<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?subject=Merit%20Badge%20Workbooks)

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 coli (E. coli), tetanus, AIDS, encephalitis, salmonellosis, and Lyme disease are contracted.

|  |  |
| --- | --- |
| Escherichia coli (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.

Young child

|  |  |
| --- | --- |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |
| 5. |  |

Adults

|  |  |
| --- | --- |
| 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.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

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.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

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 - 2013***](http://www.scouting.org/filestore/pdf/33088.pdf)**, No. 33088 (SKU-618673)**

**[1.0.0.0] — Introduction**

The current edition of the *Guide to Advancement* is the official source for administering advancement in all Boy Scouts of America programs: Cub Scouting, Boy Scouting, Varsity Scouting, Venturing, and Sea Scouts. It replaces any previous BSA advancement manuals, including *Advancement Committee Policies and Procedures*, *Advancement and Recognition Policies and Procedures*, and previous editions of the *Guide to Advancement*.

**[Page 2, and 5.0.1.4] — Policy on 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 special needs. For details see section 10, “Advancement for Members With Special Needs”.

**[Page 2] — The** [**“Guide to Safe Scouting”**](http://www.scouting.org/scoutsource/HealthandSafety/GSS/toc.aspx) **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.

**[7.0.3.1] — The Buddy System and Certifying Completion**

A youth member must not meet one-on-one with an adult. 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 verification. 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.

Note that from time to time, it may be appropriate for a requirement that has been met for one badge to also count for another. See “Fulfilling More Than One Requirement With a Single Activity,” 4.2.3.6.

**[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.

It is sometimes reported that Scouts who have received merit badges through group instructional settings have not fulfilled all the requirements. To offer a quality merit badge program, council and district advancement committees should ensure the following are in place for all group instructional events.

* Merit badge counselors are known to be registered and approved.
* Any guest experts or guest speakers, or others assisting who are not registered and approved as merit badge counselors, do not accept the responsibilities of, or behave as, merit badge counselors, either at a group instructional event or at any other time. Their service is temporary, not ongoing.
* Counselors agree not to assume prerequisites have been completed without some level of evidence that the work has been done. Pictures and letters from other merit badge counselors or unit leaders are the best form of prerequisite documentation when the actual work done cannot be brought to the camp or site of the merit badge event.
* There is a mechanism for unit leaders or others to report concerns to a council advancement committee on summer camp merit badge programs, group instructional events, and any other merit badge counseling issues—especially in instances where it is believed BSA procedures are not followed. See “Reporting Merit Badge Counseling Concerns,” 11.1.0.0.
* 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.

**[7.0.3.3] — Partial Completions**

A Scout need not pass all the requirements of one merit badge with the same counselor. It may be that due to timing or location issues, etc., he must meet with a different counselor to finish the badge. 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, the counselor does not retain his or her 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 unit leader 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 Scout’s 18th birthday. Units, districts, or councils shall not establish other expiration dates for partial merit badges.

**[7.0.4.8] — Unofficial Worksheets and Learning Aids**

Worksheets and other materials that may be of assistance in earning merit badges are available from a variety of places including unofficial sources on the Internet and even troop libraries. Use of these aids is permissible as long as the materials can be correlated with the current requirements that Scouts must fulfill. Completing “worksheets” may suffice where a requirement calls for something in writing, but this would not work for a requirement where the Scout must discuss, tell, show, or demonstrate, etc. Note that Scouts shall not be required to use these learning aids in order to complete a merit badge.