

AQA Examination-style questions

Chapter 16 Adaptation and selection

- 1 *Staphylococcus aureus* is a species of bacteria found in the throat of many people. It can be killed by treatment with antibiotics. MRSA (methicillin-resistant *Staphylococcus aureus*) is the name given to any strain of this bacterium that is resistant to one or more antibiotics.

MRSA infections are more harmful to hospital patients.

- (a) Transmission of this infection is more likely in hospitals. Give two reasons why. (2 marks)

Figure 1 shows the changes in the number of MRSA infections per 1000 population between January 2003 and December 2006.

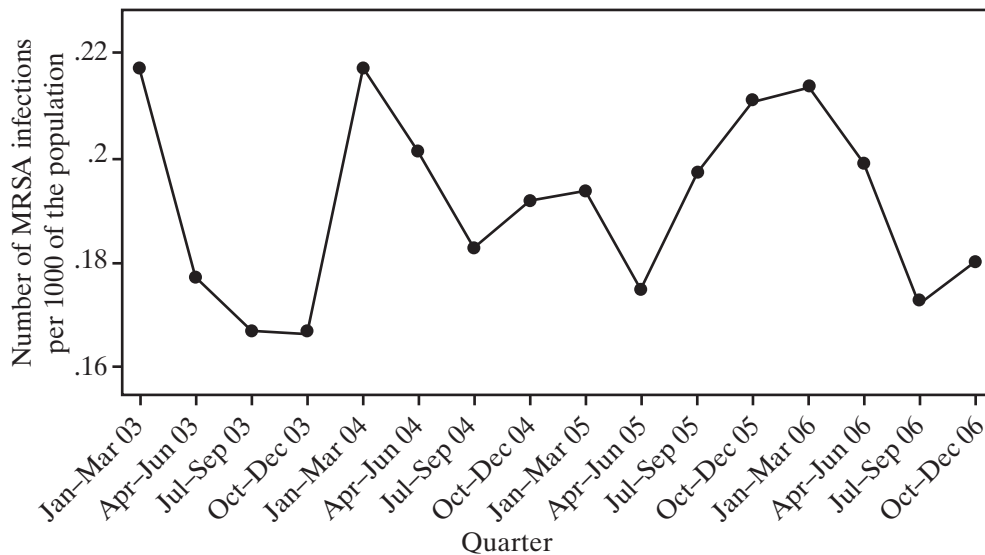


Figure 1

- (b) (i) Describe the changes shown in the graph.
 (ii) One reason for the changes shown in the graph is that the bacteria become resistant to an antibiotic. Explain how bacteria can become resistant to an antibiotic.

(6 marks)