

GCSE History Knowledge Booklet

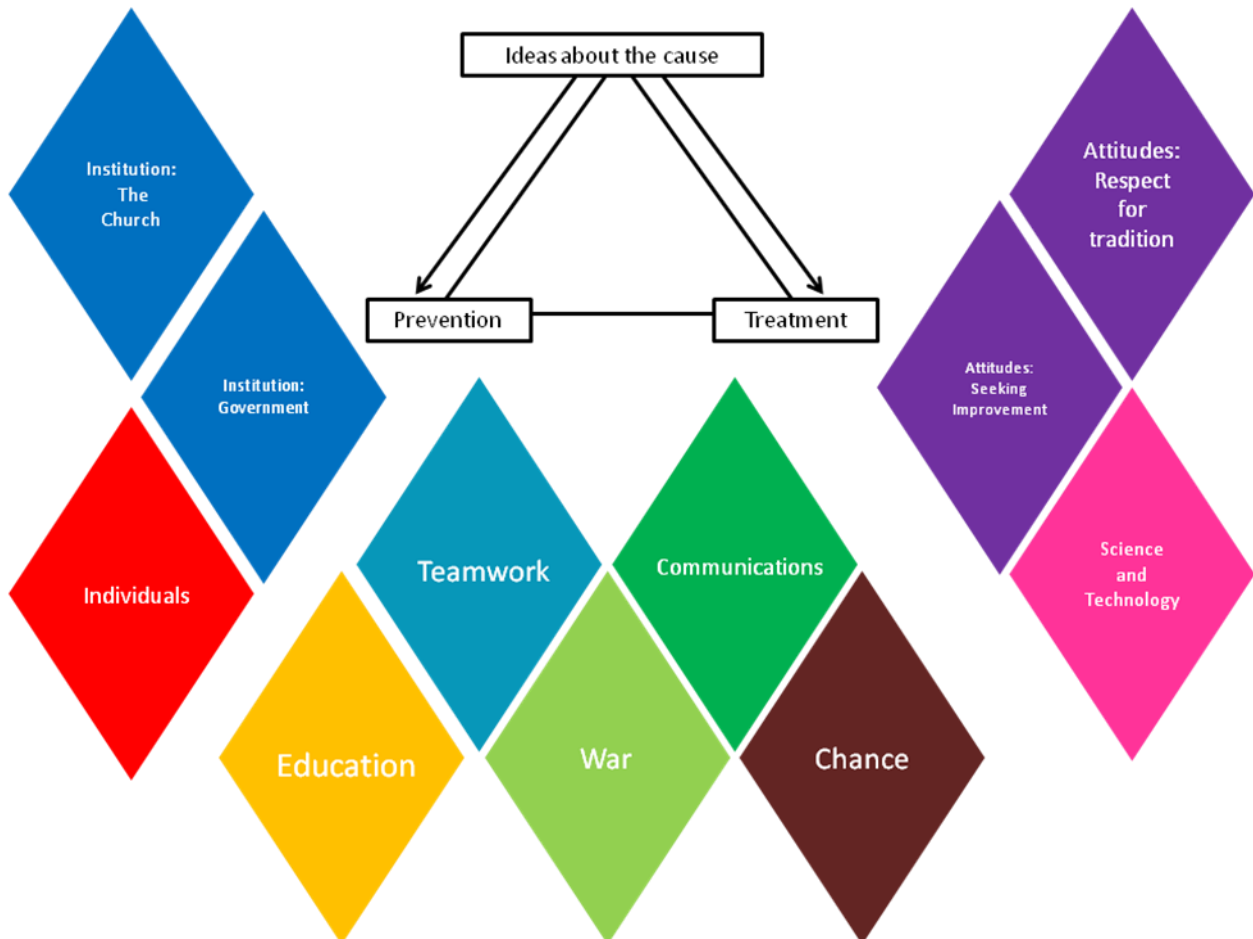
The Industrial Revolution c1700-c1900

Part 2 Topics 3.2c - 3.3b

The History of Medicine is about some of the most important questions in the whole of history. Today we live far longer than our ancestors did. We are healthier and have more chance of surviving major illness. **So why has medicine- and our health - changed so much over the centuries? This paper is about why there were changes and continuities throughout the ages.**

This booklet will help you to focus on the period of the Industrial Revolution in England and the changes and continuities, progress and stagnation in medical thinking and practice.

Examples of Factors that causes change and continuity.



