

Public Health Quiz



Public Health Quiz – Basic

1. **What is the leading cause of death in the U.S.?**
 - A. heart disease
 - B. AIDS
 - C. cancer
 - D. stroke
2. **What is the process of sterilizing milk called?**
 - A. purification
 - B. pasteurization
 - C. clostridization
 - D. refrigeration
3. **Which disease has been completely eradicated?**
 - A. smallpox
 - B. hepatitis
 - C. heliobacter pylori
 - D. leukemia
4. **Which will not protect against food borne disease (a.k.a. food poisoning)?**
 - A. wash produce before eating
 - B. thoroughly cook meats and eggs
 - C. store perishable items in a cool, dry environment
 - D. purchase organic produce
5. **Which of the following toxic elements causes the neurological disorder that inspired the Alice in Wonderland; character, the Mad Hatter?**
 - A. iodine
 - B. sodium
 - C. mercury
 - D. mercurochrome
6. **Which disease is not correctly paired with the nutrient or vitamin that prevents it?**
 - A. niacin - tuberculosis
 - B. iodine - goiters
 - C. vitamin C - scurvy
 - D. vitamin D - rickets
7. **Epidemiology is the study of:**
 - A. immunization
 - B. outbreak of disease in populations
 - C. genetic disease
 - D. skin ailments
8. **Folic acid, which is found in oranges, prevents which of the following?**
 - A. scurvy
 - B. birth defects
 - C. high blood pressure
 - D. dementia
9. **Which of the following is considered a milestone in dental public health?**
 - A. fluoridation of drinking water
 - B. introduction of mouth wash
 - C. development of the electric toothbrush
 - D. use of gold amalgams
10. **Of the 48 million Americans that currently smoke, how many will die from a smoking related disease if they continue to smoke?**
 - A. 10%
 - B. 25%
 - C. 50%
 - D. 75%
11. **How much exercise is recommended for the average adult?**
 - A. Twenty minutes of intensity at least three times a week.
 - B. One hour per night of moderate intensity
 - C. One very long exercise session once a week
 - D. No exercise is necessary unless you are overweight.
12. **What is a communicable disease?**
 - A. A disease that has a long duration and is not easily cured.
 - B. A disease that can be spread from one person to another.
 - C. A disease that is publically and scientifically understood.
 - D. A disease that is related to eating and drinking.

Public Health Quiz – Basic (Answers)

1. A. heart disease

The leading cause of death in the United States is Heart Disease. According to the Centers for Disease Control and Prevention (CDC), heart disease caused approximately 655,000 deaths in 2003 while cancer was responsible for 550,000 and stroke 150,000. In 2004 AIDS was responsible for approximately 15,800 deaths in the United States.

2. B. pasteurization

Although Louis Pasteur's process of pasteurization was first applied in wine preservation, milk producers adopted the process of pasteurization in the 1920's and thereby eliminated a substantial vector of food borne disease

3. A. smallpox

As recently as 1958, small pox killed 2 million people each year worldwide. Due to aggressive efforts by the World Health Organization, small pox was completely eradicated in the 1970's

4. D. purchase organic produce

Organic produce can contain the same food borne contaminants as other produce. "Organic" only means that pesticides were not used in growing the produce, and does not refer to the absence of pathogens.

5. C. mercury

Mercury, a highly toxic element, used to be a component of the production process of felt for hats. The application of a mercury solution was used roughen the surface of animal hair that was then shaped into felt hats. The mercury was absorbed through the skin, and attacked the nervous system, which caused a degenerative nervous disorder. Symptoms of the disorder included fluttering eyelids, slurred speech, an unsteady gait and general mental confusion. Hence, the term "mad as a hatter."

6. A. niacin - tuberculosis

Niacin prevents pellagra, a disease that plagued the United States in the early 1900's.

It causes diarrhea, dermatitis, dementia and death. Niacin is now added to flour and pellagra is almost completely eliminated in the United States.

7. B. outbreak of disease in populations

Epidemiology is defined as the study of distribution and determinants of disease frequency in human populations.

8. B. birth defects

It is advised that women of child-bearing age consume .4 milligrams of folic acid to avoid birth defects, such as spinal bifida. Folic acid is also found in other foods, such as broccoli and dried beans.

9. A. fluoridation of drinking water

Fluoridation of tap water has, in part, led to a 68% decrease in dental caries in children under 12 from 1970 to 1994. The American Dental Association, the American Medical Association, and the World Health Organization endorse water fluoridation.

10. C.50%

Smoking causes approximately one out of every five deaths in the United States each year. Out of the 48 million Americans who smoke 50% will die from a smoking related disease if they continue to smoke.

11. A. Twenty minutes of intensity at least three times a week.

Data from the National Health Interview Survey shows that in 1997-98 nearly four in 10 (38.3%) adults reported no participation in leisure- time physical activity. According to the CDC, adults should engage in vigorous physical activity 3 or more days per week for 20 or more minutes per occasion.

12. B. A disease that can be spread from one person to another.

A communicable disease is an infectious disease that spreads directly from one person to another.

