

<p>1250-1500: Food, water and housing</p> <p>Peasants housing in the country size varied in size. Most lived in simple huts with walls woven from sticks and covered in mud. Some of the larger houses had timber frames. They would have an open fire on a stone hearth. There was no chimney, smoke left through a hole in the thatched roof. The diet of the country was mainly vegetable pottage perhaps with smoked meat on occasion thrown in. Windows had no glass. Valuable animals like cows, were brought inside the house. The floor would have been covered with straw, but they were swept regularly. Most had gardens to grow their own food and keep animals. Waste would be kept on a rubbish heap, some may have had cesspits and they used moss for toilet paper.</p> <p>Town houses may had more floors for space, they too had thatched roofs and a garden. They would also have nice smelling flowers as well as animals because they believed foul air caused disease. They had more variety for food in the towns due to the markets. Those that had a trade or business had more income to spend at the market. Some houses may had wells, but no one had piped water. Water was collected wither from a conduit or bought of a water carrier. The rich had their own latrines with well-made cesspits which would not leak, poorer townsfolk shared cesspits which were not lined and might leak into cellars. Cesspits were meant to be emptied by gongfarmers who would take the mess out the city at night.</p>	<p>1500-1750: Food, water and housing</p> <p>Country life for the poor was much the same as it had been in the middle ages. There were more houses with a timber frame. Their diet was still mainly vegetable pottage. When there was famine or bad weather the poor would starve for example Greystoke in 1623 saw several deaths through starvation, although dying of starvation was rare those that were hungry were more susceptible to disease. Water collection was much the same – river, streams or wells.</p> <p>In the 16th century many inhabitants of towns lived in the medieval oak famed houses. From the 17th century they were gradually replaced with stone or brick housing. Houses in towns were often one room wide and three storeys high. Many houses were overcrowded, poor families squashed into cellars and upper storeys. Sharing beds was common. The houses were often poorly built leading to draughty and damp rooms which caused respiratory diseases. The rich had a more varied diet because of the expanding world – peppers, chillies, tomatoes, potatoes, chocolate and more were available to rich due to the discovery of America and slave plantations of the West Indies that followed. New sweet products like sugar which was used to sweeten chocolate, tea and coffee left to problems with teeth and obesity among the rich. The rich in towns could also afford piped water to their houses, the poorer would collect it from a conduit or buy it from water sellers.</p> <p>More waste was being produced. Waste was placed outside houses and rakers would come once or twice a week to take it. Urine and excrement was dealt with much the same as it had been in the middle ages – latrines and cesspit. The very rich might have a flushing water closet. Cesspits still caused problems by leaking, Samuel Pepys recorded in his diary that he had stepped into ‘a great heap of turds’ which had leaked from his neighbour’s cesspit into his cellar.</p>
<p>1750-1900: Food, water and housing</p> <p>The population exploded during the whole industrial era. As a result towns and cities grew quickly, the demand for houses could not keep up, town government was weak, there were no laws to ensure decent houses to protect people’s health and people did not know that germs caused disease until 1861.</p> <p>All large towns in early industrial Britain had lodging houses where single people lived and where newly arrived families stayed while looking for houses to rent. These houses had small rooms that were often filthy and overcrowded ideal for diseases such as Typhus. Many people had to live in back to back terraces. They had one room up and down. They were difficult to ventilate and people who lived in them often suffered from chest infections and tuberculosis. The very poorest could not even afford back to back housing had crowded below in people’s cellars.</p> <p>The diet for the poor in the city was awful. They had no gardens to grow food in towns. The working class brought food from street sellers and small shops. Their incomes meant they could not buy enough food to feed their families their diet consisted of bread, butter, potatoes and tea. Cheap bacon, rabbit or offal was a treat. Many people in early industrial Britain were malnourished and therefore prone to sickness. Quality of food was also an issue, the lassie-faire attitude of the government meant there were few laws to control food production – diseased meat, watered down milk with chalk, and butter adulterated with copper were sold. The poor suffered from diarrhoea, food poisoning as well as malnourishment.</p> <p>The rich had piped and filtered water. The poor did not. All water sources in Britain’s towns and cities were contaminated. Even rainwater which had fallen through the smog. Water companies controlled all piped water and in the poorer areas they would only turn it on for certain hours of the day. The real poor might have to walk a distance to a pond, stream or spring to collect water. Many had cisterns to collect the rainwater.</p> <p>The new urban sprawl was not built with sewers. The drains that existed was for surface water and was no equipped to deal with sewage, As a result the poorer areas smelt. Back to back houses shared privies with all their neighbours, 10 houses might share one single toilet. Night soil men were paid to empty cesspits, but landlords often allowed them to over flow. Again some cesspits leaked, which if it contaminated a drinking source could and did cause deaths. More and more of the wealthy and middle class owned flushing toilets which were in the 1830 connected to the sewers, which took the water to the river, contaminating the rivers which people drank from.</p> <p>1858 the government finally makes the sensible choice to build sensible sewers.</p>	<p>1900 onwards: Food, water and housing</p> <p>1909 the government banned further back to back housing. In 1919 standards were set by the government for space, water supply and drainage that all new housing had to meet. Control of building materials, damp proofing, ventilation, ceiling heights and window sizes was also brought in. ‘Homes fit for heroes’ built post WWI saw 25,000 built with indoor toilets and bathrooms. Councils oversaw maintenance. Slums still existed though. With developments of gas and electric heaters and cookers flats developed. Post WWII saw a huge increase in council building. 4,500 tower blocks had been built by 1980 many of those that lived in back to back moved to these high rises which had modern facilities but many people developed depression as they moved away from the community spirit they had grown up in. 1979 42% of the population lived in council housing compared to the 1% in 1900. Through the control of the housing suitable drinking water was made available to the majority of Britain. Thatcher believed people would be less dependent on the state if they lived in their own homes. 1980 an act was passed for tenants to be able to buy their own homes. 1.5 million Council homes have been sold, but it has also led to an increase of people renting – 50% of rented accommodation does not meet the government standards of a healthy home.</p> <p>The working class vote and scientific advances improved food quality from 1875 onwards. Science and technology made advances meant that refrigerated lamb from New Zealand and wheat from America led to a reduction in food prices. More food, good quality food, was available for the masses. The way food was sold changed – convenience stores such as Sainsbury’s were open every day and they were stocked. In 1914 a working family spent 60% on its income on food and 1937 it was only 37%. During WWII rationing actually improved the health of the majority ensuring that food as adequately available for everyone, it also encouraged more people to grow their own food and keep their own animals. Rationing stayed in place till 1954.</p> <p>There are new fears with food for example BSE in cows in 1986 which the government insisted could not transfer to humans... but in 1996 they admitted they were wrong and it could be. Also due to animals being given antibodies humans are becoming more resistant to anti-biotic medicine which might mean minor infections in future can kill us.</p> <p>Waste is less of an issue... instead air pollution and inactivity is now more of a public health concern.</p> <p>Car ownership has massively increased therefore so have the fumes. In 2001 the government encouraged people to buy diesel cars believing they caused less pollution but in 2014 it was found that they actually might produce more pollution.</p> <p>Levels of activity have dropped since 1914 – more entertainment in homes, better public transport and more cares have led to less activity. Almost three quarters of people who have no qualifications take little to no exercise. 44% of men and 33% of women are classed as overweight. Whereas in 1890 40% of men were found to be too weak to join the army now in 2006 over a third of the nation’s teenagers would have been too fat to join up. (The army has had to change its standards and not accepts people who are classed as overweight, the training soon put gets them fit again)</p>

The Black Death: The Black Death arrived in England in Dorset in 1348. Within weeks it reached Bristol and London, major trading hubs. No one was safe it struck the rich and poor alike. By the end of 1349 it reached the north of England. 1) Bubonic plague: from a flea bit, causes buboes, fever, blisters and eventually death 2) Septicemic plague: caused when the infection reaches the bloodstream. No buboes but the victim bleeds freely and fingers, toes or nose turn black and rot away. 3) Pneumonic plague: caught by breathing in cough droplets from someone already infected by the plague. Victims violently cough up blood and can be dead within two days. It has an 100% death rate and still no known cure.

