KQ1: What have been the main causes of illness and disease over time?

MEDIEVAL AND EARLY MODERN PERIODS: c.1300s-1700s

General causes of illness and disease in the medieval period
- Poor diet - bad harvest meant hunger; only 25 per cent of families could feed themselves; malnutrition was common.
- Living conditions - In towns, houses were crowded together, water was taken from streams contaminated with waste, floors were covered in straw which was the perfect breeding ground for rats, fleas and lice.
- Famine - the harshest famine in England was in 1315-17 when torrential rain ruined planting and harvesting.
- War - Wounds inflicted by sword or axe often became gangrenous; e.g. in the Wars of the Roses 1455-1485.

Problems in the medieval era
- Medieval people did not know the link between disease and germs.
- Towns were often filthy.

WELSH EXAMPLE: Wrexham market town; livestock brought in every day to market spreading manure and urine in the town centre; the remains of animal carcasses were left to rot in the streets; local rivers were also polluted from brewing beer; also a lot of smoke from making nails.

Plague
- Towns were breeding grounds for infection and vermin so there were outbreaks of plague from 1348 to the Great Plague of London in 1665.

There were two types of plague
1. Bubonic plague was spread by fleas from black rats. Swellings called buboes appeared in the armpits and the groin, followed by fever, headache and boils all over the body; death occurred within a few days.
2. Pneumonic plague was spread by people breathing or coughing germs onto one another; the disease attacked the lungs, causing breathing problems and coughing up blood; death occurred quite quickly.

The Black Death entered Britain in July 1348. By the end of 1349 it had spread across England, Wales and Scotland. Up to 40 per cent of the UK population was killed by the disease. In 1665, around 100,000 people died of the plague in London. That was nearly 25 per cent of the population.

WELSH EXAMPLE – the Black Death and Wales
- The Black Death killed around 100,000 people in Wales, one-third of its population. It arrived in Wales through the coastal port of Haverfordwest in Pembrokeshire, which traded with Bristol. Carmarthen was affected soon after. Within a few months it had reached north Wales, affecting Deganwy in the north-west and the market towns of Ruthin, Denbigh and Holywell in the north-east. Cosmeston near Penarth in the Vale of Glamorgan became a deserted medieval village.

INDUSTRIAL PERIOD: c.1800s

The Industrial Revolution resulted in the spread of factories and the growth of industrial towns and cities such as Glasgow, Manchester, Birmingham and Sheffield. Factories needed housing to be built for workers.

Public health problems in industrial towns -
- Squalid living conditions meant that outbreaks of disease were common.
- Tenements were overcrowded, large families lived in cramped conditions.
- Sewage contaminated drinking water, which led to outbreaks of cholera and typhoid; people did not know infected water spread cholera germs.

People in this period thought it was miasma, terrible smells, that caused disease. This is why they were so worried about events like the Great Stink in London in 1858 when sewage made the River Thames smell during the summer heat.

Dr John Snow proved that cholera was a waterborne disease after his study of the Broad Street Pump in London in 1854.

Key words
- Tenement - A large building divided into separate flats.
- Cholera - An acute intestinal infection which causes severe diarrhoea and stomach cramps, caused by contaminated water or food.
- Typhoid - A serious infectious disease that produces fever and diarrhoea, caused by dirty water or food.

WELSH EXAMPLE: Cholera epidemics in Wales
- Outbreaks of cholera occurred in Wales in 1832, 1849, 1854 and 1866.
- 1832 outbreak – the most affected areas were the industrial towns of Merthyr Tydfil and Swansea, the market towns of Denbigh and Holywell.
- 1849 outbreak – the two worst affected towns were Cardiff and Merthyr Tydfil (one of the highest death tolls in England and Wales with over 1,682 deaths). In the north, Holyhead, Holywell and Flint were badly affected.
- See Key Question 7 for examples of poor living conditions and cholera in Cardiff.
The spread of bacterial and viral diseases in the 20th century

In the 20th century, bacterial and viral diseases continued to spread as there was increased travel between countries, migration and two world wars.

Case study 1: Spanish Flu, 1918–19 - In 1918, a pandemic spread around the world. Up to 40 million people died from this strain of bird flu. It infected 20% of the world's population. The end of the First World War helped transmit the disease as returning troops spread it to the civilian population. 7 million deaths were reported in Spain, so the disease was called Spanish Flu. It could kill a person in a day. Hospitals could not cope. It killed 280,000 people in the UK.

Case study 2: Tuberculosis - spread by coughs or sneezes. It used to be known as consumption as sufferers gradually lost weight. It was associated with poor housing and unhealthy working conditions of the Industrial Revolution. ‘Fresh air’ was thought to be the cure. By the 1950s better sanitation and vaccination reduced cases significantly. Isolation hospitals were set up in the countryside (WELSH EXAMPLE – Penley Hospital in the 1960s) to help prevent the spread of the disease, but also to provide fresh air to help sufferers recover. The rise of drug-resistant strains in the 1980s, particularly amongst the homeless, means that the fight against TB continues.

Case study 3: The HIV/AIDS threat - In 1981, the first cases of AIDS were reported in the USA. The AIDS virus is spread through the blood or body fluids of infected people – via sexual contact or by sharing injection needles with an infected person. In AIDS a virus called HIV destroys the body’s immune system. The victim does not die of AIDS but of other infections that their body can no longer fight. By 2000 an estimated 30 million people were infected with AIDS, the worst affected area was Africa. By 2000 over 8 million people had died because of AIDS.

21st century Lifestyle diseases

New kinds of diseases have also begun to affect people in the modern era.

• As people are living longer so they become more prone to get cancer – one in three people in the UK will be affected by it at some point in their lives.
• Lifestyle changes like increasing smoking of cigarettes and drinking of alcohol have also led to a growth in obesity, diabetes and certain kinds of cancers which did not affect people in earlier times.

Key words

Pandemic - A disease that spreads across a wide geographical area.

AIDS - Acquired Immune Deficiency Syndrome.

HIV – Human Immunodeficiency Virus.