

## CHANGES IN HEALTH AND MEDICINE, c.1340 to the present day

### CONTENT AMPLIFICATION TO ENHANCE COVERAGE OF A WELSH PERSPECTIVE

Please note that the examples provided here are suggestions only. Teachers are encouraged to use examples from this list and any other appropriate local examples

Theme	Causes of illness and disease
Content Focus	Living conditions in the medieval era with reference to the Black Death
Welsh Perspective	Living conditions in medieval villages in Wales(e.g. Cosmeston); the Black Death in Caldicot, Carmarthen, Haverfordwest and Holywell
<b>Cosmeston</b>  <p>Cosmeston village grew up around a fortified manor house built by the De Costentin family in the early twelfth century. The De Costentin's were Norman knights who had come to Britain with William the Conqueror and then moved on to undertake the conquest of Wales with Robert Fitzhamon.</p> <p>The village was called Costentinstune, after the family of the first Lord of the Manor and the part of France where they originated, but over the years the name was altered and changed by local pronunciation. Eventually the village came to be known as Cosmeston.</p> <p>The houses were built of stone with thick thatched roofs. About 100 to 120 people lived in Cosmeston, farmers and fishermen, but there would also have been a travelling population, workers who came for specific tasks at set times of the year, and this might well have pushed up the population of the village to over 200.</p>	
<b>The Black Death</b>  <p>The plague first came to Wales in 1349, wiping out whole villages and severely damaging the economy of the whole country. It is estimated that over the course of a year is killed at least a quarter of the population.</p> <p>If the plague did not actually kill any of the residents of Cosmeston - and there is no evidence, either way - it would certainly have created a severe shortage of manpower in bigger communities such as Cardiff. The lure of higher wages would have induced many to move into the towns.</p> <p>Working the land around Cosmeston was never easy. The land is low lying and, although drainage ditches or dykes were regularly dug and extended, the arable land around the village probably flooded many times. Easier work was available in places like Cardiff. Small wonder Cosmeston became a classic deserted village.</p>	
<b>The Black Death and Caldicot</b>  <p>In 1348 the black death arrived in England and in April 1349 the first recorded instance of the plague was made in Wales. It was brought by travellers from southern England arriving</p>	

in Wales by sea.

In 1349 and again in 1361 the Black Death hit Caldicot, decimating the village. The manor accounts record that nobody could be found to serve as reeve (village headman) since all the villeins were dead.

The customs collectors at Carmarthen, an important port at the time, were amongst the first victims but soon the disease spread across the whole country. Caldicot was badly hit, as were the west Wales towns of Pembroke and Haverfordwest. The lead miners of Holywell, a close knit community, were virtually wiped out.

The symptoms were clear: a swelling in the armpit, violent headaches, sores that erupted into a rash and then death. To begin with, in the summer of 1349, Wales was ravaged by the bubonic version of the plague but as winter drove in the pneumonic version erupted in the rural communities. By the time the disease died away it has been estimated that some villages had their population reduced by as much as 80%.

However, for so many Welsh people the Black Death was a catastrophe. By the end of the 14th century the overall population of the country had been reduced from a total of 300,000 to under 200,000, a reduction of around 100,000 people. Nearly all of that was as a result of the Black Death.

### **The Black Death and Builth Wells**

The disease reached this small market town in about 1350 and the townspeople were quarantined. People from the surrounding countryside left provisions for the inhabitants on the banks of a small brook at the edge of town. The townspeople threw money into the brook to pay for these provisions. The water would cleanse the money, stopping the infection spreading. As a result, the brook became known as 'Nant yr Arian (Money Brook)

The huge death toll resulting from the Black Death meant that there were not enough people left to work the land in the countryside. In the Llanrhystud area of Ceredigion in west Wales, only 7 out of 104 workers survived.

The last outbreak was in Haverfordwest in 1652, killing about 300 of the population of 2,500 in 6 months.

<b>Theme</b>	Causes of illness and disease
<b>Content Focus</b>	The effects of industrialisation: cholera and typhoid
<b>Welsh Perspective</b>	Cholera epidemics in Merthyr Tydfil and Cardiff, 1848/49

### **Cholera epidemics in Merthyr Tydfil and Cardiff, 1848/49**

The outbreak of 1848/49 was very serious and over 3,000 people died in the county of Glamorgan

The first case of cholera in the 1849 epidemic occurred in Cardiff, with the death rate rising to 135 in June. The disease then spread to Newport; Aberystwyth also suffered an outbreak. However, Merthyr Tydfil suffered the greatest losses with a peak of 349 deaths in June.

