on the ground floor awaiting shift change. What would you do now? (Choose only ONE unless you are told to "Try again!")

- 36. Get Lynwood up and walk him down to the ground floor.
- 37. Stay with him and wait until help comes.
- 38. Help make him comfortable, cover him with your jacket, and tell him to rest while you go for help.
- 39. Ask him to get up slowly. Tell him to take deep breaths, and to take a few steps.

Question I

Think about this problem. Pretend you were Lynwood's buddy. What things could Lynwood and you have done to prevent the accident? (Select as MANY as you think are correct!)

- 40. You could have used something dry to plug the cord into the receptacle.
- 41. You could have inspected the work area more carefully.
- 42. You could have reported the poor working conditions to the foreman and asked for assistance before proceeding.
- 43. You could have made the repairs to the electrical receptacle and conduit and then worked on the acid mixer.
- 44. You could have tested the electric impact wrench to make sure it was properly grounded and insulated, and then proceeded to fix the mixer.

When you have made your selection(s), do the next question.

Question J

It is a few days later. Lynwood was taken to the hospital. He recovered in two days and returned to work. Your prompt action may have saved his life.

At the next weekly safety meeting your foreman compliments you on your first aid. Later in the meeting he asks the following question. "Suppose that while you were eating lunch a miner stands up grasping her throat. You hear a high pitched crowing sound when she attempts to take a breath and she is not coughing. What should you do now? (Choose only ONE unless you are told to "Try again!")

- 45. Begin mouth-to-mouth rescue breathing.
- 46. Clear her throat with a finger sweep.
- 47. Do abdominal thrusts until the obstruction is expelled.
- 48. Do nothing until she begins to lose consciousness.
- 49. Strike her between the shoulder blades with the heel of your hand.

Scoring your performance

1. Count the total number of responses you colored in that were marked "correct." Write this number in the first blank on the answer sheet.
2. Count the total number of incorrect responses you colored in. Subtract this number from 37 . Write the difference in the second blank on the answer sheet.
3. Add the numbers on the first and second blanks. This is your score.

The best possible score of 49 results from selecting all the correct answers and no wrong answers.

The worst possible score of zero results from selecting all the wrong answers and no correct answers.

Appendix B: Answer Sheet Blanks

These are the answer sheet blanks. Copies of these blank answer sheets may be duplicated in the normal fashion. However, the answers that are found within the brackets must be printed on these blank answer sheets in invisible ink. These answers are found in Appendix C. If you have the capability to print invisible ink, make copies of the blank answer sheets. Make a master of the answers that appear in Appendix C. Then print the invisible ink on the blank answer sheets, being careful to make sure all pages print and that the appropriate answers line up with the appropriate blanks. The Master Answer Sheet shows all the answers in their proper places.

Most companies and trainers prefer to obtain copies of the preprinted answer sheets from NIOSH, Pittsburgh Research Laboratory, Pittsburgh, PA phone 412-386-5901, fax 412-386-5902 or email to minetraining@cdc.gov.

The exercise is designed to be used in small groups. You will need one answer sheet for each group of 3 to 5 persons in your class. The answer sheets are consumable. You will need a new set for each class.

A developing pen is also needed by each person who marks an answer sheet. These may be obtained from the A. B. Dick Company, P.O. Box 1970, Rochester, New York 14692, phone 1-800-225-4835.

Answer Sheet for Electrical Shock Victim

Use this answer sheet to mark your selections. Rub the special pen gently and smoothly between the brackets. Don't scrub the pen or the message may blur. Be sure to color in the entire message once you have made a selection. Otherwise you may not get the information you need.

Question A (Choose only ONE unless you are told to "Try again!")

- 1. []
- 2. []
- 3. []
- 4. []
- 5. []

Question B (Choose only ONE unless you are told to "Try again!")

- 6. []
- 7. []
- 8. []
- 9. []
- 10. []
 []
- 11. []
- 12. []

Question C (Choose only ONE unless you are told to "Try again!")

