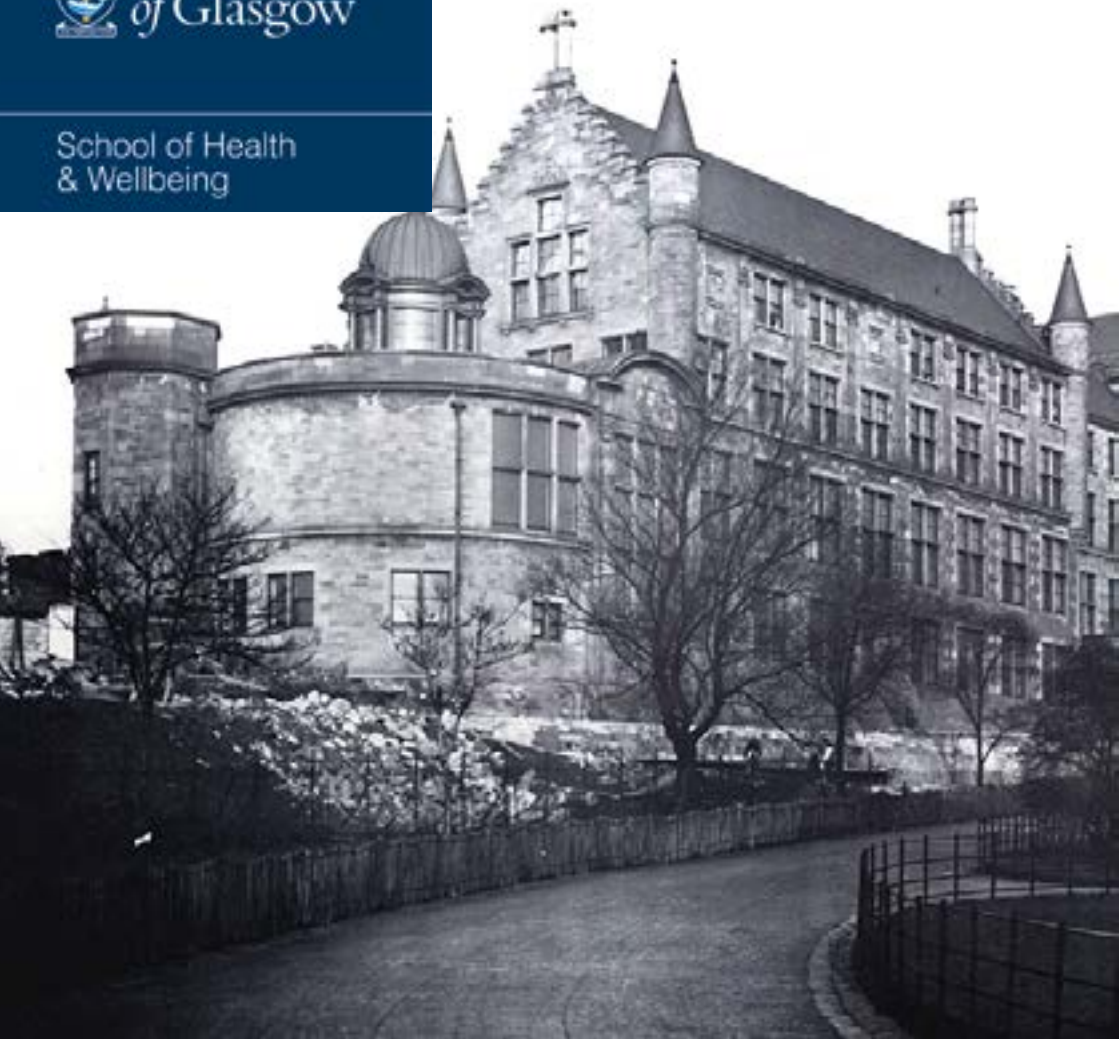




University
of Glasgow

School of Health
& Wellbeing



A Celebration of

**ONE HUNDRED YEARS
OF PUBLIC HEALTH**

at the

University of Glasgow

Foreword



2023 sees the centenary of academic public health in the University of Glasgow; 100 years since the appointment of the first Henry Mechan Chair in Public Health. Over that time, improvements in living conditions, prevention, screening and treatment have achieved many significant successes. The development of vaccines brought an end to historical public health scourges such as smallpox and polio, and improvements in diet and housing significantly impacted conditions such as rickets and tuberculosis.

