



# Public Health

## Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet.

The work space provided for each requirement should be used by the Scout to make notes for discussing the item with his counselor, not for providing the full and complete answers. Each Scout must do each requirement.

No one may add or subtract from the official requirements found in **Boy Scout Requirements** (Pub. 33216 – SKU 34765).

The requirements were last issued or revised in 2005 • This workbook was updated in June 2012.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Counselor's Phone No.: \_\_\_\_\_

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: [Workbooks@USScouts.Org](mailto:Workbooks@USScouts.Org)  
Comments or suggestions for changes to the **requirements** for the **merit badge** should be sent to: [Merit.Badge@Scouting.Org](mailto:Merit.Badge@Scouting.Org)

1. Explain what public health is. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Explain how Escherichia colt (E. coli), tetanus, AIDS, encephalitis, salmonellosis, and Lyme disease are contracted.

Escherichia colt (E. coli): \_\_\_\_\_

\_\_\_\_\_

Tetanus: \_\_\_\_\_

\_\_\_\_\_

AIDS: \_\_\_\_\_

\_\_\_\_\_

Encephalitis: \_\_\_\_\_

\_\_\_\_\_

Salmonellosis: \_\_\_\_\_

\_\_\_\_\_

Lyme disease: \_\_\_\_\_

\_\_\_\_\_

Then, pick any four of the following diseases and explain how each one is contracted: gonorrhea, West Nile virus, botulism, influenza, syphilis, hepatitis, emphysema, meningitis, herpes, lead poisoning.

Disease

How Contracted:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

For all 10 diseases, explain the type or form of the disease (viral, bacterial, environmental, toxin), any possible vectors for transmission, ways to help prevent the spread of infection, and available treatments.

Gonorrhea:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

West Nile Virus:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Botulism:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Influenza:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Syphilis:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Hepatitis:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Emphysema:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Meningitis:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Herpes:

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

Lead Poisoning.

Type or form: \_\_\_\_\_

Possible vectors: \_\_\_\_\_

Prevention: \_\_\_\_\_

Treatments: \_\_\_\_\_

2. Do the following:

a. Explain the meaning of immunization. \_\_\_\_\_  
\_\_\_\_\_

b. Name five diseases against which a young child should be immunized and two diseases against which everyone should be reimmunized periodically.

Children:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Everyone:

1. \_\_\_\_\_

2. \_\_\_\_\_

- c. Using the diseases you chose for requirement 1, discuss the diseases for which there is currently no treatment or immunization. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 3. Discuss the importance of safe drinking water in terms of the spread of disease. \_\_\_\_\_  
\_\_\_\_\_

Then, demonstrate two ways for making water safe to drink that can be used while at camp. In your demonstration, explain how dishes and utensils should be washed, dried, and kept sanitary at home and in camp. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 4. Explain what a vector is \_\_\_\_\_  
\_\_\_\_\_

- 5. With your parent's and counselor's approval, do ONE of the following:

- a. Visit a municipal wastewater treatment facility OR a solid-waste management operation in your community.  
Describe how the facility safely treats and disposes of sewage or solid waste. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Describe how sewage and solid waste should be disposed of under wilderness camping conditions. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- b. Arrange to meet with the food service manager of a food service facility (such as a restaurant or school cafeteria) and visit this establishment.  
Observe food preparation, handling, and storage, and learn how the facility keeps foods from becoming contaminated. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Find out what conditions allow microorganisms to multiply in food and how conditions can be controlled to help prevent the growth and dissemination of microorganisms. \_\_\_\_\_

Learn how microorganisms in food can be killed. \_\_\_\_\_

Discuss what you learned with your counselor. \_\_\_\_\_

6. Do the following:

- a. Describe the health dangers from air, water, and noise pollution.

Air pollution: \_\_\_\_\_

Water pollution: \_\_\_\_\_

Noise pollution: \_\_\_\_\_

- b. Describe health dangers from tobacco use, alcohol, and drug abuse.

Tobacco: \_\_\_\_\_

Alcohol \_\_\_\_\_

Drug abuse. \_\_\_\_\_

7.  With your parent's and counselor's approval, visit your city, county, or state public health agency.

Discuss how the agency addresses the concerns raised in requirements 1 through 6 and how the services provided by this agency affect your family. \_\_\_\_\_

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Then do the following:

- a. Compare the four leading causes of mortality (death) in your community for any of the past five years with the four leading causes of morbidity (incidence of disease) in your community.

Mortality (death)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

Morbidity (incidence of disease):

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

Explain how the public health agency you visited is trying to reduce the mortality and morbidity rates of these leading causes of illness and death. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- b. Explain the role of the health agency you visited related to the outbreak of diseases. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- c. Discuss the kinds of public assistance the agency is able to provide in case of disasters such as floods, storms, tornadoes, earthquakes, and other acts of destruction. Your discussion can include the cleanup necessary after a disaster occurs. \_\_\_\_\_

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8. Pick a profession in the public health sector that interests you. \_\_\_\_\_

Find out the education, training, and experience required to work in this profession. \_\_\_\_\_

Education: \_\_\_\_\_

Training: \_\_\_\_\_

Experience: \_\_\_\_\_

Discuss what you learn with your counselor. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Requirement resources can be found here:**

[http://www.meritbadge.org/wiki/index.php/Public Health#Requirement resources](http://www.meritbadge.org/wiki/index.php/Public_Health#Requirement_resources)

## Important excerpts from the [‘Guide To Advancement’](#), No. 33088:

Effective January 1, 2012, the *‘Guide to Advancement’* (which replaced the publication *‘Advancement Committee Policies and Procedures’*) is now the *official* Boy Scouts of America source on advancement policies and procedures.

- **[ Inside front cover, and 5.0.1.4 ] — Unauthorized Changes to Advancement Program**  
***No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.***  
(There are limited exceptions relating only to youth members with disabilities. For details see section 10, “Advancement for Members With Special Needs”.)
- **[ Inside front cover, and 7.0.1.1 ] — The [‘Guide to Safe Scouting’](#) Applies**  
Policies and procedures outlined in the *‘Guide to Safe Scouting’*, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- **[ 7.0.3.1 ] — The Buddy System and Certifying Completion**  
Youth members must not meet one-on-one with adults. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge—along with him attending the session. When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult certification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.
- **[ 7.0.3.2 ] — Group Instruction**  
It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.  
  
There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout — actually and *personally*— completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions. Because of the importance of individual attention in the merit badge plan, group instruction should be limited to those scenarios where the benefits are compelling.
- **[ 7.0.3.3 ] — Partial Completions**  
Scouts need not pass all requirements with one counselor. The Application for Merit Badge has a place to record what has been finished — a “partial.” In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, he or she does not retain the counselor’s portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his Scoutmaster to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partials have no expiration except the 18th birthday.