Public Health Quiz – Advanced

1. **Who is widely considered the "Father of Modern Epidemiology"?**
 - A. Robert Koch
 - B. John Snow
 - C. Joseph Lister
 - D. W. C. Cole Claiborne
2. **What is an epidemic?**
 - A. The first time a disease is documented
 - B. When more than 50% of a population has a specific illness.
 - C. When more than 25% of a population has a specific illness.
 - D. When the occurrence of a disease exceeds the normal rate.
3. **Which is the first illness that was attributed to an animal carrier?**
 - A. Rabies
 - B. Smallpox
 - C. HIV
 - D. Malaria
4. **What is one of the fastest growing public health concerns in the world?**
 - A. Cancer
 - B. SARS
 - C. Diabetes
 - D. Workplace accidents
5. **How effective are condoms in preventing transmission of HIV/AIDS?**
 - A. 100%
 - B. 85%
 - C. 50%
 - D. 0%
6. **To what minimum internal temperature (Fahrenheit) must one cook poultry in order to ensure that foodborne bacteria have been destroyed?**
 - A. 100 degrees
 - B. 150 degrees
 - C. 180 degrees
 - D. 220 degrees
7. **Hand washing can prevent all of the following except:**
 - A. Infectious diarrhea
 - B. Hepatitis A
 - C. Hepatitis B
 - D. Meningitis
8. **What two diseases account for over 50% of all deaths in the United States?**
 - A. cancer and heart disease
 - B. stroke and tuberculosis
 - C. AIDS and cancer
 - D. old age and infant mortality
9. **Approximately what fraction of people over age 12 smoke?**
 - A. 1/20
 - B. 1/10
 - C. 1/4
 - D. 1/3
10. **Antibiotics are widely used as a preventive measure against bacterial diseases. For how many years have antibiotics been used?**
 - A. 1000 years
 - B. 500 years
 - C. 100 years
 - D. >50 years
11. **Which of the following is responsible for over half of all deaths from unintentional injuries?**
 - A. Drowning
 - B. Motor vehicle crashes
 - C. Poisoning
 - D. Firearm injuries
12. **Which Chinese invention played a early role in improving sanitation and hygiene?**
 - A. Chopsticks
 - B. Sewers
 - C. Fireworks
 - D. Rice Steamers

Public Health Quiz – Advanced (Answers)

1. B. John Snow

John Snow is widely regarded as the "Father of Modern Epidemiology" following his efforts to contain the cholera outbreak in London's Soho district in 1854. Snow identified the cause of the outbreak as a public water pump on Broad Street and had the handle removed, thus ending the outbreak.

2. D. When the occurrence of a disease exceeds the normal rate.

An epidemic is when the occurrence in a community or geographic area of a disease at a rate that clearly exceeds the normally expected rate.

3. D. Malaria

Malaria is the first human illness attributed to an animal carrier (mosquitoes) in 1717.

4. C. Diabetes

In 2006, according to the World Health Organization, at least 171 million people worldwide suffer from diabetes. Its incidence is increasing rapidly, and it is estimated that by the year 2030, this number will double.

5. B. 85%

According to a 2001 report by the National Institutes of Health, correct and consistent use of latex condoms reduces the risk of HIV/AIDS transmission by approximately 85% relative to risk when unprotected.

6. C. 180 degrees

Foodborne illness is a serious public health problem. The Centers for Disease Control and Prevention (CDC) estimates that each year, 76 million people get sick, more than 300,000 are hospitalized, and 5,000 Americans die as a result of foodborne illnesses, primarily the very young, elderly, and the immunocompromised. Cooking foods at their proper temperature and safe methods for handling raw foods can help minimize the risk of foodborne illness. Poultry must be cooked to an internal temperature of 180 degrees.

7. C. Hepatitis B

Hepatitis B infections result in 500,000 to 1.2 million deaths per year worldwide due to the complications of chronic hepatitis, cirrhosis, and hepatocellular carcinoma. Hepatitis B can be transmitted through blood transfusion, though this is now rare, tattoos (both amateur and professionally done), through sexual contact or through transmission from mother to her unborn child.

8. A. cancer and heart disease

Cancer and heart disease accounted for 54% of all deaths in the United States in 1997. Pneumonia, influenza and AIDS account for another 4.5% of all deaths

9. D. 1/3

According to the American Lung Association, cigarette smoking has been identified as the most important source of preventable morbidity and premature mortality worldwide. Smoking-related diseases claim an estimated 438,000 American lives each year, including those affected indirectly, such as babies born prematurely due to prenatal maternal smoking and victims of "secondhand" exposure to tobacco's carcinogens. It is estimated that approximately 1/3 of people over age 12 smoke.

10. D. >50 years

Though penicillin was discovered in the 1920's, it was not developed for medical use until the 1940's, when it was produced in substantial quantities and used by the U.S. military to treat sick and wounded soldiers

11. B. Motor vehicle crashes

Car accidents kill an estimated 1.2 million people worldwide each year, and injure about forty times this number according to the World Health Organization. The term "accident" is considered an inappropriate word by some, as reliable sources estimate that upwards of 90% are the result of driver negligence. Public health contributes to the reduction of these types of fatalities and injuries by developing policies that lead to safer behaviors (mandatory use of seatbelts or encouraging the use of public transportation) and working with engineers to design safer roads.

12. A. Chopsticks

Eating with chopsticks, which were first used around 2,000 BC, provided the unintended benefit of preventing illnesses by interrupting the hand-to-mouth transmission of germs.