Whilst we have seen significant improvements in some aspects of lifestyle, such as reduced tobacco smoking, new risk factors such as obesity have now emerged. It took 50 years from understanding the public health threat of tobacco to making meaningful progress in addressing it. We need to adopt greater urgency in addressing current threats to public health, the lack of progress made in tackling climate change being the most obvious example.

Overall improvements in many measures of health have been marred by the persistence of inequalities in health, and the solution cannot be delivered by the health sector in isolation. Throughout the century there has been an understanding that the determinants of health extend beyond the individual and healthcare. Just as our predecessors highlighted the need to improve housing conditions, provide clean air and water and access to healthy food, so we continue to work with partners outside of the health sector to ensure that people live in a safe, secure and supportive environment in which healthy choices are accessible and affordable to all.

Unfortunately, some public health problems have come full circle. A century ago, communicable diseases, such as pneumonia and dysentery, were major contributors to mortality and morbidity. Antibiotics greatly reduced the incidence and impact of such conditions. However, over recent years, the development of antimicrobial resistance, such as drug-resistant tuberculosis, and increases in zoonoses, such as avian influenza and coronaviruses, have resulted in the re-emergence of communicable diseases as a major threat to public health. Addressing this problem will need the combined efforts of multiple partners; not only medical and veterinary practitioners, but also the animal husbandry and food industries. In addition, we have encountered, over recent decades, an increasing mismatch between supply and demand. The

finite resources of the health and social care sectors are overstretched due to improved survival, an aging population, and an increase in multimorbidity.

Our 100th anniversary is an ideal time to reflect on what we should learn from our successes and failures. We should take confidence from successes in addressing apparently intractable problems that are now of largely historical interest. We should also acknowledge that the successes have largely been gained where different parties have put self-interests aside and come together to share their insights and ideas, and work together on identifying and delivering the solutions: “It is amazing what you can achieve if you don’t care who gets the credit.”

Professor Jill Pell CBE, FPHM, FRSE, FMedSci
Henry Mechan Professor of Public Health
University of Glasgow

Contents

Foreword	
Professor Jill Pell, Henry Mechan Professor of Public Health	3
Introduction	
Prologue - Public Health in the 19th Century	6
Sir Henry Mechan KB 1855-1943	8
Letter from Henry Mechan Endowing the Chair of Public Health	10
Henry Mechan Professors of Public Health	12
The Homes of Public Health in Glasgow	15
Public Health Training and the Diploma in Public Health	16
Master of Public Health	18
Public Health in the 1940s	20
Public Health in the 1960s	22
A Century of Public Health	
1923-1929 - At the Birth of Public Health at the University of Glasgow	26
1930-1939 - Evolution of Cancer Services, Economic Strife & the Gathering Clouds of War	28
1940-1949 - War and its Aftermath	30
1950-1959 - The Post-War Years	32
1960-1969 - A Decade of Contrasts and Social Change	34
1970-1979 - Organisational Reform	36
1980-1989 - New Diseases, New Public Health Challenges	38
1990-1999 - Vaccines, vCJD and Scotland's Changing Population	40
2000-2009 - The Rise of Global Terrorism, Epizootic and Zoonotic Diseases	42
2010-2022 - Public Health in 21st Century Scotland, COVID-19 - a Global Pandemic	44
One Hundred Years of Public Health in Glasgow: What has Changed?	46
Reflections	
Memories of Glasgow from Former Staff and Students	47
Contributors	58

Cover image: The West Medical Building, home of the new Public Health laboratories, at the time of its opening in 1907. University of Glasgow PHU27/4

Prologue

Public Health in the 19th Century



The 19th century saw the evolution of the speciality which was to become formalised as Public Health, as the rapid urbanisation which resulted from the Industrial Revolution was accompanied by an increase in disease and mortality in consequence of overcrowding and poor living conditions. In Glasgow, **James Cleland** (1770-1840), **Sir William Gairdner** (1824-1907) and **John Glaister** (1856-1932) (pictured left to right above) were especially influential in drawing attention to these wider influences on health, and in setting the scene for the establishment of a Chair of Public Health at the University of Glasgow.