Within the town, two thirds of the deaths occurred in Upper Merthyr, which had the highest levels of poverty and overcrowding. The cholera epidemic gave a sense of urgency to the need to carry out sanitary improvements across Wales. The Public Health Act of 1848 permitted the establishment of local Boards of Health and the new position of Medical Officers of Health (MOHs). It was an enabling, not a compulsory act and implementation depended on the initiatives of local communities.

There was little central government direction and powers were limited. Some 17 towns in south Wales petitioned to form Boards of Health around the time of the cholera epidemic, among them Cardiff and Swansea in 1848, Merthyr Tydfil in 1850, Aberdare in 1854 and Maesteg in 1858. All brought about some improvement in sanitation, but the effectiveness of reform depended greatly upon the balance of local interests.

In Merthyr Tydfil, despite some opposition from local ironmasters concerned to safeguard their own industrial water needs, a public water supply was established. A reservoir was completed in 1863, and sewage pipes were laid underground.

<b>Deaths from cholera, 1849</b>	
Merthyr Tydfil & surrounding area	1682
Cardiff	396
Swansea	262
Neath	245
Newport	209

Locally Holywell and flint suffered. The disease then spread to the villages of Northop and Halkyn.

### Exam Question

**Describe the living conditions in industrial towns such as Cardiff that led to cholera outbreaks in the mid nineteenth century. [6]**

*The living conditions in industrial towns such as Cardiff can be described with reference to several historical features; the huge growth in population in Cardiff in the early nineteenth century; in 1831 the population of Cardiff was 6,137: by 1849 the population of Cardiff was 16,000; in the 1840s, Cardiff had huge social and public health problems as a result of the period of rapid population growth; there was insufficient housing which caused overcrowding; there was very poor sanitation with people using the River Taff and the Glamorgan Canal was for both drinking water and sewage disposal; such overcrowded and filthy conditions meant that diseases spread very quickly amongst the population.*

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	Nineteenth century advances in medical knowledge
<b>Welsh Perspective</b>	The work of bonesetters (e.g. in Anglesey and Rocyn Jones at Rhymney) and links to the foundations of orthopaedics
<p>In the 18th Century, sometime between 1743 and 1745, a mystery shipwrecked child who could not speak a word of Welsh or English washed up in Anglesey. They were rescued by a smuggler called Dannie Lukie, from Anglesey.</p> <p>and helped to revolutionise Western medicine with never-seen-before bone-setting skills.</p> <p>Ever since, at least one in every generation of his descendants has worked in the field of orthopaedics, with his great-great grandson going on to save tens of thousands of lives on the western front in World War I.</p> <p>A local doctor adopted one of the boys and named him Evan Thomas. The boy began to take an interest in the doctor's work, and soon demonstrated a truly extraordinary skill.</p> <p>Evan Thomas used touch alone, firstly on injured animals, to feel where bones were broken, and would deftly manipulate the edges to ensure a better join when the fracture began to knit.</p> <p>He was also the first to use traction and splints to pull apart the over-lapping edges of breaks, and immobilise limbs while healing took place.</p> <p>His techniques, unheard-of at the time, continue to form the basis of orthopaedic surgery to this day.</p> <p>His great-grandson, Hugh Owen Thomas, who would find worldwide acclaim as the "father of modern orthopaedics".</p> <p>Hugh Owen Thomas, the first of the family to be formally trained as a physician, invented the Thomas Collar to treat osteo-tuberculosis, the Thomas wrench for reducing dislocations, and the Thomas splint, which greatly reduced deaths from femoral fractures among late 19th Century Liverpool dockers.</p>	
<p><b>Rocyn Jones (1822 - 1877)</b></p> <p>His father was well know for treating animal diseases in Cardigan, Carmarthen, and Pembroke Rocyn helped his father and took particular interest in the veterinary practice . As his experience grew, he began to use the knowledge which he gained with animals to the treatment of human injuries. Gradually his success as a bonesetter increased so much that he gave up the treatment of animals.</p> <p>He moved to Monmouthshire and settled in Rhymney. He built up his practise and his skills attracted patients from all over South Wales. He was skilful in the treatment of fractures, dislocations and muscle injuries. He devised carved wooden splints with a foot-piece, he moulded gutta percha splints for keeping the hand a rest and fully extended in cases of paralysis and severe tendon injuries.</p> <p>All of this was done at least fifty years before they became part of common professional treatment.</p>	

