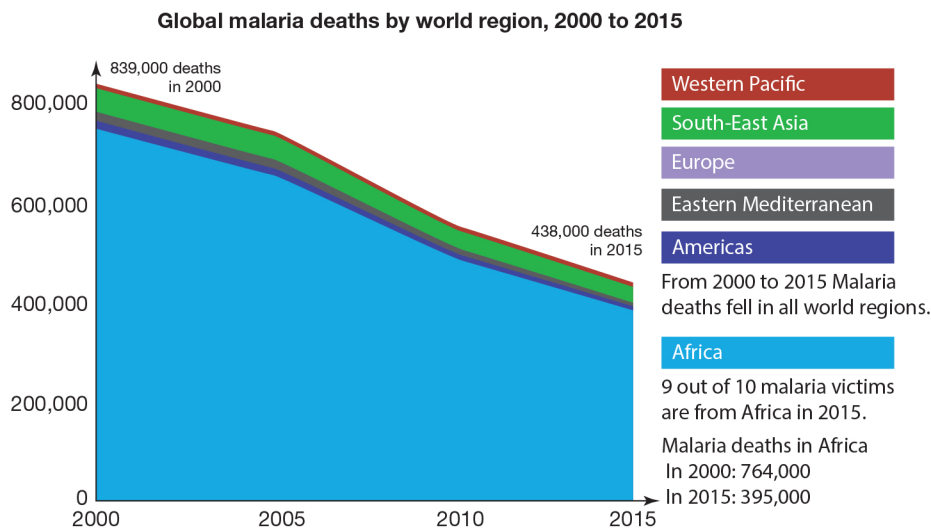


- 1
  - a What is a pathogen?
  - b Name two communicable diseases that are caused by bacteria.
  - c Describe how bacterial diseases are transmitted.
  - d What type of drugs can be used to treat bacterial infections?
- 2
  - a Compare the structure of bacteria and viruses.
  - b Measles is a virus that is often caught by small children.
    - i Describe the symptoms of measles.
    - ii Identify some ways in which measles could be prevented.
  - c TMV is a virus that affects plants.
    - i What does TMV stand for?
    - ii Explain how TMV affects the growth of plants.
- 3 The graph below shows the number of deaths from malaria from 2000 to 2015.



- a What type of microorganism causes malaria?
    - i Describe the pattern of the graph.
    - ii Suggest reasons for this pattern.
- 4
    - a Describe two non-specific defences the body has against pathogens.
    - b Compare two types of white blood cell that defend the body against pathogens.
  - 5 A new antibiotic (C) is being tested in a laboratory, along with two other antibiotics (A and B) that are in common use. The results are shown in the table below:

Antibiotic	Number of bacteria killed			Mean number of bacteria killed
	1	2	3	
A	34	35	37	35
B	44	39	42	42
C	140	126	132	133

- a
  - i Describe the results of the table.
  - ii Suggest a reason for these results.
- b Explain why it is important to keep making new antibiotics.