James Cleland was born in the Trongate, Glasgow in 1770 and initially worked in the manufacture of wooden packing cases. He was a member of the Incorporation of Wrights, one of the fourteen mediaeval trades guilds of Glasgow which continued in existence, and continue to this day. The Incorporations collectively formed the Trades House of Glasgow and by the 19th century, their role had become (and remains today) predominantly concerned with welfare and charity. Cleland became the Collector (treasurer) of the Wrights in 1794 and Deacon (chairman) in 1796. He was active in civil life, being appointed Bailie for the Gorbals in 1803 and for the City of Glasgow in 1806. In 1814 he became Superintendent of Public Works in Glasgow, and two years later he published *Annals of Glasgow*, which highlighted issues of population growth and poverty in the city. It is for his work as a statistician that he made his greatest contribution to Public Health, with the publication of many books and documents including his seminal *Historical Account of Bills of Mortality of the Probability of Human Life in Glasgow and other large towns* (1836). This drew attention to the link between deprivation and poor health, and presaged the understanding of the role of health inequalities which would be further developed much later by Sir Douglas Black (1980), Sir Donald Acheson (1988), Vera Carstairs (1991) and Sir Michael Marmot (2010 and 2020).

Sir William Tennant Gairdner came from a medical background. The son of John Gairdner, who would later become President of the Royal College of Surgeons of Edinburgh, and his wife Susanna Tennant, he was born on 8 November 1824. After

studying at the Edinburgh Academy and the University of Edinburgh, he graduated MD in 1845. His first post was at the Royal Infirmary of Edinburgh, but in 1862 he was appointed Regius Professor of Medicine at the University of Glasgow and physician to the Western Infirmary. Already showing an interest in Public Health, he became part-time Medical Officer of Health for Glasgow in 1862, a post he held for 10 years. The title of his textbook *Public Health in Relation to Air and Water* calls to mind Hippocrates' *On Airs, Waters and Places*. He soon became acutely aware of the problems caused by extreme overcrowding, and he made a major contribution to the health of the City when he introduced "ticketing" to limit the number of people permitted to inhabit a dwelling. Recognising the importance of Public Health, and the need to place it on a firm academic footing, in 1898 he campaigned for the University to establish a Chair of Public Health. The proposal proved unaffordable and the compromise agreed by the Senate meant that it would remain a joint Chair of Forensic Medicine and Public Health for the next 25 years.

John Glaister was born in Lanark on 9 March 1856, the son of Joseph Glaister and his wife Marion Hamilton Weir. Educated at Lanark Grammar School, he trained in Medicine at the University of Glasgow, graduating MB in 1879 and MD in 1885. He married Mary Scott Clarke; their second son, also John, saw active service in the First World War and succeeded his father as Professor of Forensic Medicine in 1931; Glaister father and son occupied the Regius Chair of Forensic Medicine for over 60 years.

Initially, Glaister worked as a general practitioner in Townhead, and as a police surgeon in Glasgow. The latter work was an especial interest, and he was appointed Lecturer in Medical Jurisprudence at the Medical School in 1881 and Special Lecturer in Public Health in 1887. He also taught Public Health at St Mungo's College. He became Professor of Forensic Medicine and Public Health at the University of Glasgow in 1888 and was appointed to the Regius Chair in 1898. Nonetheless his Letter of Commission as Regius Professor, signed by Her Majesty Queen Victoria on 26 March 1898, confirms the aspiration for a separate Chair of Public Health in due course. *"Provided always that if and when a separate Chair of Public Health or Sanitary Science shall be founded in the said University the said John Glaister shall if required by the University Court cease the teaching of Public Health."*

He was to teach "Public Health sufficient to qualify for graduation in Medicine". The initial fee for the course in Public Health was to be 12 guineas for 6 months' teaching, or 6 guineas for 3 months. Men and women were to be taught separately, the latter at Queen Margaret College although initially, the male students were also taught there until a duplicate set of Public Health laboratory apparatus was obtained. In 1907 Prof Glaister oversaw the opening of the new state-of-the-art Public Health laboratories in the Western Medical Building. Most importantly, in 1903 he had introduced the postgraduate degrees of BSc and DSc in Public Health for medical practitioners. However, in 1922 he relinquished the professorship in Public Health in order to concentrate on his legal work, in which he was by now a renowned authority. This forced the University's hand into establishing the separate Chair of Public Health which had been envisaged by Gairdner, facilitated by the timely and generous donation by Glaister's friend Henry Mechan.

