

# MERIT BADGE SERIES



# PUBLIC HEALTH



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# Requirements

1. Do the following:
  - a. Explain what public health is. Explain how *Escherichia coli* (*E. coli*), tetanus, HIV/AIDS, malaria, salmonellosis, and Lyme disease are contracted.
  - b. Choose any four of the following diseases or conditions, and explain how each one is contracted and possibly prevented: gonorrhea, West Nile virus, Zika, botulism, influenza, syphilis, hepatitis, emphysema, meningitis, herpes, lead poisoning.
  - c. For each disease or condition in requirement 1b, explain:
    - i) The type or form of the malady (viral, bacterial, environmental, toxin)
    - ii) Any possible vectors for transmission
    - iii) Ways to help prevent exposure or the spread of infection
    - iv) Available treatments
2. Do the following:
  - a. Explain the meaning of *immunization*.
  - b. Name eight diseases against which a young child should be immunized, two diseases against which everyone should be reimmunized periodically, and one immunization everyone should receive annually.
  - c. Using the list of diseases and conditions in requirement 1b, discuss with your counselor those which currently have no immunization available.

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 and how insects and rodents can be controlled in your home, in your community, and at camp. Tell why this is important. In your discussion, explain which vectors can be easily controlled by individuals and which ones require long-term, collective action.
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.
    - i) Describe how the facility safely treats and disposes of sewage or solid waste.
    - ii) Discuss your visit and what you learned with your counselor.
    - iii) Describe how sewage and solid waste should be disposed of under wilderness camping conditions.
  - b. Visit a food service facility, such as a restaurant or school cafeteria.
    - i) Observe food preparation, handling, and storage. Learn how the facility keeps food from becoming contaminated.
    - ii) Find out what conditions allow microorganisms to multiply in food, what can be done to help prevent them from growing and spreading, and how to kill them.
    - iii) Discuss the importance of using a thermometer to check food temperatures.
    - iv) Discuss your visit and what you learned with your counselor.
6. Do the following:
  - a. Describe the health dangers from air, water, and noise pollution.

- b. Describe health dangers from tobacco use and alcohol and drug abuse.
  - c. Describe the health dangers from abusing illegal and prescription drugs.
7. With your parent's and counselor's approval, visit your city, county, or state public health agency OR familiarize yourself with your city, county, or state health agency's website. 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 disease in your community. 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 your health agency as it relates 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 the disaster.
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. Discuss what you learn with your counselor.

# Resources

## Scouting Literature

*Boy Scout Handbook; Fieldbook; Animal Science, Camping, Citizenship in the Community, Citizenship in the Nation, Citizenship in the World, Cooking, Dentistry, Emergency Preparedness, Environmental Science, First Aid, Medicine, Safety, Search and Rescue, and Soil and Water Conservation* merit badge pamphlets

For more information about Scouting-related resources, visit the BSA's online retail catalog (with your parent's permission) at <http://www.scoutstuff.org>.

## Books

- Altman, Linda Jacobs. *Plague and Pestilence: A History of Infectious Disease*. Enslow, 1998.
- American Medical Association. *Health Care Almanac: Every Person's Guide to the Thoughtful and Practical Sides of Medicine*. American Medical Association, 1998.
- Friedlander, Mark P. *Outbreak: Disease Detectives at Work*. Lerner, 2000.
- Giblin, James Cross. *When Plague Strikes: The Black Death, Smallpox, AIDS*. HarperCollins, 1995.
- Gittleman, Ann Louise. *Guess What Came to Dinner? Parasites and Your Health*. Avery, 2001.
- Grant, Pamela. *Water*. Thameside Press, 2000.
- Marrin, Albert. *Dr. Jenner and the Speckled Monster: The Search for the Smallpox Vaccine*. Dutton, 2002.
- Nardo, Don. *Vaccines*. Lucent, 2001.
- Pickett, George E. *Opportunities in Public Health Careers*. VGM Career Horizons, 1995.
- Stewart, Gail. *Teens With Cancer*. Lucent, 2001.
- White, Katherine. *Everything You Need to Know About AIDS and HIV*. Rosen, 2001.
- Yount, Lisa. *Disease Detectives*. Lucent, 2001.

## Organizations and Websites

### Centers for Disease Control and Prevention

1600 Clifton Road  
Atlanta, GA 30333  
Toll-free telephone: 800-311-3435  
Website: <http://www.cdc.gov>

### Environmental Protection Agency

Ariel Rios Building  
1200 Pennsylvania Ave. NW  
Washington, DC 20460  
Telephone: 202-272-0167  
Website: <http://www.epa.gov>

### National Institutes of Health

9000 Rockville Pike  
Bethesda, MD 20892  
Telephone: 301-496-4000  
Website: <http://www.nih.gov>

### Office of Disease Prevention and Health Promotion

1101 Wootton Parkway, Suite LL100  
Rockville, MD 20852  
Telephone: 240-453-8280  
Website: <http://www.odphp.osophs.dhhs.gov>

### U.S. Department of Health and Human Services

200 Independence Ave. SW  
Washington, DC 20201  
Telephone: 202-619-0257  
Website: <http://www.hhs.gov>

### U.S. Food and Drug Administration

10903 New Hampshire Ave.  
Silver Spring, MD 20993  
Toll-free telephone: 888-463-6332  
Website: <http://www.fda.gov>

### U.S. Public Health Service Commissioned Corps

1101 Wootton Parkway, Suite LL100  
Rockville, MD 20852  
Toll-free telephone: 800-279-1605  
Website: <http://www.usphs.gov>

### World Health Organization

Website: <http://www.who.int>

## Acknowledgments

The Boy Scouts of America is thankful to Dr. William C. Reeves for his help in updating the 2014 printing of the *Public Health* merit badge pamphlet. The BSA also thanks the following subject experts for their assistance with updating the 2005 edition: Eric J. Pyle, Ph.D., Department of Education Theory and Practice, West Virginia University; Gerald F. Pyle, Ph.D., Department of Health Promotions and Kinesiology, University of North Carolina–Charlotte; and Richard W. Klomp, Information Management Team, Centers for Disease Control and Prevention.

Thanks to the Centers for Disease Control and Prevention, Atlanta, Georgia, for providing the information found in the “Recommended Immunization Schedule.”

The Boy Scouts of America is grateful to the men and women serving on the Merit Badge Maintenance Task Force and the subject experts on the BSA Health & Safety Support Committee for the improvements made in updating this pamphlet.