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	Improved knowledge of the germ theory
<b>Welsh Perspective</b>	The role of JW Power, MOH for Ebbw Vale in setting up courses on bacteriology e.g. Cardiff, 1898
<p>The MOH for Ebbw Vale, Dr J.W. Power, suggested that courses in bacteriology should be organised for MOHs, and in 1886 one was established at King's College, London.</p> <p>In 1898 a public health laboratory was established in Cardiff, jointly funded by Glamorgan County Council and the City of Cardiff. By the end of the nineteenth century Wales had undergone a major transformation. The sanitary movement and public health reforms had been instrumental in moderating the worst effects of rapid industrialisation and in improving the health of the people. Wales was beginning to develop a modern scientific approach to disease detection and control, to establish new institutions, and initiate training and research in the field of health.</p>	

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	The discovery of DNA and genetic research in the later twentieth century
<b>Welsh Perspective</b>	The work of Martin Evans on stem cells
<p>Martin Evans, born 1 January 1941 in Stroud, Gloucestershire, is an English biologist who, with Matthew Kaufman, was the first to culture mice embryonic <b>stem cells</b> and cultivate them in a laboratory in 1981. His work can be adapted for a wide variety of medical purposes. His discoveries are now being applied in virtually all areas of biomedicine – from basic research to the development of new therapies.</p> <p>In 2007 Professor he was awarded the Nobel Prize in Medicine for his ground-breaking discoveries.</p>	

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	Traditional treatments common in the medieval era
<b>Welsh Perspective</b>	The place of the mediciner of the household in the laws of Hywel Dda, with payment rates for treatments; curative wells (e.g. Ffynnon Gwenffrewi, Holywell)
<p>The laws of Hywel Dda were created in the 10<sup>th</sup> century. The physician was one of 26 named officers whose legal rights and duties were described in the laws of Hywel Dda. A court physician sits second next to the chief of the household in the hall. His land he has free, and a horse regularly from the king. He prepares medicines for the household for free and for the men of the court.</p> <p>St. Winefride's Well (Ffynnon Gwenffrewi) is a holy well located in Holywell, in Flintshire. St. Winefride was a legendary 7th Century Welsh noblewoman who was declared a saint. The legend tells how in 660 A.D., an enraged local chieftain severed the head of the young Winefride after she rejected his advances. A spring rose from the ground at the spot where her head fell, and was later restored to life by her uncle, St. Beuno.</p> <p>A healing spring at the site of her death is now a shrine and pilgrimage site, known as the</p>	

Lourdes of Wales.

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	Traditional herbal remedies
<b>Welsh Perspective</b>	The physicians of Myddfai
<p>The Physicians of Myddfai were herbalists, living and working in and around the Carmarthenshire village of Myddfai, Carmarthenshire in west Wales.</p> <p>Rhiwallon Feddyg (Rhiwallon the Doctor) and his three sons were court doctors to the Lord of Dinefwr during the 13<sup>th</sup> century. They wrote down their cures and remedies in order to share them with others.</p> <p>Remedies were made from only natural products, over 170 of them, grown locally in the Myddfai area. Many of the medicines were made from herbs and plants collected from hedgerows round Myddfai. They would grind the herbs using a pestle and mortar, then add boiling water to make herbal drinks, or mix them with plant oil to make ointments.</p> <p>They included cures for such things as headache, sunburn, swellings and pain in the legs, coughs and sneezes. It has been claimed, with some justification, that the birth of modern medicine can be traced back to these Physicians of Myddfai.</p> <p>Lord Rhys established and sponsored a new monastery at Strata Florida in about 1177. Strata Florida means layers of flowers and, before too long, the monastery had become a centre for herbal healing.</p> <p>The legend of the Physicians of Myddfai originates from this period, a time of new ideas and of great cultural development, not just in Wales but in the whole of Britain. And over the years the knowledge of these physicians, their healing arts and remedies, were passed down from one generation to the next.</p> <p>While the monasteries at places like Strata Florida and Talley continued their work, Myddfai also achieved fame as a centre of medical help. People came from all over the country to find cures and help for ailments, and the physicians were in constant demand - not just for people with money but for ordinary folk, too. For over 100 years the village of Myddfai was a place of great learning and excellence in the healing arts</p>	

<b>Theme</b>	Medical knowledge, prevention and treatment of illness and disease
<b>Content Focus</b>	Traditional Treatments
<b>Welsh Perspective</b>	Dynion Hysbys - wise men and use of charms
<p>Dyn hysbys means wise man. These figures were very common in Wales at one time, and their services ranged from stopping witchcraft, healing, and astrology, to fortune telling and uncovering lost property.</p> <p>In the nineteenth and early twentieth centuries Llangurig was especially famous for its <i>dynion hysbys</i>. Charms against witchcraft were written on a piece of paper which was carefully rolled up and sealed inside a bottle. This was then placed under the hearth or hidden in one of the main beams in the house, thus ensuring protection from witchcraft and any other evildoer.</p>	