Sir Henry Mechan KB 1855-1943

Henry Mechan was born in Anderston, Glasgow in 1855, the eldest child of Arthur Meighan or Mechan, a Glasgow businessman and councillor, and his wife Mary Belshaw. He was educated at the Anderston College before becoming an apprentice in his father's engineering firm. He had three brothers, Samuel, Arthur and Joseph, the latter two becoming medical practitioners having graduated MB CM at the University of Glasgow in 1879 and 1887 respectively, whilst Samuel and Henry joined the family business.



The family business, variously Mechans Ltd or Mechan & Sons Ltd, was established by Arthur Mechan Snr in 1862. He retired in 1893, leaving the business in the hands of his sons Henry and Samuel. In 1871 it was recorded as “employing 30 men and 10 boys”. Initially located at the Cheapside Works and manufacturing goods in copper and tin, then at the Neptune Brass and Copper Works at Cranstonhill from 1880, it eventually settled into its permanent home at the Scotstoun Iron Works from 1900, with an office in London.

The firm made ships' fittings, mining machinery, industrial conveyers and much else, enjoying great commercial success throughout the heyday of Glasgow's heavy industry. It finally closed its doors in 1963, having passed out of family hands in 1960, following the decline of heavy engineering in Glasgow.

Henry Mechan's philanthropic commitment was established at an early stage in his career when he entered the Trades House of Glasgow, of which James Cleland had been a member a century earlier. Appropriately for an engineer, he joined the Incorporation of Hammermen on 22 December 1890, and was appointed to the Master Court in 1908, becoming its Collector in 1914 and Deacon in 1916. All Deacons of the Hammermen contribute a gold link to the Deacon's gold chain of office, in a design usually alluding to their business; appropriately enough for an engineer appointed in 1916, the link that he added is a French 75mm shell.

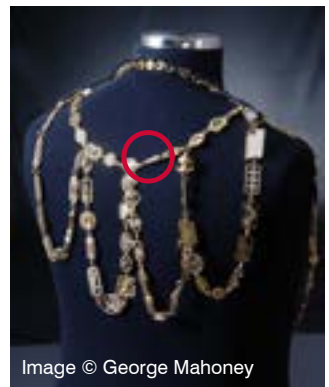


Image © George Mahoney

He married Jane Stewart, daughter of Sir Andrew Blackwood Stewart; the couple had no children. Perhaps as a consequence of his brothers' careers in Medicine and of the charitable endeavours of the Incorporation of Hammermen, he was acutely aware of the public health issues affecting Glasgow in the late 19th and early 20th centuries, and on 11 November 1922 he wrote to the Principal of the University of Glasgow Sir Donald MacAlister KCB MD LLD offering to endow a Chair of Public Health, with a donation of £25,000 (equivalent to around £1.5 million now). The Chair was approved at a meeting of the University Senate in 1923. Henry Mechan's offer could not have been more timely, coinciding with Professor John Glaister's relinquishment of the Public Health role of his own Chair. Indeed, as John Glaister was also involved in the Trades House, having become a member of the Incorporation of Barbers in 1918, these two events are unlikely to have been entirely coincidental; there is at least one record that Mechan and Glaister, who were the same age, were friends.

In 1927, Henry Mechan was made a Knight Bachelor "For Political, Public and Philanthropic Services in the West of Scotland", a richly deserved honour. However his philanthropy was not yet finished. In 1914, Sir John Stirling Maxwell who, like Henry Mechan was a member of the Incorporation of Hammermen, had chaired a meeting at the Merchants' House which resulted in the setting up of a committee to support the early cancer services in the West of Scotland, and in 1929 Sir Henry and Lady Mechan donated the sum of £5,000 (equivalent to around £335,000) towards this cause. In the same year, he was appointed Lord Lieutenant of Renfrewshire.

Such was Henry Mechan's contribution to Public Health that in 1931 he was installed as President of the 42nd Congress of the Royal Sanitary Institute, which was held in Glasgow from 4-11 July of that year. In his Presidential Address, he paid tribute to the contribution that improvements in Public Health had achieved in Glasgow, where life expectancy for a male child had increased by 17 years and a female child by 20 years in the course of the preceding half-century. It is perhaps unfortunate, in the light of later understanding of health risks, that the press report of his address in *The Courier and Advertiser* appears immediately above a prominent advertisement for cigarettes, which in turn is above an advertisement for whisky. The Congress was accompanied by a Health Exhibition held in the McLellan Galleries on Sauchiehall Street, thus contributing to the ethos of public education in matters of health and hygiene. The Congress comprised five parallel conferences, aimed at representatives of the Sanitary Authorities, Medical Officers of Health, Engineers and Surveyors, Sanitary Inspectors and Health Visitors, demonstrating the multidisciplinary nature of Public Health which was further underlined by the topics covered: Preventive Medicine, Architecture and Engineering, Maternity, Child Welfare and School Hygiene, Hygiene of Food, Hygiene in Industry, Veterinary Hygiene, and National Health Insurance—topics which would not be out of place today, nearly a hundred years later.

