

## **PUBLIC HEALTH MERIT BADGE**

### Requirements and Pre-work/Homework

- Length: 1 session of 4 hours – Arrive at least 5 minutes prior to start time!
- Uniform: Please wear your Class A uniform as you will be representing BSA in a government office building.
- Location: Fairfax County Health Department  
Kelly Square - Administrative Building  
10777 Main Street  
Fairfax, Virginia 22030
- Supplies needed: Blue card  
Pen or pencil  
Snack and water bottle  
All pre-work/homework  
Public Health Merit Badge workbook, printed from internet  
Public Health Merit Badge booklet, if available

Pre-work: If the following requirements are completed prior to our program, we can sign the merit badge blue card as completed at the conclusion of the session. Otherwise, we will initial only the specific requirements met by the scout. Once all the requirements have been completed, the scout may schedule an appointment with the Merit Badge Counselor for review and signature. All requirements are due within a month after the program date.

- Read the Public Health Merit Badge booklet, available from the Northern Virginia Scout Shop, 5232 Port Royal Road, Springfield, Virginia or [Scoutstuff.org](http://Scoutstuff.org).
- Scouts are encouraged to explore the [Health Department's web pages](#) to learn more about the programs and services of the Health Department.
- Use the attached worksheet to complete requirements #1 and #2.
  1. Explain what public health is. Explain how Escherichia coli (E. coli), tetanus, AIDS, encephalitis, salmonellosis, and Lyme disease are contracted and possibly prevented. 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. 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 exposure or the spread of infection, and available treatments.
  2.
    - 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 re-immunized periodically.
    - c) Using the diseases you chose for requirement 1, discuss the diseases for which there is currently no treatment or immunization. If treatments or immunizations are available for the diseases you chose, discuss others on the list.
- In support of Requirement #8, please bring two questions that you would like to ask a public health professional. (Note: these two questions do not have to be turned in when you arrive.)

For more information, contact:  
Sharon Arndt  
[Sharon.Arndt@fairfaxcounty.gov](mailto:Sharon.Arndt@fairfaxcounty.gov)  
703-246-8753

For your information, the following requirements will be met during the Merit Badge class (for options, the activities selected are indicated in bold):

Do the following:

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, visit the mosquito abatement district facility in your community. Tell how your community attempts to control the mosquito population and why. (Fairfax County Health Department's Disease Carrying Insects Program is located in the Kelly Square Building)
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.
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 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 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. Discuss what you learn with your counselor.

SCOUT NAME: \_\_\_\_\_ TROOP: \_\_\_\_\_

Explain what public health is and explain the meaning of immunization.

1. What is Public Health?	2a. What does immunization mean?

Use the table below to describe for each disease how it is contracted and possibly prevented, the type or form of the disease, any possible vectors for transmission, and available treatments and/or immunizations.

Disease	How is it contracted/ transmitted/ spread?	How can it be prevented?	What is the type/form of the disease?	Are there any possible vectors for transmission?	What treatments are available for this disease?	Who should be immunized?
Escherichia coli (E. coli)			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Tetanus			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available

Disease	How is it contracted/ transmitted/ spread?	How can it be prevented?	What is the type/form of the disease?	Are there any possible vectors for transmission?	What treatments are available for this disease?	Who should be immunized?
AIDS			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Encephalitis			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Salmonellosis			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Lyme Disease			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available

Disease	How is it contracted/ transmitted/ spread?	How can it be prevented?	What is the type/form of the disease?	Are there any possible vectors for transmission?	What treatments are available for this disease?	Who should be immunized?
Gonorrhea			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
West Nile virus			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Botulism			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Influenza			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available

Disease	How is it contracted/ transmitted/ spread?	How can it be prevented?	What is the type/form of the disease?	Are there any possible vectors for transmission?	What treatments are available for this disease?	Who should be immunized?
Syphilis			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Hepatitis			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Emphysema			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Meningitis			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available

Disease	How is it contracted/ transmitted/ spread?	How can it be prevented?	What is the type/form of the disease?	Are there any possible vectors for transmission?	What treatments are available for this disease?	Who should be immunized?
Herpes			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available
Lead Poisoning			<input type="checkbox"/> Viral <input type="checkbox"/> Bacterial <input type="checkbox"/> Environmental <input type="checkbox"/> Toxin			<input type="checkbox"/> Young Children <input type="checkbox"/> Everyone should be re-immunized periodically <input type="checkbox"/> No immunization available