There was no cure for the plague in the 1300s. They knew they could ease inflammation from camomile lotion (camomile is used in medicine today). Some people tied live toads or chickens to buboes. They tried bloodletting to restore the balance of the humours. Nothing worked. **Church Responses:** People believed God was punishing them. People prayed for healing. They would light a candle in Church for their loved ones; so many candles were lit prices for wax soared. In some rare cases individuals recovered from the plague and this confused people Priests urged people to confess their sins, there were special Church services with holy bread, the king ordered bishops to arrange large processions of priests through cities to confess the nation’s sins, groups of flagellants came to England from Northern Europe. They walked in lines whipping their bare backs with whips which had sharp pins knotted in them. They believed their suffering on the behalf of others would take away the plague. Very few English people copied this idea.

Other causes: People blamed the movements of the planets, earthquakes in distant lands, miasma, Jews poisoning the water, that you could catch the disease by looking into the eyes of someone with the disease, humours out of balance.

Impact: The disease could not be stopped. It travelled 500 miles in 500 days. Historians believed it killed about a third of the English population, but recent research indicate that it could have been as high as 60%. That’s 3.5 million people in two years. That death toll impacted everyday life. Bodies could be buried in mass graves (too many to bury individually or give last rites to). The plague hit the towns the hardest. Householders forced lodgers out onto the streets if they showed signs of any sickness. The rich moved to the countryside or shut themselves inside their houses throwing their waste out onto the streets. In rare cases they even threw out the bodies of the plague victims. King Edward III had to give explicit instructions to clean up the city. Clean the streets, remove the odour.

Other than the written word the King and parliament actually did very little to stop the plague. In Italy the government took control they

Exeter has underground passages that are 1.5 metres high. This passages allowed access to the lead pipes that fed water to the town.

Records show that the pipes were first constructed by the monks in 1180. This system brought fresh, clean water from the country side, down to cathedral and smaller priory. This water was used for holy rituals and for day-to-day washing and cooking. They also created another pipe for the town folk but the water supply was not very good. At this time there was no underground passages. When leaks happened the pipes had to be dug up and repaired.

1240s: someone came up with a good idea for carrying the pipe through the city walls. A passage was built so that the pipe could be reached and fixed with ease. This would avoid having to rebuild the wall whenever there was a leak.

1340s: really serious developments took place. The parchment from the day shows that the Church made huge payments for the construction of a lengthy underground passage to carry the lead pipe from the point where it came through the wall to the Cathedral itself. In a few places there are vertical shafts rise up from the main pipe. Some of these carried pipes up to ground level to feed fountains or conduits at street level and others provided access for workers who used footholds in the stone work as a sort of ladder to climb up and out. This passage was completed just as the plague struck Exeter in 1349.

1420s: this time the work and payment was organised by the town council. Exeter’s wool trade helped the town grow in population and wealth. Two rich ex-mayors left money in their wills specifically to improve the town’s water supply. The records tell the name of the man in charge of the work John Dale – plommer (plumber).

1440s: more improvements were made both the cathedral and the town council paid for the improvements. The town were able to pay for an expert plumber from London to help with the work and when he had finished they were able to employ a full time plumber John Frende, who had been apprenticed to John Dale.

The water supply was a symbol of civic pride. When Henry VI visited in 1451 the great conduit was chosen as the centre of celebration and two temporary conduits were rigged to flow wine. 1500:Exeter extended its underground passages to secure its water supply. This time the work took place outside the city walls.

The Plague: was still an issue in the early modern era. There were eight significant outbreaks between 1500-1670. One outbreak every twenty years. People would know there was a possibility of a plague epidemic. People still did not know what caused it. They still believed it was God’s punishment or miasma. They had still not linked rats and fleas to the spreading of the plague. After 1667 the plague never returned to England and no one is really sure why.

National Government response: In 1500 England was still rather backward in its approach to the plague but it started to learn from more advanced counties like Scotland, France and the Italian states. 1518: Henry VIII made a proclamation that plague houses should clearly be identified with bundles of straws. Victims of the plague needed to carry a white stick if they left the house so they could be avoided. It was also expected of town Aldermen and mayors to take action when the plague hit.

1578: The Privy Council of Elizabeth I ordered the printing of Plague Orders, which were sent to all counties and towns. The printing press became an important weapon for the fight against the plague. Plague orders included: searchers to be employed, no cats, dogs, or tame pigeons on the streets, funerals to happen at dusk, infected houses to be shut up for six weeks, watchmen to be appointed etc 1604: allowed the town to take money from parishes to help aid the epidemics, it introduced harsh laws to those that broke isolation (hanged if a plague victim and whipped if healthy).

During the Great Plague parliament only met once (in Oxford) to discuss the London outbreak and that was to ensure that no pest houses were built next to any person of note. And that people of note did not have to abide by the isolation rules... it was to improve the lives of the rich not the majority. The majority were left to fend for themselves but they did abide by the rules. The mayor of London did stay in London, in a glass box, issuing orders. He even allowed the shut in people out for an evening, while the healthy hid inside.

Case Study Cambridge: In the Spring in 1665, travellers and carriers brought news to Cambridge that the plague was spreading in London. The Cambridge Aldermen issued an order that strangers to town would have to have a certificate of health. The streets were cleaned. Searchers were hired. Stray cates and dogs were killed. By December 1666 920 people died from the plague.

Case Study Newcastle: Newcastle was fifth largest city in England in the 1630s with a population of 12,000. The wealthiest of the occupants lived in the middle of the city and the poorer in the narrow streets along by the river. The plague struck in 1636 in May in Sandgate, the poorer part of the city. By October 5600 people were dead, 47% of the population. They followed the plague orders, but it still ravaged through the poor.

The Gin Crisis

Gin was a drink traditionally brewed in Holland but with coronation of William of Orange as the British King gin became a popular drink in England’s urban areas.

In 1689 parliament banned imports of gin to encourage English distillers to make their own. As a consequence gin was produced and at a much cheaper price. Thousands of gin shops opened all over the place and it became the drink of choice for the poor.

By the 1720s, gin had become a social and health problem for London. Hundreds and thousands of people turned to gin to make their own miserable lives more bearable. Crime went up, families were ruined and the death rates increased.

In 1729 the government finally made a law to control gin drinking. Distillers had to pay a tax of five shillings on each gallon of gin produced and had to buy an annual licence for £20. It was impossible to enforce. There were too many small gin shops.

In 1736, the government issued a harsher act. The gin license went up to £50 but again it was difficult to enforce. It was easy to hide a gin shop.

In 1743 the Gin Act restricted the sale of gin to alehouses but still gin consumption increased. By 1750 Londoners were consuming over 11 million gallons of gin a year.

In 1751 the government finally issued an effective law. Anyone caught selling gin illegally was imprisoned, for a second offence they were whipped and for a third offence, transportation (sent to a colony). Gin drinking was reduced but it also happened at time of a bad harvest which drove up the prices of grain making it harder to produce cheap gin.