Sir Henry Mechan died in 1943, his wife surviving him by only three years. Five years after his death, his company endowed the Henry Mechan Chair of Engineering in his memory. Although little known outside Glasgow academia, he deserves a place among the "greats" of Public Health.

1922

Original letter from Henry Mechan to the Principal of the University, Sir Donald MacAlister, endowing the Chair of Public Health

11th November 1922

The letter was presented at the meeting of the University Court held in the Court Room on Thursday 14th December 1922.

Its approval paved the way for the appointment of the first Henry Mechan Professor of Public Health in 1923.

SUNDOWN
KELVINSIDE
GLASGOW
11.11.22

My dear Principal

I have read under consideration for some time the desirability of securing in some language form which would be for the benefit of the Community the present and future work which is being done in the University. In view of the fact that I have reached the conclusion that I could best do this by the endowment of a Chair of Public Health, & accordingly I would propose subject to the approval of the University Court to make over to the University the sum of £25000 for the establishment & equipment of such a Professor's Chair.

It must be explained by me that the money is to be used for the purpose I have stated, I attach no conditions to my gift, preferring not so that the accomplishment of my purpose should be left to the University authorities.

It is my sincere hope as it is my belief, that the advancement & diffusion of knowledge in all matters pertaining to the public health will be a practical & permanent benefit to the Community.

Yours very truly
Henry Mechan

To Donald MacAlister
Principal
The University

Transcript of Letter from Henry Mechan to the Principal of the University of Glasgow

SUNDOWN
KELVINSIDE
GLASGOW

11th November, 1922

My dear Principal,

I have had under consideration for some time the desirability of recognising in some tangible form, which would be for the benefit of the community, the great and important work which is being done by the University of Glasgow. After much thought I have reached the conclusion that I could best do this by the endowment of a Chair of Public Health, and accordingly I would propose, subject to the approval of the University Court, to make over to the University the sum of £25,000 for the establishment and equipment of such a Professorship.

Beyond the expression of my direction that the money is to be used for the purpose I have stated I attach no conditions to my gift, preferring as I do that the accomplishment of my purpose should be left to the University authorities.

It is my sincere hope, as it is my belief, that the advancement and diffusion of knowledge in all matters pertaining to the public health will be of practical and permanent benefit to the community.

I am, my dear Principal,

Sincerely yours,

(signed) Henry Mechan

Sir Donald MacAlister K.C.B, M.D., LL.D,
The University

Henry Mechan Professors of Public Health

1923 John Ronald Currie

Professor JR Currie was born in Ayr and studied at the Universities of Oxford and Edinburgh, gaining degrees in the Arts, before studying medicine in Glasgow where he graduated MB in 1898 and MD in 1910. After working at various hospitals in Glasgow including the Glasgow Smallpox Hospital, he was appointed Medical Officer of Health for Chester, later returning to Scotland to take up a post in Fife. After service in the First World War, he was appointed Medical Officer to the Scottish Board of Health. He was appointed Professor of Preventive Medicine at Queen's University, Kingston, Ontario in 1922, returning to Scotland the following year on appointment as the first Henry Mechan Professor of Public Health. He also served as Clerk of Senate from 1930.



1940 James Macalister Mackintosh

Professor JM Mackintosh was born in Kilmarnock and studied for an Arts degree at Glasgow, developing an interest in Medicine in the course of his MA studies. Still a medical student at the outbreak of the First World War, he joined the Infantry and was seriously wounded at the Battle of Loos. He returned to the University to complete his studies and rejoined the Army on graduation, returning to France in 1918. His academic career continued as he gained the DPH in 1920, MD in 1923 and then was appointed a barrister in 1930. After positions in Public Health in England, he was appointed Chief Medical Officer for Scotland in 1937. He succeeded Professor Currie as Henry Mechan Professor of Public Health in 1940, departing in 1944 on appointment as Professor of Public Health at the London School of Hygiene and Tropical Medicine.



