

Exam 5 Practice Problems Answers

1) Answer: A

A “green” triage tag, also referred to as the “walking wounded,” would be a broken thumb from falling debris. Burns over 98% of the body are declared “black” because the injured person is not breathing and is beyond the scope of available medical assistance. A 3-inch laceration on the arm is labeled “yellow” because such injured persons can be assisted after “immediate (red)” clients, such as the person with a tension pneumothorax, are medically cared for first.

2) Answer: B

Infection with *Bacillus anthracis*, the cause of anthrax, can occur via three routes of exposure: cutaneous, gastrointestinal, and inhalation. Botulism can be transmitted via ingestion of toxin-contaminated food. The toxin can be aerosolized and inhaled (man-made). Tularemia is not known to be spread from person to person and is caused by the bacterium *Francisella tularensis*, which is found in animals (especially rodents, rabbits, and hares).

3) Answer: B

The Hospital Incident Command System (HICS) is the comprehensive system intended for use in both emergent and nonemergent situations in hospitals and health care agencies. National Incident Management System (NIMS) is the overarching federal initiative that requires health care emergency responders to be trained in HICS. START is a type of triage methodology employed in hospitals and in the field. DIME is a type of triage mnemonic used to remember the immediate prioritization of clients in an emergency.

4) Answer: C. Assessment of disaster survivors

Secondary prevention consists of minimizing the effects of the disaster. The term refers to measures in a disaster designed to reduce morbidity and mortality after a disaster has occurred, in order to minimize harm from the disaster. Secondary measures include logistical coordination, rescue, immediate care, supportive care, and evacuation.

Participation in community disaster exercises is an example of primary prevention. Conducting community outreach is an example of primary prevention. Primary prevention measures include preventing disaster and minimizing the potential for harm if a disaster occurs. This occurs in the non-disaster stage before the threat of a disaster is evident. Identification of risk of disaster, development of the community disaster plan, pre-identification of vulnerable populations, and assisting in community disaster exercises are primary prevention measures in disaster preparedness.

Providing community service linkages to families for recovery assistance is an example of tertiary prevention. These measures include actions that take place as the community recovers from the disaster. Other tertiary measures include follow-up care for injuries or psychological problems resulting from the disaster and prevention of a future disaster.

5) Answer: A. Physical symptoms of tremors, nausea, and a headache; D. Reluctance or refusal to leave the disaster scene while working; E. Difficulty making decisions

Disaster responders who live in a community affected by a disaster experience stress when work demands time away from home, family, and friends, as all may be affected by the disaster. Other stressors can include physical danger, inadequate workspace, noise, environmental disruption change in overall living pattern, a feeling of not doing enough to help, and the burden of making critical decisions that affect lives. Symptoms that may indicate a need for help with stress management include physical symptoms, anger, resentment, difficulty concentrating or making decisions, reduced attention span, and feelings of overwhelming stress and fatigue. Stress can also manifest in unnecessary risk-taking activities, reluctance to leave the scene, and denying a need for rest or recovery.

6) Answer: C. HPV is associated with an increased risk of cervical cancer.

Human papillomavirus is a sexually transmitted infection acquired by most individuals during their lifetimes. Although the virus usually causes a mild, self-limited disease, several forms of human papillomavirus are associated with increased risk of cervical cancer. Vaccination is recommended as a primary prevention measure for cervical cancer. Routine Pap smears can detect early cellular changes consistent with HPV infection, which enables early treatment to prevent progression to cervical cancer.

7) Answer: D. Tuberculosis

One of the major responsibilities of a public health nurse (PHN) is to conduct epidemiological reports of the diseases in the community. Typically, PHNs submit these reports according to the schedule set by the local or national health centers. However, highly contagious diseases such as tuberculosis must be reported at once in order to contain the infection and prevent it from spreading.

Tuberculosis is an infectious lung disease caused by the bacteria *Mycobacterium tuberculosis*. It is considered an airborne disease and airborne isolation is indicated. It can be passed to another person by inhaling the infectious agents in the air dispersed through coughing, sneezing, or spitting. It is associated with high mortality in the community, and multidrug-resistant strains exist. The centers and health departments have to take necessary actions by ensuring management of the client's condition and conducting preventive measures.

8) Answer: B. Painless genital ulcer

Primary syphilis is characterized by a chancre, which is a painless, round ulcer that is located at the point of entry of the bacteria *Treponema pallidum*. Although usually a genital ulcer, chancres can occur on the anus, fingers, lips, or other areas exposed through sexual contact. The microorganism circulates through the bloodstream and lymph nodes. If untreated, it progresses through a primary, secondary, and tertiary stage. The secondary stage is characterized by malaise, anorexia, weight loss, and symmetrical lesions. A low-grade fever may occur. Tertiary syphilis can affect the central nervous system or heart. All cases must be reported to the public health authorities, and the client should inform any sexual partners. HIV testing is recommended for individuals who contract syphilis.

9) Answer: B

A vector is a non-human agent that actively carries disease organisms to humans.

10) Answer: D

Answer choices A & C are secondary prevention. Answer choice B is an example of tertiary prevention.

11) Answer: A

Answer choices B & C are examples of primary prevention. Answer choice D is an example of tertiary prevention.

12) Answer: C

Vector-borne diseases occur in all countries; rats are the major vector and occur in the United States; vector-borne diseases are not minor. Many significant illnesses are related to vectors.

13) Answer: C

Vaccine supplies are adequate, providers are knowledgeable about communicable diseases, and immunization materials are kept up to date and effective.

14) Answer: B

Infection with *Bacillus anthracis*, the cause of anthrax, can occur via three routes of exposure: cutaneous, gastrointestinal, and inhalation.

15) Answer: D

Botulism is transmitted by ingestion of toxin-contaminated food. It can be aerosolized and inhaled. The client needs supportive care only; no isolation precautions are necessary.

16) Answer: A

Both anthrax and botulism can be aerosolized and inhaled and disseminated by airborne release. Plague and smallpox are spread person-to-person.

17) Answer: C

Triage can be used by lightly trained emergency department personnel and is not to supersede or instruct medical techniques.

18) Answer: D, E, F

Anthrax, smallpox, and plague are all bioterrorism agents that may be spread through the air and cause significant morbidity and mortality

19)

- a. 21 per 100,000
- b. 3 per 100,000
- c.