<b>Theme</b>	<b>Patient care and public health</b>
<b>Content Focus</b>	The role of the church and monasteries from medieval times up to the mid sixteenth century
<b>Welsh Perspective</b>	Infirmaries within monasteries e.g. Franciscan Friary, Carmarthen; Tintern Abbey; hospital of Knights of St John (order of hospitallers) on pilgrim route at Ysbyty Ifan
<p>The Christian church taught that it was a religious duty to care for the sick. Monasteries and nunneries usually had infirmaries, which were kind of hospital ward looked after by the inhabitants. There monks and nuns as well as poor people or travellers who had been taken ill, could be treated. The infirmary tended to be separate from the main buildings, to avoid infection and to prevent travellers from speaking to the monks and corrupting them. This was the case at Margam Abbey in South Wales.</p> <p>In the 12<sup>th</sup> century the Christian church started to set up hospitals, run by monks and nuns. They got their name from the fact that they provided hospitality. Nearly 1200 of these places were created in medieval Wales and England. The Hospital of the Blessed David in Swansea was established c1332 for 'blind, decrepit or infirm priests and other poor men'.</p> <p>Ysbyty Ifan means hospital of St John, and got this name in 1190 after it came to the attention of the Knights of St John, an order of Hospitallers, who were bound to protect pilgrims on their way to the Holy Land and on religious journeys.</p> <p>They chose to set up a hospital and hostel to care for pilgrims in Ysbyty Ifan as it was located on several ancient pilgrimage routes, including Bangor-on-Dee and Holywell in north-east, and to Ynys Enlli /Bardsey island off the tip of the Llŷn peninsula.</p>	

<b>Theme</b>	<b>Patient care and public health</b>
<b>Content Focus</b>	The role of voluntary charities and endowed hospitals
<b>Welsh Perspective</b>	Predominance of voluntary hospitals across Wales including specialist ones such as Stanley Sailor's Hospital, Holyhead, 1871 and Hamadryad Seaman's Hospital, Cardiff from the 1860s

Stanley Sailors's Hospital was opened in 1871. It was built on Salt island at a cost £1,170. Initially it treated only sailors but later developed as a general hospital. It was taken over by the NHS in 1948 and closed in 1987. It was very busy during the wars of the 20<sup>th</sup> century. Hundreds of patients from all over the world passed through the hospital during the course of the First World War as well as a large number of staff. Many of the nurses came from the voluntary Aid Detachment (VAD) of the Red Cross.

The Hamadryad was the port's Seaman's Hospital. Dr Paine, medical officer of health for Cardiff from 1855 until 1887, was very concerned about sailors bringing infectious diseases like cholera, smallpox and typhoid into the docks from where they might spread into Cardiff itself.

At a public meeting in March 1866 it was proposed that a hospital ship be brought to the docks. The proposal for a hospital ship was agreed, and the Admiralty offered to loan the old frigate Hamadryad as the base for the establishment.

The Hamadryad was brought from Devonport and converted into a hospital ship.. As well as beds and wards for patients, accommodation was also provided for a medical superintendent, a matron and a number of nurses.

Originally moored in East Bute Dock, the Hamadryad was soon moved to a patch of land, waste ground, donated by the Marquis of Bute. Ominously, it was called Rat Island. Alterations complete, the Hamadryad opened as a hospital on 1 November 1866 with Mr Vavasour as the first medical superintendent.

In the first year of operations over 400 patients were treated, most of them from ships in Cardiff Dock but some from places such as Swansea and Barry. Over the years of her existence thousands of sailors – and people from the immediate locality – were helped.

### **No women policy**

Sailors of all nationalities were treated in the hospital, either as day patients or as full admissions. In 1897 Dr Hughes, the medical superintendent at the time, reported that 379 people had been admitted while many more had been treated as casualties and day patients. Interestingly, while men of all nations were admitted, no women were allowed – and neither was anyone suffering from scabies or lice.

After admission all patients were given a bath and a haircut and were then issued with hospital clothing. It was a practice that continued right up into the 20th century.

