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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)

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1. Explain what public health is.

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

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| Escherichia coli (E. coli): |  |
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| Tetanus: |  |
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| AIDS: |  |
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| Encephalitis: |  |
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| Salmonellosis: |  |
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| Lyme disease: |  |
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Then, pick any four of the following diseases and explain how each one is contracted and possibly prevented: gonorrhea, West Nile virus, botulism, influenza, syphilis, hepatitis, emphysema, meningitis, herpes, lead poisoning.

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|  | Disease | How Contracted and Prevented: |
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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.

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| Gonorrhea: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| West Nile Virus: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Botulism: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Influenza: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Syphilis: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Hepatitis: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Emphysema: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Meningitis: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Herpes: |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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| Lead Poisoning. |  |
| Type or form: |  |
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| Possible vectors: |  |
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| Prevention or Spread: |  |
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| Treatments: |  |
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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

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| 2. |  |
| 3. |  |
| 4. |  |
| 5. |  |

Adults

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| 1. |  |
| 2. |  |

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.

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

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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.

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4. Explain what a vector is

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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.

Facility Visited:

Describe how the facility safely treats and disposes of sewage or solid waste.

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

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OR

⬜ Visit the mosquito abatement district facility in your community.

Tell how your community attempts to control the mosquito population and why

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⬜ 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.

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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.

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Learn how microorganisms in food can be killed.

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Discuss what you learned with your counselor.

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6. Do the following:

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

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| Air pollution: |  |
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| Water pollution: |  |
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| Noise pollution: |  |
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b. Describe health dangers from tobacco use, alcohol, and drug abuse.

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| Tobacco: |  |
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| Alcohol |  |
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| Drug abuse. |  |
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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 disease in your community.

Mortality (death)

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Incidence of disease (Morbidity):

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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.

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

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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.

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| Education: |  |
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| Training: |  |
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| Experience: |  |
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Discuss what you learn with your counselor.

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