Cholera:

Case Study Cholera in Leeds: Cholera reached Leeds on 28th May 1832. The disease first hit a poor family in Blue Bell Fold, a cramped dirty yard in the poorer area of the city. The houses were built next to a stinking stream which flowed into the river Aire. The disease then spread quickly, by the end of July it had killed 187 people. Most victims were in overcrowded poor areas. In Boot and Shoe Yard for example ten people shared each of the small back to back houses. There was no water within a quarter of a mile, and only three privies for the 340 people living in the yard. Dr Baker who lived in Leeds kept track of the cases and highlighted that the areas afflicted were in the area of destitution. But Dr Baker believed it was miasma.

John Snow:

In 1854 there was a large outbreak of Cholera in the Broad Street area. Dr John Snow decided to track the cases in order to identify what caused the disease. He did not believe it was caused by miasma. In order to confirm his ideas he marked on the map every case. He saw that very few people died from the work house and no body died from the brewery. Both of which had their own well. His anomaly that was far from Broad Street found that the lady that died collected water from the Broad Street pump as she liked the taste. He identified through interviews that the source of the Cholera outbreak was the Broad Street pump. Cholera was a waterborne disease, but he could not prove it scientifically.

The local residents were convinced and the pump was removed.

However, the local preacher believed it was a punishment from God and the medical board still believed it was miasma.

Edwin Chadwick and the 1848 Public Health Act

SIGNIFICANT EVENT:1861 Louis Pasteur can scientifically link germs to disease. He first of all proved that alcohol is spoilt by bacteria. He then linked germs to disease in animals (silk worms). The Robert Koch took the next big leap by linking germs to disease in humans. The two of them, in competition, then used their research to create vaccines to protect people from diseases such as Cholera and Tuberculosis. National Government:: Edwin Chadwick was a civil servant who wanted to save the government money by finding out why the poor were so sick constantly. He believed in miasma and he found that poor areas reeked, therefore miasma might be the problem. Public Health Act 1848: said that sewers should be built, clean water supplies, local boards of health etc and it was all to be paid for by local rate payers. The big problem was that it was optional and many people did not want to pay.

1867: the working class got the vote and to ensure a win at the elections the Conservative party promised a big clean up so the 1875 Public Health Act made actions from the 1848 Act and other acts compulsory. There was a massive increase improvement in public health but it still had a long way to go.

Joseph Bazalgette: unwittingly saved the lives of thousands of Londoners. Although he was on the Metropolitan Board of Works they did not start anything immediately. It was not until the Great Stink of 1858 that Parliament decided to do something to clear up London. As it effected Parliament huge amounts of money was pumped into the Board of Works.

Bazalgette designed a massive and entirely new sewage system for London. He wanted to construct 82 miles of sewers running from west to east across the city. Three main sewers to the north of the river, and two to the south. The angle of the sewers would dump the waste into the Thames downstream. He also created pumping station (the likes that had never been seen before) tp pump sewage into huge covered reservoirs.

The sewers took seven years to build but the result was spectacular. Cholera and typhoid more or less vanished as the system prevented the spread of waterborne diseases. It was a huge revolution.

The Spanish Flu: the Spanish Flu is the reason that Britain gets very jumpy about ‘Swine flu’ or Avian flu. The Spanish flu, which originating from Spain is a type of avian flu that killed over 50 million people. In Britain it killed 228,000 people.

It occurred in 1918 towards the end of World War I which allowed the flu to spread all around the world as men headed home from the war. Spanish flu was much like influenza it called a chill, high temperatures, headaches and pains then it turned into pneumonia and they struggled for oxygen. People could be healthy in the morning and then dead by the afternoon.

It is thought that the Spanish fly is an avian flu came from the far east that jumped into Chinese labourers. We still have no cure for the influenza today, vaccines offer some protection but it’s not enough. A new flu virus could attack the world at any time and despite all our scientific advances we are still largely defenceless.

Dr Niven’s work in Manchester in 1919 limited the spread of the Spanish Influenza. 2000 people died but his attempts to publish advice, close schools, show educational films made a difference. More died in Glasgow and London as a comparison.

Aids: Phase 1: 1970s-1983 – Growing Awareness by 1982 7 people in Britain had died from AIDS. Friends of one of these set up the Terrance Higgins Trust to raise funds for research and raise awareness of the illness. At this time very few people shared their concern over AIDS. The media took an interest in 1983 when a number of people had developed AIDS because of blood transfusions. The government urged gay people and drug addicts to stop donating blood. A Newspaper ran a story called ‘Killer Blood’ and soon two documentaries were shown on television about AIDS. They emphasised the condition was associated with gay men. One newspaper called it the ‘Gay Plague’.

Early reporting of AIDS raised concerns but many say that AIDS was not like Cholera or Spanish Flu and it should be avoided if men would refrain from having sex with men and if drug users kicked their habit. Some Church leaders preached it was God’s punishment on gay people and drug addicts.

Phase 2: 1984-85 – Growing Alarm- People were unsure of how easily AIDS could spread and over reacted. Some fire service staff stopped giving mouth-to-mouth resuscitation. Some churchgoers refused to share the cup from which everyone drank their wine for Holy Communion. Parents withdrew their children from a class when one pupil acquired HIV through a blood transfusion. There was no risk of getting AIDS in any of these situations but at this time that was not made clear. People’s fears then got worse when the Royal College of Nursing in 1985 wrongly predicted they would have 1 million cases of AIDS by 1991. The government made this worse when they told hospitals to detain patients with AIDS even if the patients wished to leave. Doctors and visitors had to wear gowns, masks and gloves which made fears about how AIDS spread worse.

Phase 3: 1986-87by this time more helpful actions were underway: Charity groups, including some set up by churches, provided clean needles to addicts to reduce cross infection. The government funded free testing for HIV at hospitals and the screening of all blood donations so transfusions would be safe. The government organised an AIDS prevention campaign. It sent advertisements on TV on HIV to avoid contracting AIDS and leaflets to every home called ‘Don’t die of ignorance’.

TV programmes, radio shows and posters helped to end the myths about how AIDS was spread. A major breakthrough happened in 1987 when the Princess Diana (who was the most popular member of the royal family) visited a clinic and made sure that the media took pictures of her shaking hands with an AIDS patient with no gloves on. She showed the nation that these victims should not be feared but shown compassion and respect.

Phase 4: 1988-95 Growing Acceptance -In the late 80s and early 90s AIDS was becoming more widely understood. In 1991 Eastenders ran a story about a character who was diagnosed as HIV-positive. In the same year Freddie Mercury (a huge rock icon) died from AIDS. In 1992 a tribute concert and a special release of one of his greatest hits raised around £20 million for the cause. This would have been unthinkable in the years before. AIDS was spreading but not at the rate that had been predicted by 1995 25,000 people had been diagnosed HIV-positive, 12000 of those developed AIDS and 8,500 had died.

Phase 5: From 1996 – Growing complacency - In 1996 came unexpected news that scientists had devised drugs called ‘anti-retrovirals’ that delayed onset AIDS in people infected by HIV. It was a very expensive but the government funded them. Great news. There were, however, unexpected consequences. The government relaxed it’s campaigns about AIDS and HIV as well as many other sexually transmitted diseases. In 2009 about 100,000 people in Britain are living with HIV of those 40,000 are gay men the rest are heterosexual men and women. About 25% are unaware they are living with HIV and may be spreading the infection without knowing it. Far from helping the epidemic the discovery of an effective treatment has made it worse.