1944 Thomas Ferguson CBE

Professor T Ferguson was appointed in 1944 and would continue in post for the next 20 years. He was an Edinburgh graduate (MB ChB 1922, DPH 1923, MD 1924). He was HM Medical Inspector of Factories 1929-1930, where he was instrumental in raising awareness of Health and Safety at work. He worked for the Scottish Department of Health from 1933 to 1944, until his appointment to the University. He and his wife, who predeceased him, had no children and his entire estate was left to the University with an instruction that the money was to be used to foster the social side of life at the University. The Ferguson Bequest continues to fund a wide range of activities for the benefit of staff and students including the popular "Music in the University" lunchtime concerts.



1870-1949

1891-1966

1900-1977

1964 Thomas Anderson CBE

Professor T Anderson, known as "Tam", was educated at Glasgow High School and graduated MB ChB at the University in 1928. Specialising in infectious diseases, he worked at Ruchill Hospital from 1933 until his appointment as Lecturer in Infectious Diseases at the University in 1941. During this period he was also Physician Superintendent at Knightswood Hospital. He was promoted to Reader in 1947 and Professor of Infectious Diseases in 1959. In 1964 he was appointed Henry Mechan Professor of Public Health, a post he held until his retirement in 1971. Renowned as an inspirational teacher, he introduced management courses into Public Health education, and did much to modernise the department. He was appointed CBE in 1972.

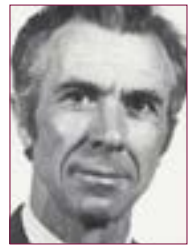
1904-1990



1972 Gordon Thallon Stewart

Professor GT Stewart was born in Paisley and educated at Paisley Grammar School, where he was Head Boy. He graduated BSc at the University of Glasgow in 1939 and MB ChB in 1942. As a Surgeon-Lieutenant in the Royal Navy during the Second World War, he served on escort duties with the Arctic Convoys in the most challenging of conditions. He was able to make use of the newly-discovered penicillin in the treatment of war wounds, and later he had the privilege of working with its discoverer Sir Alexander Fleming. His illustrious career culminated in his appointment as Henry Mechan Professor of Public Health. An internationally-renowned epidemiologist, one of his later roles was in support of children damaged by whooping cough vaccine.

1919-2016



1984 Anthony Johnson Hedley

Professor AJ Hedley was born in Lancashire and studied Medicine in Aberdeen. He was a passionate campaigner on matters of public policy, particularly focussing on tobacco control and reduction of air pollution. He became Titular Professor of Community Medicine at the University of Glasgow in 1983, and the following year he was appointed to the Henry Mechan Chair, a post which he held until 1988 when he left to become Professor of Community Medicine at the University of Hong Kong, where he lived until his retirement in 2010. His premature death deprived Public Health of one of its most influential and colourful characters.

1941-2014



1989

James McEwen

Professor J McEwen was appointed to the Henry Mechan Chair in 1989, having previously been Professor of Community Medicine at King's College London 1983-1989. Prior to that, he was Director of Public Health for Camberwell, London. He served as President of the Faculty of Public Health of the Royal Colleges of Physicians from 1998 to 2001. He demitted office in 2000 but remained as an Honorary Senior Research Fellow for some years. A landmark during his tenure was the restoration in 1990 of the original name of Public Health to the Department, following a period as the Department of Community Medicine, although the Henry Mechan Chair did not change its title.

b.1940



2000

David Goldberg

Professor David Goldberg is a clinical epidemiologist with a particular interest in blood-borne infections. He was appointed Henry Mechan Professor of Public Health in 2000, a position he held until 2006. He remains an Honorary Professor at the University. His other roles have included Deputy Director of Public Health Scotland and former Acting Director of the Scottish Centre for Infection and Environmental Health, and he is Professor of Epidemiology and Population Health at Glasgow Caledonian University.

b.1959



2007

Jill Pell CBE

Despite the specialty of Public Health having bridged the gender boundary many years earlier, Professor Jill P Pell was the first woman to be appointed Henry Mechan Professor of Public Health. Formerly Professor of Epidemiology at the British Heart Foundation Cardiovascular Research Centre, her research interests centre on the epidemiology of chronic disease. Her ground breaking paper on the impact of Scottish smoke-free legislation brought international acclaim. She was awarded the CBE in 2017 "For Services to Public Health Research".