History of medicine Contents

Key Topic 3: c1700–c1900: Medicine in eighteenth and nineteenth century Britain Part 2	4-11
Key Topic 3.2c Approaches to prevention and treatment (Public Health)	4
Knowledge Check 3.2c Approaches to prevention and treatment (Public Health)	6
Key Topic 3.3a Jenner and the development of vaccination	7
Knowledge Check 3.3a Jenner and the development of vaccination	9
Key Topic 3.3b Fighting Cholera in London, 1854	10
Knowledge Check 3.3b Fighting Cholera in London	11

Key Topic 3: c1700–c1900: Medicine in eighteenth and nineteenth century Britain

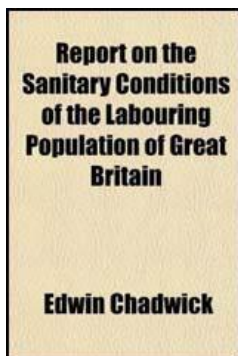
Key Topic 3.2c Approaches to prevention and treatment (Public Health)

Public Health Problems in the Early 1800s

- During the late 1700s and the first half of C19th, houses were built as close together as possible as more people crowded into factory towns to work.
- In these squalid conditions, diseases spread easily and rapidly.
- Some thought that the government should force local councils to clean up their towns.
- But, many believed that the government shouldn't interfere - this attitude is called laissez-faire.



Edwin Chadwick

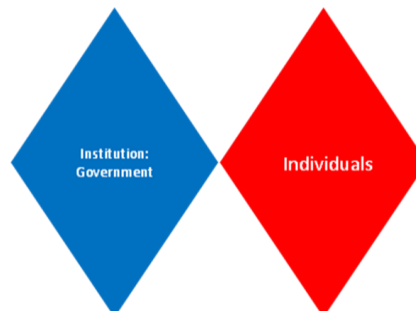


- In 1842 he was asked by the government to report on the living conditions and health of the poor.
- Chadwick concluded that poverty was caused by ill health which was caused by the terrible conditions in which people lived.

• In his
Conditions of

said industrial towns should:

1. Organise drainage and refuse
2. Provide a pure water supply
3. Appoint a Medical Officer of



"Report on the Sanitary
the Labouring Population" he

collection

Health

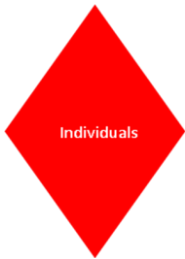
1848 Public Health Act



- In 1848 there was an outbreak of cholera, this put pressure on the government to do something.
- Parliament reluctantly agreed to pass Public Health Act. Although it was not compulsory. The government set up a Board of Health to encourage, but not to force, local authorities to improve conditions. Only a few local authorities took any new measures.
- By 1872 only 50 Medical Officers of Health had been appointed.

- The Board of Health was abandoned in 1854.

1853 John Snow



- In 1854 John Snow proved that there was a link between cholera and water supply.
- He used research, observation and door-to-door interviews to build a detailed map of a cholera epidemic in Broad Street.
- After collecting evidence, John Snow put pressure on water companies to clean up their water supplies (*read more about this in Key Topic 3.3b*)

1858 Great Stink



- For years human waste made its way from the latrines in London into the River Thames.
- In 1858 the hot weather caused a 'great stink'. The bad smell was right under Parliament's nose.
- Parliament considered moving and had to coat their curtains with a deodorant to get rid of the smell.
- The Great Stink prompted Parliament to sort out London's sewage and drainage system and to clean up the River Thames.

Within a year Sir **Joseph Bazalgette** had begun to build an extensive system of sewers and drains that are still in operation today.

1875 Second Public Health Act



- Unlike the 1848 Public Health Act, the 1875 Public Health Act actually forced local authorities to introduce the following measures:
 - ✓ Provision of clean water
 - ✓ Proper drainage and sewage
 - ✓ The appointment of a Medical Officer of Health



Act,
forced

Knowledge Check 3.2c Approaches to prevention and treatment (Public

Health)

1. Many people believed that the government shouldn't interfere with public health. What was this attitude called?

-

2. What was Edwin Chadwick asked to report on?

-

3. What did Edwin Chadwick conclude that poverty was caused by?

-

4. Why did the government pass the 1848 Public Health Act?

-

5. Identify two limitations of the 1848 Public Health Act

-
-

6. Why did parliament start to take notice of dirty water and poor conditions in 1858?

-

7. When was the Second Public Health Act passed?

-

8. Identify two measures introduced by the 1875 Public Health Act.

Key Topic 3.3a Jenner and the development of vaccination



- Smallpox killed more children than any other disease and survivors left scarred.
- To stop people catching it inoculation used in China and other parts of

Asia. This involved spreading pus from a skin of a healthy person. **Lady Mary** idea back from Turkey in 1721 where her

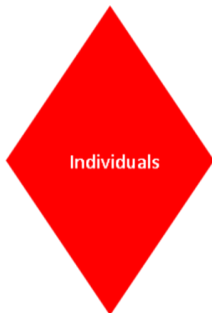
- Inoculation became big business in Britain per patient for thousands of inoculations.

- However, very risky as if got too strong a dose they could die. (2/3 out of every 100 died) Could also be spread by inoculated person. People could not afford them.



smallpox pustule into a cut in the **Wortley Montague** brought this husband was British ambassador. with doctors charging up to £20

Vaccinations



- Jenner was a country doctor. He heard that milkmaids didn't get smallpox, but instead a milder cowpox. He realised that vaccinations might work - putting a weaker form of a disease into a patient to build up resistance.