1. Public Health 1250-1500

The quick over view:

Religion and superstition dominated how people in the thirteenth century dealt with public health.

Almost everyone in Medieval England was a Christian. Although people trusted in God's goodness they also feared the devil and God's punishment.

The Roman Catholic Church controlled every Christian in Western Christendom (Europe). The Church was rich, powerful and controlled by the Pope. For the majority of people the care of the care came from priests who served in small areas known as parishes. Every Church had a parish and important towns had cathedrals. There were also abbeys, monasteries and convents where monks and nuns lived. They prayed, but they also served the local people **by providing food, care and shelter for those in need**. Catholics believed in order to **get to heaven they needed to do good deeds** such as give money to the sick and needy.

Kings were meant to serve God by defending the nation from its enemies by maintaining law and order and encouraging trade. **Kings taxed the people** and took their money but **they DID NOT provide public services like roads, sewers, buildings or water supplies**, which the Romans had done.

Kings kept control by giving lands to Lords, and the Lords divided that land among knights. Profits went back to the barons and the kings, but some knights earned the right to in parliament to have some say over how taxes were spent, but in reality they had little to no control over the king's actions.

The peasants, the people, were the backbone of the country. They did all the hard, physical work to create the nation's wealth. Some had land but the majority did not. **90% of the population lived in the countryside**. In times of bad harvest they would be the first to suffer. They had no say in how the country was ruled, their way of life depended on their lords, the king and the Church. They contributed to the wool trade which made England rich and famous in Europe.

There were few towns in England, by 1500 there were fifteen towns that had a population of more than 10,000 which compared to today's standards is still small. A town was controlled by a mayor not a lord. Towns often had their own orders kept in order by guards and guilds. Townspeople were proud of where they lived and did their best to keep it in order, but markets were messy and noisy.

The most powerful machinery of the day was water mills and windmills. There were blades for digging, but made by hand. **Printing presses appeared in England in 1470** this would help spread new ideas (reduce Church power), but before that it was word of mouth or handwritten text. There did not know about microbes. There was no way to know.

The Four Humours dominated their understanding of health. It was an incorrect theory followed since Hippocrates of Ancient Greece. (These ideas were kept alive by Arab writings). The four humours – blood, phlegm, black bile and yellow bile needed to be kept in balance in order to stay healthy. Eating the right food and regular exercise was generally the doctor's advice as consequence (not too different from their advice today). They also believed in purging the body and bloodletting.

Miasma was the main theory for disease. Bad air (bad smells) led to disease. It was incorrect and led to centuries of holding Public Health back.

Countryside

Food: Harvest was the most important thing about life in the Middle Ages. A good harvest meant health and comfort and a bad harvest could lead to catastrophic disaster. There was a Great Famine in 1315-16 this killed about 10% of the population. This was followed by outbreaks of animal diseases which killed cattle. Poor weather and harvests plagued the country until 1322.

In damp conditions a certain fungus could grow on the rye which was used to make rye bread. This fungus could cause ergotism, victims suffered from painful pustules, fever, hallucinations and they would go mad. The fungus was not connected to the disease until 1670.

Villagers could catch fish and eels from their local streams. This would be the only meat that peasants really got to eat. Everyone ate fish on Fridays because the Church insisted that no one ate animals from the land that day. Some villagers even had their own fish ponds.

Water: Every village was built near a stream which provided water for the humans and animals. Springs often fed at least one well in the village. The wells were often the cleanest water as animals drank from the streams and peasants bathed in them.

Those that lived in the countryside would drink more water than townspeople but they would also drink cider, mead, ale and small beer which had a low alcohol content but was safe to drink because the water had to be boiled (killing any germs) making it safe to drink.

Houses: Peasants could graze animals on common land. Animals often wandered in and out of the houses. Cattle were kept inside at night for warmth and protection. Houses were simple timber buildings. There were no chimneys so smoke escaped through windows or through the thatching. They would have gardens to grow vegetables.

Everyday life

Town

Water and waste: In the centre of the towns they would have a conduit. This fountain was fed by through lead pipes from the countryside. The earliest conduits were built by the Church as they needed clean water for acts of worship.

By the fifteenth century, as towns grew richer, the town council took over maintenance of these conduits. Water carriers made money by filling large carriers of water from the conduits and selling water door to door. Taverns sold the ale, but it was strong and public drunkenness was a common issue despite Church warnings.

Markets were messy, but essential to town life. At the end of the market day the streets would be filled with rubbish – waste from food, other goods and animal droppings. From 1293 London paid rakers to clear the streets and dispose of waste outside the towns walls. Rakers were then adopted in other towns.

There were all manners of town pollution – scrapped animal hair and natural acids (tanners), barley husks (brewers), soapy water (washer women), rubble and dust (masons), limewash paint (lime burners).

There were public latrines near markets and when Richard Whittington, Mayor of London died in 1423 he left money in his will for more toilets to be built in London. The smell of the lime burners was horrific. Archaeologists have compared skeletons of children from towns and countryside. They found that children in towns suffered from damage to their sinuses, this led to breathing difficulties.

Houses: Rich merchants might have owned houses. Houses were tightly backed together in the centre of town, but further out there was more space some even had gardens. Occupants grew sweet smelling flowers to prevent miasmas. They also grew vegetables and kept animals. The rich ate a variety of meat whereas the poorer townsfolk ate very similar food to their countryside counterparts.

Some houses had their own latrines gongfarmers would be paid to empty cesspits. It was a good job, paid more than the average labourer. Sometimes the cesspits leaked into the neighbours cellars or rooms.

The Black Death: The Black Death arrived in England in Dorset in 1348. Within weeks it reached Bristol and London, major trading hubs. No one was safe it struck the rich and poor alike. By the end of 1349 it reached the north of England, all of Wales and into Ireland.

Yersinia Pestis is the name of the germ that causes the disease and it lives in the gut of fleas. The flea regurgitates the germ into its victim and spreads the disease. The fleas live on black rats that infested trading ships. The disease still exists today, but can be treated by antibiotics but medieval people would never link the disease to something as common as a flea or a rat.

1. Bubonic plague: from a flea bite, causes buboes, fever, blisters and eventually death
2. Septicemic plague: caused when the infection reaches the bloodstream. No buboes but the victim bleeds freely and fingers, toes or nose turn black and rot away.
3. Pneumonic plague: caught by breathing in cough droplets from someone already infected by the plague. Victims violently cough up blood and can be dead within two days. It has a 100% death rate and still no known cure.

There was no cure for the plague in the 1300s. They knew they could ease inflammation from camomile lotion (camomile is used in medicine today). Some people tied live toads or chickens to buboes. They tried bloodletting to restore the balance of the humours. Nothing worked.

Church Responses: People believed God was punishing them. People prayed for healing. They would light a candle in Church for their loved ones; so many candles were lit prices for wax soared. In some rare cases individuals recovered from the plague and this confused people. Priests urged people to confess their sins, there were special Church services with holy bread, the king ordered bishops to arrange large processions of priests through cities to confess the nation's sins, groups of flagellants came to England from Northern Europe. They walked in lines whipping their bare backs with whips which had sharp pins knotted in them. They believed their suffering on the behalf of others would take away the plague. Very few English people copied this idea.

Other causes: People blamed the movements of the planets, earthquakes in distant lands, miasma, Jews poisoning the water, that you could catch the disease by looking into the eyes of someone with the disease, humours out of balance.

Impact: The disease could not be stopped. It travelled 500 miles in 500 days. Historians believed it killed about a third of the English population, but recent research indicate that it could have been as high as 60%. That's 3.5 million people in two years.

