

Solutions

2.1 Viruses, bacteria, protists, fungi.

2.2 Vaccination of children; covering coughs/sneezes, hygiene, isolating cases.

2.3 The mosquito; mosquito nets / preventing mosquito breeding.

3.1 Bacteria are ingested in food, or food prepared in unhygienic conditions; bacteria and the toxins they secrete cause the symptoms; the UK vaccinates poultry against Salmonella, which controls the spread through poultry meat/eggs.

3.2 The discolouration reduces the chlorophyll-containing leaf area; so photosynthesis is reduced; less glucose is made, so growth is reduced through lack of food energy.

3.3 Random mutations created resistant strains; the antibiotic killed only non-resistant bacteria, giving resistant strains a survival advantage; resistant bacteria reproduced and spread; repeated penicillin use selected for resistance each generation – natural selection.