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<b>Theme</b>	<b>Patient care and public health</b>
<b>Content Focus</b>	Nursing from the mid-nineteenth century
<b>Welsh Perspective</b>	Betsi Cadwaladr in military nursing responds to unhygienic conditions and bureaucracy in the Crimean War
<p>Betsi Cadwaladr was born in Bala, North Wales, in 1789, one of 16 children. Her father was a Methodist preacher.</p> <p>Wanting to see the world, she ran away from home aged 14, travelling to Liverpool and then to London. Between 1815 and 1820 she served as a maid to a ship's captain and visited places in South America, Africa and Australia.</p> <p>On her return to London she trained as a nurse and in 1854, aged 65, she went to the Crimea to help nurse wounded soldiers.</p> <p>She showed that she would do anything to improve the quality of care for her patients. She strongly disliked the bureaucracy that Florence Nightingale had set up; this served to deprive the wounded of food, clothing and even bandages. As she didn't get on with Florence Nightingale she moved from the hospital at Scuteri to balaclava; she cleaned wounds and changed dressings, working from 6am to 11pm.</p> <p>When Florence Nightingale witnessed what Betsi had achieved at Balaclava, she was won over to her ways. Betsi worked in the Crimea until the war took its toll on her own health, suffering from cholera and dysentery. She left the Crimea in 1855 (aged 66). She died in 1860. The Betsi Cadwaladr NHS Trust in North Wales commemorates her work.</p>	

<b>Theme</b>	<b>Patient care and public health</b>
<b>Content Focus</b>	Aneurin Bevan and the setting up of the NHS
<b>Welsh Perspective</b>	Aneurin Bevan influenced by his background in south Wales
<p>By 1944 the new national health system was being planned, and following the election of a Labour Government in 1945 Aneurin Bevan, Labour MP for Ebbw Vale, was appointed Minister of Health.</p> <p>Bevan's first challenge was to convince the public of the need for the creation of a national health service. He argued that everybody had the right to medical treatment according to need, having contributed into a health insurance scheme. Everybody would be treated the same, regardless of whether they were rich or poor. He wanted to create a health service that cared for people 'from cradle to grave'.</p> <p>Bevan had been born in Tredegar where the Tredegar Workingmen's Medical Aid Society had been established to provide free medical aid and hospital treatment in return for a small weekly subscription.</p> <p>Bevan faced opposition, mainly from the British Medical Association, who didn't want to be</p>	

controlled by the government. Bevan was, however, very persuasive and eventually won over the medical profession to his ideas.

<b>Theme</b>	<b>Patient care and public health</b>
<b>Content Focus</b>	Victorian improvements in public health
<b>Welsh Perspective</b>	Sir Henry de la Beche 1844 Report on Conditions in Merthyr. The building of reservoirs in Wales from the 1860s

Sir Henry De La Beche, reporting on Merthyr Tydfil, in 1844, stated that:

"There was no water supply -- there were some privies at the few decent houses, but none at the cottages. Slops and refuse were thrown on the unmetalled highways and streets, and on mounds of coal-ashes at every turn.

There was a great number of poor as indicated by the fact that between 6,000 and 7,000 persons, out of a population of 37,000 (one out of six), were relieved from the poor-rates annually."

"A large number of cottages consist of only two rooms, the upper being the sleeping apartment of the family, and usually ill-ventilated. Mr Davies, superintendent of the Merthyr police, states, that in these two-roomed houses, occupied by workmen, there are generally three beds in the sleeping apartment, containing five or six persons. These cottages are often very small, 8 feet by 10 feet and 8 feet by 12 feet, being not uncommon."

"The worst part of the town of Merthyr Tydfil was an area known as 'The Cellars', where 1500 people lived in cramped and unhealthy conditions. Living conditions here consist of small houses of two stories, situated in a depression between a line of road and a cinder heap.....The space between these houses is generally very limited; and an open, stinking, and nearly stagnant gutter, into which the house refuse is, as usual, flung, moves slowly before the doors. It is a labyrinth of miserable tenements and filthy."

The Report concludes:

"Merthyr Tydfil, with Penydarren and Dowlais, may be regarded as chiefly a large cottage town without public care for supply of water, drainage, or cleansing; the open character and small height of its straggling buildings, and consequent exposure to sun and air, saving its population from still greater evils than those to which they are now exposed from the filth so abundant in it."

The difficulties of obtaining water in Merthyr Tydfil were a particular problem. People had to queue for it at waterspouts in the street. Sometimes women would queue for up to ten hours at a time for their turn and then some would have to leave without any water at all.

Without proper sanitation or clean and regular water supply, the filthy conditions in the poorest part of Merthyr Tydfil led to waves of cholera and typhoid epidemics seeping through the town in the first half of the 19<sup>th</sup> century.