That death toll impacted everyday life. Bodies could be buried in mass graves (too many to bury individually or give last rites to). The plague hit the towns the hardest. Householders forced lodgers out onto the streets if they showed signs of any sickness. The rich moved to the countryside or shut themselves inside their houses throwing their waste out onto the streets. In rare cases they even threw out the bodies of the plague victims. King Edward III had to give explicit instructions to clean up the city. Clean the streets, remove the odour.

Other than the written word the King and parliament actually did very little to stop the plague. In Italy the government took control they controlled movements of people and goods and issued extra cleaning of the streets and sewers – England did not go to these lengths until the Sixteenth Century.

Continuity: The plague died down but it flared up occasionally it struck again in 1361-62 and there were TWENTY more outbreaks before 1500. Skeletons representing death became common in paintings, tombstones and jewellery. After 1400 the plague generally only afflicted the towns but towns took more measures to control it. But it was not always easy.

Exeter Case Study

Exeter has underground passages that are 1.5 metres high. These passages allowed access to the lead pipes that fed water to the town.

Records show that the pipes were first constructed by the monks in 1180. This system brought fresh, clean water from the country side, down to cathedral and smaller priory. This water was used for holy rituals and for day-to-day washing and cooking. They also created another pipe for the town folk but the water supply was not very good. At this time there was no underground passages. When leaks happened the pipes had to be dug up and repaired.

1240s: someone came up with a good idea for carrying the pipe through the city walls. A passage was built so that the pipe could be reached and fixed with ease. This would avoid having to rebuild the wall whenever there was a leak.

1340s: really serious developments took place. The parchment from the day shows that the Church made huge payments for the construction of a lengthy underground passage to carry the lead pipe from the point where it came through the wall to the Cathedral itself. In a few places there are vertical shafts rise up from the main pipe. Some of these carried pipes up to ground level to feed fountains or conduits at street level and others provided access for workers who used footholds in the stone work as a sort of ladder to climb up and out. This passage was completed just as the plague struck Exeter in 1349.

1420s: this time the work and payment was organised by the town council. Exeter's wool trade helped the town grow in population and wealth. Two rich ex-mayors left money in their wills specifically to improve the town's water supply. The records tell the name of the man in charge of the work John Dale – plommer (plumber).

1440s: more improvements were made both the cathedral and the town council paid for the improvements. The town were able to pay for an expert plumber from London to help with the work and when he had finished they were able to employ a full time plumber John Frende, who had been apprenticed to John Dale.

The water supply was a symbol of civic pride. When Henry VI visited in 1451 the great conduit was chosen as the centre of celebration and two temporary conduits were rigged to flow wine.

1500: Exeter extended its underground passages to secure its water supply. This time the work took place outside the city walls.

2. Public Health 1500-1750

The quick over view:

Religion and superstition was still very dominant in how people treated disease and public health.

The majority of every person in England was still Christian but there were a few changes. Henry VIII brought an end to the monasteries confiscating their land and money. Their water systems fell into ruin. The printing press challenged some of the old ideas but these old ideas of magic, witch craft and God's punishment were VERY SLOW to disappear.

The monarch was still in charge but the power of Parliament was growing. The number of MPs increased, but it made little difference to the ordinary people as only 3% of the population could vote. Still little was done to improve Public Health.

Local authority could make a big impact on the lives of ordinary people. Justices of the Peace enforced laws and acted as administrators although this was a continuation from the Middle Ages there was a surge in new elite groups. Merchants, lawyers, and doctors were wealthy and not because of land. Wealthy merchants could control the town councils and it would be these men that took on the plague when it struck.

The peasants, the people, are still the backbone of the country. Farming was still done by hand and a bad harvest could still have a devastating blow to the country, However, by the start of the eighteenth century hardly anyone died from starvation the population doubled from 3 million from 1550 to 6 million in 1750. There were definite improvements in agriculture. Wool was still the main trade in England, still much of the work was produced in people's homes.

The first steam engine was invented in 1712 it was called the Newcomen engine. Hundreds were used to mainly pump water out of coal mines. Coal was being used in many industries e.g. brewing, salt boiling and glass making. The poorer population also used it as fuel for warmth and cooking. Burning of coal in cities started to cause air pollution. There were also new discoveries. In 1683 Van Leeuwenhoek saw tiny organisms through his powerful microscope which today we call germ, but it would be 200 years before a scientist links these organisms to germs.

Towns were growing. In 1650 Bath had a population of just over 1000 and by 1700 it had doubled and burst outside its old medieval walls. Towns were growing quickly as more and more people moved from the countryside to the towns to seek work. **By 1750 a fifth of the population lived in towns.** This however is minor compared to the period.

Trade increased abroad as England build colonies in North America and developed a transatlantic trade in slaves, metal goods, sugar and tobacco. In 1608, the East India Company sent its first ship to India and began to trade in spices, dyes, silk and cotton.

The people of the Early Modern Era still drank a lot of alcohol. The number of alehouse grew rapidly in this time and they became important meeting places. From 1570 they would also enjoy tobacco unaware of what it was doing to their lungs.

The Four Humours and Miasma are still the main theories for disease. Bad air (bad smells) led to disease. It was incorrect and led to centuries of holding Public Health back.

Food and Famine: In many ways the food enjoyed in the early modern period had not changed much since the Middle Ages. Those who were rich could afford a variety of meat: beef, veal, mutton, lamb, pork etc. Fish was still important as it was eaten on Friday which was a tradition continued after the Reformation. The wealthy enjoyed white bread and their diet included small quantities of salad, vegetables and fruit. People still drank alcohol as they knew water could make them ill.

New products from America and Asia brought a wider range of foods: peppers, pumpkins, chillies, tomatoes, potatoes and new drinks hot chocolate, tea and coffee. All sweetened by sugar from the plantations of the West Indies. This again was for the rich.

The poor ate mainly pottage as they did in the Middle Ages. Their diet was healthier but in times of bad harvests hit the poor could not afford bread, people could starve to death and we know this from records. Although people rarely died of starvation the lack of nutrition weakened their resistance to disease, which would kill them before starvation could.

The Urban environment:

Animals: The towns were busy cattle, sheep and geese were headed into towns to be sold or slaughtered. Horse-drawn carts blocked the way and could injure or kill children and adults alike. There were loose dogs and their excrement contains parasites that could be spread to humans. Cats too were common and along with the dogs they hunted rats, but still there were not enough of them to control the rat and mice population.

Streets: Streets, particularly on market days would have been crowded. Streets were just beaten ground or gravel. Dust in the summer and mud in the winter. Paved streets were often covered in dung so people's clothes would become very dirty.

Smoke: although coal was unpopular because of its smell it was cheap in the seventeenth century so people used it to warm their houses and cook. Urban craftsmen used it for ovens, forges and furnaces. The dust, soot and smoke from chimneys contributed to respiratory diseases.

Everyday life

Houses: Most people continued to live in medieval oak buildings. Gradually these houses were replaced by houses made from stone or brick. Houses in towns were open just one room wide by three storeys tall. Many of the houses were over crowded. Poor families squashed into cellars and upper storeys and sharing beds was common. Houses were poorly made; often draughty and damp causing respiratory diseases.