- Jenner investigated and discovered people who had already had cowpox didn't get smallpox.



- In 1796 he took a small boy called James Phipps and injected him with pus from the sores of a milkmaid with cowpox. Jenner then injected the boy with smallpox. James Phipps developed cowpox but not smallpox and was vaccinated against it when Jenner tried to give him smallpox.

- In 1798 published book, *An Enquiry into the Causes and Effects of Variola Vaccinae*, known by the Name of *Cowpox*, describing vaccination and proved evidence it worked.
- By 1803 vaccination was being used in the USA and in 1805 Napoleon had the whole French army vaccinated (*Trade and Communication/Individual Genius-Helping*)
- Government helped to spread his ideas - in 1802 and 1807 Parliament gave Jenner £30,000 to develop his work. In 1852 vaccinations were made compulsory in Britain and were strictly enforced until 1887. Led to drop in deaths from smallpox. (*Government-Helping*)

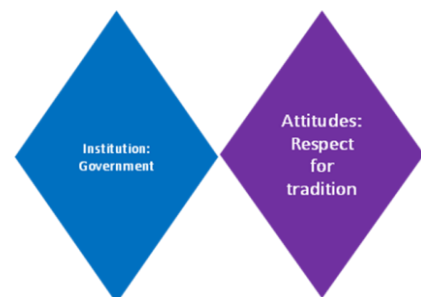


Opposition to Vaccination



- Many people did **oppose vaccination**. In 1866 an anti-vaccine league was formed. Some believed it was unnatural to give diseases from animals and against God's wishes. The Royal Society of Science refused to published his book and said his ideas were too revolutionary. Other people had not heard of Jenner so refused to believe him. Some saw as dangerous as doctors mixed up vaccines and others used infected needles. Some did not like the government telling them what to do in terms of vaccinations - *laissez faire attitude*. (*Attitudes-Hindering*)

- Also, government could not decide how much to force people and from 1887 vaccinations were not compulsory. (*Government-Hindering*)
- Furthermore, Jenner did not know that germs cause disease and could not explain how the vaccination worked. Science was not that developed. (*Science-Hindering*)



Knowledge Check 3.3a Jenner and the development of vaccination

1. What idea did Lady Mary Wortley Montague bring bak from Turkey in 1721?

-

2. What evidence is there that inoculation was risky?

-

3. What occupation did Florence Nightingale have?

-

4. Which country was Jenner from?

-

5. What did he notice about people with cowpox?

-

6. What did Jenner do to James Phipps?

-

7. What disease could James Phipp not catch after the vaccination?

-

8. What was the difference between inoculation and vaccination?

-

9. How did the government help Jenner spread his ideas?

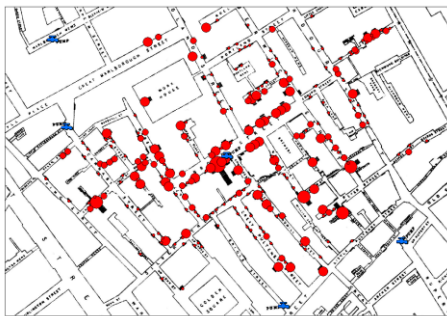
-

10. What was the name of the group that opposed vaccination?

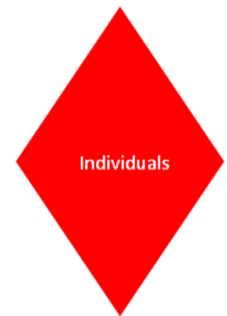
-

Key Topic 3.3b Fighting Cholera in London, 1854

- Cholera broke out in 1854 in London. Cholera killed victims in less than a day.
- People tried to prevent cholera by burning barrels of tar or vinegar, smoking cigars as protection against bad air, praying or wearing lucky charms, clearing house and burning the clothing and bedding of victims.
- In 1849 John Snow published a book saying that people caught cholera from water not 'bad air' His suggestion was mocked by other doctors.



- In 1854 John Snow proved that there was a link between cholera and water supply. He used research, observation and door-to-door interviews to build a detailed map of a cholera epidemic in Broad



Street.

- Nearly all the deaths had taken place within a short distance of the water pump.
- Near to the pump, there was a brewery and none of the people there had cholera. The brewery had its own water pump, and the men had been given free beer. They didn't use the Broad Street Pump at all.
- After collecting evidence, John Snow removed the handle from the Broad Street pump.
- There were no more deaths. It later came to light that a cesspool near to the pump had a cracked lining which allowed the contents to contaminate the drinking water.
- Snow put pressure on water companies to clean up their water supplies.



Knowledge Check 3.3b Fighting Cholera in London

1. In what year did Cholera break out in London?

-

2. What was the name of the man who claimed that Cholera was spread through bad water not bad air?

-

3. What was the name of the street where the epidemic was centred around?

-

4. What was strange about all the people who worked in the local brewery?

-

5. What did John Snow do to the water pump in Broad Street?

-

6. What was the result of his actions?

-