- 13. []
- 14. []
- 15. []
- 16. []
- 17. []

Question D (Choose only ONE unless you are told to "Try again!")

- 18. []
- 19. []
- 20. []
- 21. []

Question E (Choose only ONE unless you are told to "Try again!")

- 22. []
- 23. []
 []
- 24. []
 []
- 25. []
- 26. []

Question F (Select as MANY as you think are correct.)

- 27. []
- 28. []
- 29. []
- 30. []
- 31. []

Question G (Choose only ONE unless you are told to "Try again!")

- 32. []
- 33. []
- 34. []
- 35. []

Question H (Choose only ONE unless you are told to "Try again!")

- 36. []
- 37. []
- 38. []
[]
- 39. []

Question I (Select as MANY as you think are correct.)

- 40. []
- 41. []
- 42. []
- 43. []
- 44. []

Question J (Choose only ONE unless you are told to "Try again!")

- 45. []
- 46. []
- 47. []
- 48. []
- 49. []

Finding your score

Number of "Correct" answers you colored in = (1)_____

37 minus number of incorrect answers you colored in = (2)_____

Add blanks one and two to get your total score = (3)_____

Highest possible score = 49

Lowest possible score = 0

Appendix C: Invisible ink Answers

These pages contain the answers that must be printed in the blanks of the answer sheet in Appendix B. These answers are spaced and sequenced correctly so that they exactly match up with the appropriate blanks on the answer sheet blank.

Once the answers have been printed in the answer sheet blanks, the developing pen reveals the formerly invisible printed message.

You may obtain preprinted answer sheets or you may prepare your own copies. To learn more about these options, and to determine how many answer sheets and developing pens you will need, see the introductory section of the Instructor's Copy.

This is not the first thing to do. Try again!

Correct! This warning could save his life. Do the next question.

This won't solve the problem and he could be hurt. Try again!

Dry gloves are a good idea but this doesn't solve the problem. Try again!

You are too far away. Anyway, this is dangerous. Try again!

This wastes time and won't help. The motor power is locked out. Try again!

Lynwood needs your help now. Try again!

You receive a strong electrical shock. Try again!

You receive a strong electrical shock. Try again!

Lynwood doesn't let go and the cord stays plugged in. You receive a strong electrical shock. Try again!

Correct! The cord pulls out. Lynwood stops convulsing. Do the next question.

It is too far. Lynwood needs your help now. Try again!

Color pale. This wastes time. Try again!

Correct! Breathing is absent. Do the next question.

No bracelet is present. This wastes time. Try again!

Both pupils are dilated. This wastes time. Try again!

Airway appears normal. This wastes time. Try again!

His heart may be beating. You are not trained in CPR. Try again!

Lynwood needs your immediate help. Try again!

Correct! Do next question.

This wastes time. Try again!

This should only be done if you suspect foreign material is present. Try again!

Correct! This is all that was needed. Now his chest rises when you blow into his mouth. Do the next question.

This should only be done if you suspect foreign material is stuck in his windpipe. Try again!

This wastes time. Try again!

This wastes time. Try again!

This may cause injury.

Correct!

This may cause him to vomit.

This wastes time.

Correct! This may improve the airway.

This may cause him more worry. Try again!

Correct! You should be honest, but also reassuring. Do the next question.

This may cause him more worry. Try again!

This would upset him, and it is probably not true. Try again!

This could harm him. Try again!

Lynwood may need help right away! Try again!

Correct! He needs medical attention and he might need CPR should his heart stop. Do next question!

This could harm him. Try again!

This is dangerous. The wrench might still be unsafe.

Correct! Inspections help spot hazards before they cause accidents.

Correct! Management would rather have a delay than an injured worker.

Qualified electricians and others are needed to make the repairs.

This would be foolish and dangerous.

This may harm her. Try again!

This should not be done at this time. Try again!

Correct! You need to dislodge the object in her windpipe. **End of Problem.**

This is dangerous she may die. Try again!

This is not the most effective thing to do. Try again!