Clean water: we know from records and images that people cared about cleaning their clothes and sheets, however, cleanliness depended on wealth. The rich and middling sort could afford servants to do their washing. The poorer class could only afford one set of woollens. These poor people would be riddled with lice and fleas – the carries of typhus and plague. It was thought that most people were not too clean for three reasons

1. If you lived near a stream or pond you could have a cold dip. Bathing inside was only for the rich.
2. Soap made from leftover animal fat could be used to clothes but it was not suitable for skin. Only the rich could afford olive oil soap.
3. Water was often dirty and many people believed it would infect them.

Instead people cleaned themselves through a dry process. Brushing themselves.

There were three ways of accessing clean water.

1. Paying for piped water
2. Collecting water from a conduit
3. Buying water from a water seller.

Waste: People in the Early Modern Era produced less waste than we do today. Townspeople put rubbish into a tub which was collected from outside their house by a scavenger 1-2 a week. It was then sold to gardeners outside the towns.

Getting rid of urine and excrement was difficult to get rid of. Some people had water closets but only the very rich. Nearly everyone used privies as their ancestors had done. In the countryside little changed but in the towns it was becoming a huge problem. Cesspits were expensive to empty and so fewer and fewer people paid to empty them.

The Plague: was still an issue in the early modern era. There were eight significant outbreaks between 1500-1670. One outbreak every twenty years. People would know there was a possibility of a plague epidemic.

People still did not know what caused it. They still believed it was God's punishment or miasma. They had still not linked rats and fleas to the spreading of the plague. After 1667 the plague never returned to England and no one is really sure why.

National Government response: In 1500 England was still rather backward in its approach to the plague but it started to learn from more advanced counties like Scotland, France and the Italian states.

1518: Henry VIII made a proclamation that plague houses should clearly be identified with bundles of straws. Victims of the plague needed to carry a white stick if they left the house so they could be avoided. It was also expected of town Aldermen and mayors to take action when the plague hit.

1578: The Privy Council of Elizabeth I ordered the printing of Plague Orders, which were sent to all counties and towns. The printing press became an important weapon for the fight against the plague. Plague orders included: searchers to be employed, no cats, dogs, or tame pigeons on the streets, funerals to happen at dusk, infected houses to be shut up for six weeks, watchmen to be appointed etc

1604: allowed the town to take money from parishes to help aid the epidemics, it introduced harsh laws to those that broke isolation (hanged if a plague victim and whipped if healthy).

During the Great Plague parliament only met once (in Oxford) to discuss the London outbreak and that was to ensure that no pest houses were built next to any person of note. And that people of note did not have to abide by the isolation rules... it was to improve the lives of the rich not the majority. The majority were left to fend for themselves but they did abide by the rules. The mayor of London did stay in London, in a glass box, issuing orders. He even allowed the shut in people out for an evening, while the healthy hid inside.

Case Study Cambridge: In the Spring in 1665, travellers and carriers brought news to Cambridge that the plague was spreading in London. The Cambridge Aldermen issued an order that strangers to town would have to have a certificate of health. The streets were cleaned. Searchers were hired. Stray cats and dogs were killed. By December 1666 920 people died from the plague.

Case Study Newcastle: Newcastle was fifth largest city in England in the 1630s with a population of 12,000. The wealthiest of the occupants lived in the middle of the city and the poorer in the narrow streets along by the river. The plague struck in 1636 in May in Sandgate, the poorer part of the city. By October 5600 people were dead, 47% of the population. They followed the plague orders, but it still ravaged through the poor.

The Gin Issue

Gin was a drink traditionally brewed in Holland but with coronation of William of Orange as the British King gin became a popular drink in England's urban areas.

In 1689 parliament banned imports of gin to encourage English distillers to make their own. As a consequence gin was produced and at a much cheaper price. Thousands of gin shops opened all over the place and it became the drink of choice for the poor.

By the 1720s, gin had become a social and health problem for London. Hundreds and thousands of people turned to gin to make their own miserable lives more bearable. Crime went up, families were ruined and the death rates increased.

In 1729 the government finally made a law to control gin drinking. Distillers had to pay a tax of five shillings on each gallon of gin produced and had to buy an annual licence for £20. It was impossible to enforce. There were too many small gin shops.

In 1736, the government issued a harsher act. The gin license went up to £50 but again it was difficult to enforce. It was easy to hide a gin shop.

In 1743 the Gin Act restricted the sale of gin to alehouses but still gin consumption increased. By 1750 Londoners were consuming over 11 million gallons of gin a year.

In 1751 the government finally issued an effective law. Anyone caught selling gin illegally was imprisoned, for a second offence they were whipped and for a third offence, transportation (sent to a colony). Gin drinking was reduced but it also happened at time of a bad harvest which drove up the prices of grain making it harder to produce cheap gin.

3. Public Health 1750-1900

The quick over view:

Religion and superstition was no longer dominant. There was new scientific thinking that challenged the word of the Bible. Charles Darwin's theory of evolution challenged the creation story. Many people by the end of 1900 believed that science had disproved Christianity.

Until 1832, only 5% of the population could vote. Change came with the 1832 Reform Act which gave the vote to men who owned property and allowed larger towns to two MPs. In 1867 and 1884 the vote was extended to working class men. Their laws had much more impact on ordinary people and by the end of the century it was normal for the government to pass laws which tried to improve the lives of the poor.

Population rocketed from 6 million in 1750 to 21 million in 1850 and then 37 million by 1900. There was an agricultural revolution, enclosure and machinery meant Britain would not starve, but wages were low in the countryside and so families still went hungry or fled to the cities.

Industrialisation transformed Britain. It started first with the textile factories powered by steam. This led to a greater demand for coal – more mines – building of canals- more coal – more factories. It caused a big thick smog over the streets. Air pollution grew worse and worse. As did working conditions. Days were long for adults and children, they were deafened by machines, injured and breathed in dust for hours. All to make enough money to just get by.

Towns grew rapidly. Towns became overcrowded leading to rapid spread of disease, a lack of water and non-sanitary conditions. Trains brought food into the city to feed them but it also brought pollution.

The empire was a hub for trade. In 1900 Britain ruled one fifth of the world and ruled over one quarter of the world's population. Britain had the resources and the man power to be the world's first super power. There were new plants, animals, foods, ideas and diseases (Cholera) feeding into London. This led to inequality on a global scale but could be seen back in England. Class divisions were distinct. There was the rich, the middle class and the working class.

Alcohol as always was a common issue for Britain. The Temperance movement in the nineteenth century had little impact. Pubs were good spots to socialise and became part of everyday life particularly for the working class.

Alcoholism was a problem but education was beginning to increase. More and more people could read as the government took steps to improve literacy. There was a growing demand for newspapers and with that the media started to grow in power.

Miasma remained a common belief for disease right up until 1861. Louis Pasteur and Robert Koch were able to prove that disease was caused by germs and not by bad air. This was a huge turning point for medicine and public health.

Urbanisation Crisis:

1. Towns and cities grew quickly. Existing infrastructure could not cope.
2. The supply of housing could not keep up with demand. Houses were built quickly and the quality was not great.
3. Town governments were weak – many did not want to up rates to provide clean water and sewers for the poor.
4. There were no laws to ensure decent housing and to protect people's health.
5. People did not yet know what caused germs.

Housing: All large towns had lodging housing where single people and families arrived and stayed until they could find somewhere to rent. These houses were large, overcrowded and filthy. Disease spread easily. Builders built many houses back-to-back houses to cram in as many houses as they could. These houses often had just one room downstairs and upstairs. They were hard to ventilate. The very poorest had to cram into cellars.

