



Summary

Massive advances in the understanding, treatment and prevention of disease. Better diagnosis of illness using technology such as X-Rays, blood tests and CT, Ultrasound and MRI scans. Better treatment of disease is made possible with the discovery of antibiotics and the development of “magic bullet” drugs. The discovery of DNA and mapping of human genome enables great strides in understanding hereditary factors in disease. Advances in surgical techniques make life-saving treatments possible, such as transplants and mastectomies. The introduction of the NHS in 1948 means that free healthcare is provided to everyone in Britain. Mass vaccination campaigns to help eradicate diseases such as tetanus, polio and measles. There is more understanding of the lifestyle factors affecting disease, such as the links between obesity and diabetes and the link between smoking and lung cancer.



Key Vocabulary

Antibiotic	A treatment that destroys or limits the growth of bacteria in the human body.
Beveridge Report	A 1942 report chaired by William Beveridge which identified five "Giant Evils" in society: squalor, ignorance, want, idleness, and disease, and went on to propose widespread reform to the system of welfare.
DNA	Short for deoxyribonucleic acid, a substance that carries genetic information that determines characteristics such as hair and eye colour.
Genome	The complete set of DNA containing all the information needed to build a particular organism
Haemophilia	A genetic disease passed from parent to child that stops blood from clotting
The Human Genome Project	A 10-year project which decoded and mapped all the genomes in DNA. This made it possible for scientists to better understand genetic diseases such as cancer.
Magic Bullet	A chemical treatment that targets specific microbes without harming the rest of the body.
Key Hole Surgery	Surgery that takes place through a tiny incision using cameras to see inside the body and operate.
NHS	National Health Service which provides free medical care for the entire population of Britain
Penicillin	First antibiotic to be discovered
Prontosil	A bright red dye which was discovered by scientist Gerhard Domagk to kill bacterial infections in mice, then successfully tested on his daughter who had blood poisoning in 1935.
Salvarsan 606	First magic bullet drug which treated Syphilis.
Streptomycin	Powerful antibiotic, discovered in 1943, effective against tuberculosis which until then, had been considered incurable.

1906-1914– Liberal reforms include pensions, national insurance and school meals.

1909: Discovery of Salvarsan 606

1928: Alexander Fleming discovers penicillin.

1932: Prontosil discovered to kill bacterial infections in mice

1941: Penicillin successfully used on a human

1942: Publication of the Beveridge Report

TIMELINE

Y10 History Medicine 1900-Present



Key Figures	
Gerhard Domagk	Discovered that Prontosil could cure bacterial infections
Paul Ehrlich	Tested over 600 arsenic compounds to find a cure for syphilis. His research was continued by a Japanese scientist named Hata who found compound 606 (salvarsan) cured syphilis.
Alexander Fleming	Discovered that penicillin (a type of mould) could kill harmful bacteria after noticing the mould growing on an old petri dish of bacteria.
Howard Florey and Ernst Chain	Two scientists who took Fleming's discovery of penicillin as WWII broke out and developed it as an antibiotic treatment for use on humans.
Rosalind Franklin and Maurice Williams	Took the first X-ray photographs of DNA.
Francis Crick and James Watson	Two scientists working at Cambridge University who identified the double helix structure of DNA.
Aneurin Bevan	The Health Minister who opened the NHS in 1948.
Joseph Salk	Pioneered a vaccination for Polio
Dr Christian Barnard	Performed the first human to human heart transplant.

1948: NHS launched.

1954: Polio vaccine discovered by Joseph Salk

1967: First successful heart transplant.

1978: Louise Brown, the first test tube baby born.

1990: Launch of the human genome project

<https://www.bbc.co.uk/bitesize/guides/zchw4j6/revision/1>
<https://www.youtube.com/watch?v=my14ZuzjH5I>
 G7TZ-RC98G—Schooly Code

Challenge

Which factor forced progress more in the Twentieth century, Technology or War?

How have treatments changed for ordinary people between 1900 and present day?

What was the most important breakthrough in medicine between 1900 and the present and why?



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SCAN ME