

# 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.