Food: Poor people had a very poor diet and it played a major part in the public health crisis in the early nineteenth century. It was impossible to build grow food in the slum districts. Working class families had to buy food from small shops and street-sellers. The poor families lived mainly on bread, butter, potatoes and tea. Sometimes they get cheap bacon, rabbit or offal. These people were mal-nourished, making them prone to sickness and disease.

Not only was there a lack of food but the quality of food was an issue. Food was not preserved in cans until 1860s and refrigerators were not invented until the 1880s. The government had a laissez-faire attitude meant they made little attempt to control the production and sale of food. So meat was diseased, milk was mixed with chalk and water, butter had copper to improve its colour. So many people suffered from diarrhoea and food poisoning.

Everyday life

Water: Water supplies were under severe pressure. In working class districts it was rare to have water piped into your houses. Water companies supplied water to pumps in streets and courts. Whole streets would have to share one pump. Landlords paid for basic provision so water might only be available for a couple of hours.

Where the companies could not supply water the poorest families had to take water from streams, ponds, or rivers. Some collected water from cisterns or barrels from the rain. All water supplies were dirty. Water companies pumped their water from polluted rivers. Typhoid was common in the poorer district.

Waste: The biggest health problem was the disposal of human waste. Existing sewers in towns had been built to drain the streets of rain water not sewage. As a result pools of stinking water often filled the streets. In the first half of the century people continued to use the privies that had been there for centuries. More than ten houses might have shared a single privy.

Cesspits were emptied by night soil men. Land lords were cheap so they did not pay to empty cesspits and so the waste would spill over into other people's building and land. Sometimes even contaminating the local water source. The waste became much bigger issue. It even forced parliament to move.

Diseases:

Tuberculosis: the largest killer in the nineteenth century. The disease was spread person to person in the droplets of water produced when coughing. It thrived in overcrowded and poorly ventilated houses. TB could be spread through unpasteurised cows' milk.

Influenza: virus transmitted through coughing and sneezing. Caused fevers, shivering and severe headaches.

There were regular outbreaks.

Diphtheria: spread through coughing and sneezing. Also through contact with clothing of an infected person.

Typhoid: spread through contaminated food or water. The disease killed Prince Albert in 1861. Caused fever,

Cholera:
Case Study Cholera in Leeds: Cholera reached Leeds on 28th May 1832. The disease first hit a poor family in Blue Bell Fold, a cramped dirty yard in the poorer area of the city. The houses were built next to a stinking stream which flowed into the river Aire. The disease then spread quickly, by the end of July it had killed 187 people. Most victims were in overcrowded poor areas. In Boot and Shoe Yard for example ten people shared each of the small back to back houses. There was no water within a quarter of a mile, and only three privies for the 340 people living in the yard. Dr Baker who lived in Leeds kept track of the cases and highlighted that the areas afflicted were in the area of destitution. But Dr Baker believed it was miasma.

John Snow:
In 1854 there was a large outbreak of Cholera in the Broad Street area. Dr John Snow decided to track the cases in order to identify what caused the disease. He did not believe it was caused by miasma.

In order to confirm his ideas he marked on the map every case. He saw that very few people died from the work house and no body died from the brewery. Both of which had their own well. His anomaly that was far from Broad Street found that the lady that died collected water from the Broad Street pump as she liked the taste. He identified through interviews that the source of the Cholera outbreak was the Broad Street pump. Cholera was a waterborne disease, but he could not prove it scientifically.

The local residents were convinced and the pump was removed. However, the local preacher believed it was a punishment from God and the medical board still believed it was miasma.

Edwin Chadwick and the 1848 Public Health Act

SIGNIFICANT EVENT:1861 Louis Pasteur can scientifically link germs to disease. He first of all proved that alcohol is spoilt by bacteria. He then linked germs to disease in animals (silk worms). The Robert Koch took the next big leap by linking germs to disease in humans. The two of them, in competition, then used their research to create vaccines to protect people from diseases such as Cholera and Tuberculosis.

National Government:: Edwin Chadwick was a civil servant who wanted to save the government money by finding out why the poor were so sick constantly. He believed in miasma and he found that poor areas reeked, therefore miasma might be the problem. Public Health Act 1848: said that sewers should be built, clean water supplies, local boards of health etc and it was all to be paid for by local rate payers. The big problem was that it was optional and many people did not want to pay.

1867: the working class got the vote and to ensure a win at the elections the Conservative party promised a big clean up so the 1875 Public Health Act made actions from the 1848 Act and other acts compulsory. There was a massive increase improvement in public health but it still had a long way to go.

The Great Stink

Joseph Bazalgette: unwittingly saved the lives of thousands of Londoners. Although he was on the Metropolitan Board of Works they did not start anything immediately. It was not until the Great Stink of 1858 that Parliament decided to do something to clear up London. As it effected Parliament huge amounts of money was pumped into the Board of Works.

Bazalgette designed a massive and entirely new sewage system for London. He wanted to construct 82 miles of sewers running from west to east across the city. Three main sewers to the north of the river, and two to the south. The angle of the sewers would dump the waste into the Thames downstream. He also created pumping station (the likes that had never been seen before) tp pump sewage into huge covered reservoirs.

The sewers took seven years to build but the result was spectacular. Cholera and typhoid more or less vanished as the system prevented the spread of waterborne diseases. It was a huge revolution.

4. Public Health 1900-to the present

The quick over view:

By 1900 the majority of Britain still attended Church, and 55% of all children went to Sunday school. However, science was causing more and more doubt to religion. Science was advancing and the horrors of World War I only fuelled religious doubt. By 2001 only 10% of the British people attend Church. People now turned to science not prayer to fix problems.

By 1900 the population was at 37 million. With advances in machinery more food could be produced, but there was less need for labour. So people left the countryside for the towns and cities. Although the average working week was 54 hours there was still leisure time. By 200 the population is at 58 million with a larger mix of ethnicities due to Commonwealth migration. Larger population put much more strain on the welfare state, and later the NHS.

People may have still sat in the pub in 1900 but they still got plenty of exercise elsewhere whereas in 2000 the working hours are only around 39 hours and most people are entertained through technology and involves a lot less exercise. Binge drinking is also still an issue. Alcoholism is a continuous problem.

In the early 1900 most jobs were mainly manual labour and mostly done by the men. Married women did not work, but stayed at home to raise children, Unions did make some differences. In 2000 it was very different. A much larger middle class now existed and jobs became less manual but there was a better quality of life.

Science was accelerating. There were cars from 1896 on the roads and in the same year there were movies on screens. Wireless telegraph signal could reach from America to England. And science would advance rapidly for the next century. Chemicals, paints, pesticides and so much more. In the 1960s the arrival of the contraceptive pill which led to family planning. The world now had anti-biotics that ended many once life threatening infections. Travelling was much easier and much more advanced and ideas could now be published around the world in mere seconds.

By the 1880s many working men could vote and they wanted the national government to make changes. The government had to promise changes to secure votes. Between 1906 and 1911 the Liberal Party made many changes to create a welfare state. In 1945 the Labour Party was voted into power and they created the NHS in 1948 though in 2010 there were many cuts made to the NHS, due to cost.

It is important to realise that there were many changes in the 20th and 21st century, but still some continuity. There are also still many problems with the current public health system

Housing: In the first half of the twentieth century the government took more and more responsibility for the people's health. In 1909 Parliament banned back to back housing. Then there was further significant changes in 1919 which ordered councils to become landlords for the poor by building new, rented housing for the working class people in their area, used taxpayers' money to help fund each local authority's building programme, set standards for space, water supply, and drainage that all new houses had to meet.

