

Answer key, final quiz

Q1. What is a multidrug-resistant bacterium or a “superbug”?

1. A bacterium that is resistant to several antibiotics.

A multidrug-resistant bacterium is usually defined as a bacterium that is resistant to three or more antibiotics of different antibiotic classes.

Q2. What areas of the world suffer most from the burden of antibiotic resistance?

1. Low- and middle-income countries.

Low- and middle-income countries generally have fewer tools to manage antibiotic resistance, including restricted access to health care and diagnostics, poor sanitary conditions and uncontrolled antibiotic use. These factors affect the risk of resistance development and the possibilities to treat infections caused by resistant bacteria.

Q3. Why is antibiotic treatment often not used for mild throat or skin infections?

2. The human immune system can often clear these kinds of infections on its own.

The benefits of antibiotic treatment are minor in these cases and unnecessary use promotes resistance development. Therefore, antibiotics should be saved for the treatment of more serious infections.

Q4. Why are antibiotics used in livestock production and animal farming?

3. They are used for treatment and prevention of disease and for growth promotion.

Antibiotics are indeed used for all these purposes, but the consumption varies significantly between countries. For example, use of antibiotic growth promoters is prohibited in some parts of the world.

Q5. How much of the human use of antibiotics is unnecessary?

2. About 50%.

It has been estimated that human use of antibiotics is inappropriate in about 50% of the cases.

Q6. Could vaccination against viral diseases slow down the antibiotic resistance development?

2. Yes. Protection from viral diseases will decrease the use of antibiotics, which in turn will affect the antibiotic resistance development.

Although antibiotics cannot be used for treating viral infections, vaccination against them will decrease the overall use of antibiotics. Fewer infections will result in fewer health care visits in which antibiotics could be incorrectly prescribed. Moreover, protection from viral diseases will result in fewer secondary infections, i.e. bacterial infections that may follow a viral infection

Q7. In poor countries, insufficient access to antibiotics is currently a bigger problem than antibiotic resistance.

1. True.

Due to weak health systems and lack of access to antibiotics, more people in poor countries die from curable infections than incurable ones.

Q8. There is not much I can do to affect antibiotic resistance development.

2. False

If you thought the statement was true, please go back and review the material in part 4 again!