These council houses were called 'homes fit for heroes'. In 1921 work started on the Becontree Estate in Dagenham, and in 1932 over 25,000 houses became homes for those in the East end. The houses had toilets and bathrooms INDOORS. Despite developments there were still slums and so parliament knew they had to force private landlords in 1930 to sell their houses in the slums to the council. The councils could then clear the slums and build new suitable housing.

Streets in the air: City councils wanted to build as many homes as they possibly could. Developments in gas and electricity meant they could start building high rises. The Second World War II saw a destruction of 475,000 houses this saw an enormous building programme for three decades. 4,500 high rises were built by 1980 and those that had lived in the back-to-back housing now moved into the tower blocks, but the communities were not as welcoming as they had been.

Decline of council housing: By 1979, 42% of the population lived in council housing of some sort compared with just 1% in 1900. Prime Minister, Margaret Thatcher, thought things had gone too far. She believed people should be less dependent on the state. In 1980 tenants were able to buy their council housing. 1.5 million council houses were sold. This led to a rise in renting which could be seen as a good thing but in reality 50% of private rented housing failed to meet the government's required standards for healthy homes set out in 2000.

Inactivity: the country faces a huge problem of inactivity. There are fewer active jobs, more cars and lazier forms of entertainment. A research project shows that in 2013 that three quarters of people who have no qualifications take little or not exercise.

Everyday life

Food: Big changes in the in the last 25 years of the nineteenth century led to changes in the way food was sold. Change of grocery stores such as Sainsbury's became popular. They were open every day unlike market stores. Fall prices were falling and wages were rising so luxury items like chocolate and sweets became much more affordable. By 1914 Britain spent 60% of their income on food, but by 1937, this had fallen to 37%.

War changes everything. WWII broke out in 1939. It became impossible to import goods from abroad so more effort was put into producing food at home. The government had to introduce food rationing to ensure there was enough to be fairly distributed. People with land would grow vegetables and keep animals. The war ended in 1945 but rationing continued in 1954. The health of Britain improved under rationing as everyone had to abide by a balanced diet.

Food supplies changed after 1950 as more families became wealthy. In 1959 13% of homes had refrigerators. More women were working so more families relied on ready-made meals. Preservatives meant these meals would keep for longer. Microwaves were invented in 1950 and they over took the sale of regular cookers in 1975. Convenient food was now part of the nation's life style.

We still face food scares. 1986 BSE infected cows, and in 1996 it became apparent that it could infect humans who eat the meat. This has been followed by foot and mouth scares. Also animals are now being given anti-biotics to kill infections, but in the long term this is making germs more resistant to anti-biotics which will create huge problems in the future.

Air: Smog was a huge problem. There were laws to prevent such thick smog but in reality little was done. In December 1952, London suffered the worst smog it had ever known it killed around 12,000 Londoners. In 1956 the government passed the Clean Air Act. This required factories to burn special types of 'smokeless' fuel, by the 1980s smog was less of a problem...

Factory smoke has become less of an issue but car exhaust fumes are. Car ownership became much more of an issue. Pollution is still big issue particularly in the cities.

Aids

Phase 1: 1970s-1983 – Growing Awareness by 1982 7 people in Britain had died from AIDS. Friends of one of these set up the Terrance Higgins Trust to raise funds for research and raise awareness of the illness. At this time very few people shared their concern over AIDS. The media took an interest in 1983 when a number of people had developed AIDS because of blood transfusions. The government urged gay people and drug addicts to stop donating blood. A Newspaper ran a story called 'Killer Blood' and soon two documentaries were shown on television about AIDS. They emphasised the condition was associated with gay men. One newspaper called it the 'Gay Plague'. Early reporting of AIDS raised concerns but many say that AIDS was not like Cholera or Spanish Flu and it should be avoided if men would refrain from having sex with men and if drug users kicked their habit. Some Church leaders preached it was God's punishment on gay people and drug addicts.

Phase 2: 1984-85 – Growing Alarm- People were unsure of how easily AIDS could spread and over reacted. Some fire service staff stopped giving mouth-to-mouth resuscitation. Some churchgoers refused to share the cup from which everyone drank their wine for Holy Communion. Parents withdrew their children from a class when one pupil acquired HIV through a blood transfusion. There was no risk of getting AIDS in any of these situations but at this time that was not made clear. People's fears then got worse when the Royal College of Nursing in 1985 wrongly predicted they would have 1 million cases of AIDS by 1991. The government made this worse when they told hospitals to detain patients with AIDS even if the patients wished to leave. Doctors and visitors had to wear gowns, masks and gloves which made fears about how AIDS spread worse.

Phase 3: 1986-87 by this time more helpful actions were underway: Charity groups, including some set up by churches, provided clean needles to addicts to reduce cross infection. The government funded free testing for HIV at hospitals and the screening of all blood donations so transfusions would be safe. The government organised an AIDS prevention campaign. It sent advertisements on TV on HIV to avoid contracting AIDS and leaflets to every home called 'Don't die of ignorance'. TV programmes, radio shows and posters helped to end the myths about how AIDS was spread. A major breakthrough happened in 1987 when the Princess Diana (who was the most popular member of the royal family) visited a clinic and made sure that the media took pictures of her shaking hands with an AIDS patient with no gloves on. She showed the nation that these victims should not be feared but shown compassion and respect.

Phase 4: 1988-95 Growing Acceptance -In the late 80s and early 90s AIDS was becoming more widely understood. In 1991 Eastenders ran a story about a character who was diagnosed as HIV-positive. In the same year Freddie Mercury (a huge rock icon) died from AIDS. In 1992 a tribute concert and a special release of one of his greatest hits raised around £20 million for the cause. This would have been unthinkable in the years before. AIDS was spreading but not at the rate that had been predicted by 1995 25,000 people had been diagnosed HIV-positive, 12000 of those developed AIDS and 8,500 had died.

Phase 5: From 1996 – Growing complacency - In 1996 came unexpected news that scientists had devised drugs called 'anti-retrovirals' that delayed onset AIDS in people infected by HIV. It was a very expensive but the government funded them. Great news. There were, however, unexpected consequences. The government relaxed its campaigns about AIDS and HIV as well as many other sexually transmitted diseases. In 2009 about 100,000 people in Britain are living with HIV of those 40,000 are gay men the rest are heterosexual men and women. About 25% are unaware they are living with HIV and may be spreading the infection without knowing it. Far from helping the epidemic the discovery of an effective treatment has made it worse.

Spanish Flu

The Spanish Flu: the Spanish Flu is the reason that Britain gets very jumpy about 'Swine flu' or Avian flu. The Spanish flu, which originating from Spain is a type of avian flu that killed over 50 million people. In Britain it killed 228,000 people.

It occurred in 1918 towards the end of World War I which allowed the flu to spread all around the world as men headed home from the war. Spanish flu was much like influenza it called a chill, high temperatures, headaches and pains then it turned into pneumonia and they struggled for oxygen. People could be healthy in the morning and then dead by the afternoon.

It is thought that the Spanish fly is an avian flu came from the far east that jumped into Chinese labourers. We still have no cure for the influenza today, vaccines offer some protection but it's not enough. A new flu virus could attack the world at any time and despite all our scientific advances we are still largely defenceless.

Dr Niven's work in Manchester in 1919 limited the spread of the Spanish Influenza. 2000 people died but his attempts to publish advice, close schools, show educational films made a difference. More died in Glasgow and London as a comparison.

AIDS: AIDS itself is not a disease it is just a condition where the victim's natural defences can no longer fight off other infections. Unlike other viruses it cannot spread by air or by touch. It can only be spread through blood or body fluids.