b.1964



The Homes of Public Health in Glasgow



1907-1949

The Western Medical Building



1949-1964

No. 6 University Gardens



1964-1985

The White House, Ruchill Hospital



1985-2023

1-3 Lilybank Gardens



2023

The Clarice Pears Building

Public Health Training and the Diploma in Public Health

The Diploma in Public Health (DPH), regulated by the General Medical Council (GMC) as the national standard-setting body, was introduced in 1871, following the publication of the report of the Royal Sanitary Commission which made local authorities responsible for health and welfare¹. The Diploma established professional standards for Medical Officers of Health (MOHs), and courses were quickly established by the major universities. It was in 1876 that the University of Glasgow passed a resolution to institute formal training in Public Health. Initially, the curriculum largely comprised training in Epidemiology, Population statistics and Communicable diseases,. As noted in the Prologue, teaching flourished under the guidance of Professor John Glaister, receiving a major boost with the opening of the new Public Health teaching facilities and laboratories in the Western Medical Building on 23 April 1907.

On 25 November 1920, the Senate approved the recommendation by the Faculty of Medicine to establish five new Diplomas in Special Branches of Medicine and Surgery, including Public Health. The Public Health course was to have additional Special Certificates in Industrial Hygiene, School Hygiene, Tuberculosis, and Venereal Diseases. Detailed Regulations for the DPH were placed before Senate on 3 February 1921, and recommended revisions were submitted on 19 June 1922. Thus on his appointment as the first Henry Mehan Professor of Public Health in October 1923, Professor (later Sir) John Currie was well placed to oversee the implementation of these changes.

He was able to describe the impact of the changes in Public Health training in Glasgow in his Presidential Address which was read at the 1931 Conference of Medical Officers of Health, part of the 42nd Congress of the Royal Sanitary Institute (of which Henry Mehan was President—see page 9). Unfortunately Professor Currie was not present in person owing to a “diary malfunction”! The long-desired emphasis on scientific training had now come to fruition, and Part 1 of the new course was to cover “chemistry, physics, meteorology, climatology, bacteriology, immunology, protozoology, entomology, helminthology, and the recent additions of physiology with biochemistry and radiology with electrology . . . and their relation to public health”.

¹ Cole K, Sim F, Hogan H. The evolution of public health education and training in the United Kingdom. *Public Health Reviews*. 2011 Jun;33(1):87-104.

Part 2 was to have a more traditional focus on “hygiene and sanitation, epidemiology and infectious disease, sanitary law and vital statistics and public health administration”, which would constitute the “life work” of the Medical Officer of Health.

Professor Currie’s address included a number of key messages which still resonate today, nearly 100 years later. For example:

“The first care of the teacher should be to hold fast to the essentials. He must not be lured away from the verities by any fugitive catchword of the moment.”

“He should . . . deal fully with those projects or movements which, although not new to science or medicine, are from time to time thrown into relief by the turn of events or the course of legislation.”

“The teacher of hygiene owes it to those candidates for the Diploma who have entrusted their destinies to his guidance to include in his course ...”

The new Glasgow DPH courses led by Professor Currie were acknowledged to be “the leading ones in Britain”, building on the degrees of BSc and DSc in Public Health which had been introduced in 1903 and opening up training to a wider section of the medical profession.

The University is fortunate to hold in its archives the “day books” of two DPH students, which provide a fascinating and detailed insight into the topics covered and methods of teaching. Outside visits to localities of Public Health importance were a prominent part of the students’ day, providing real-world experience.

Dr Andrew Patrick Curran (1917-1997) studied for the DPH in the 1940s. He would later become a Senior Lecturer in Community Medicine (as Public Health was known for a time) at the University of Glasgow, after working as Deputy Medical Officer of Health in Luton and West Ham. As an officer in the Royal Army Medical Corps, he had also seen military service in East Africa, where he made an important contribution to Public Health programmes in Nigeria. In his day book, he described undertaking visits to such diverse facilities as a mother and baby clinic, a remand home, the slaughterhouse and the City refuse services. Dr Sarah McEwan (c.1923-2002) was a DPH student in 1960-61, prior to emigrating to Canada in 1966. Her day book takes a similar format and shows that there had been little change in the curriculum in the 20 or so years that had elapsed. Extracts from their day books are on pages 20-23.

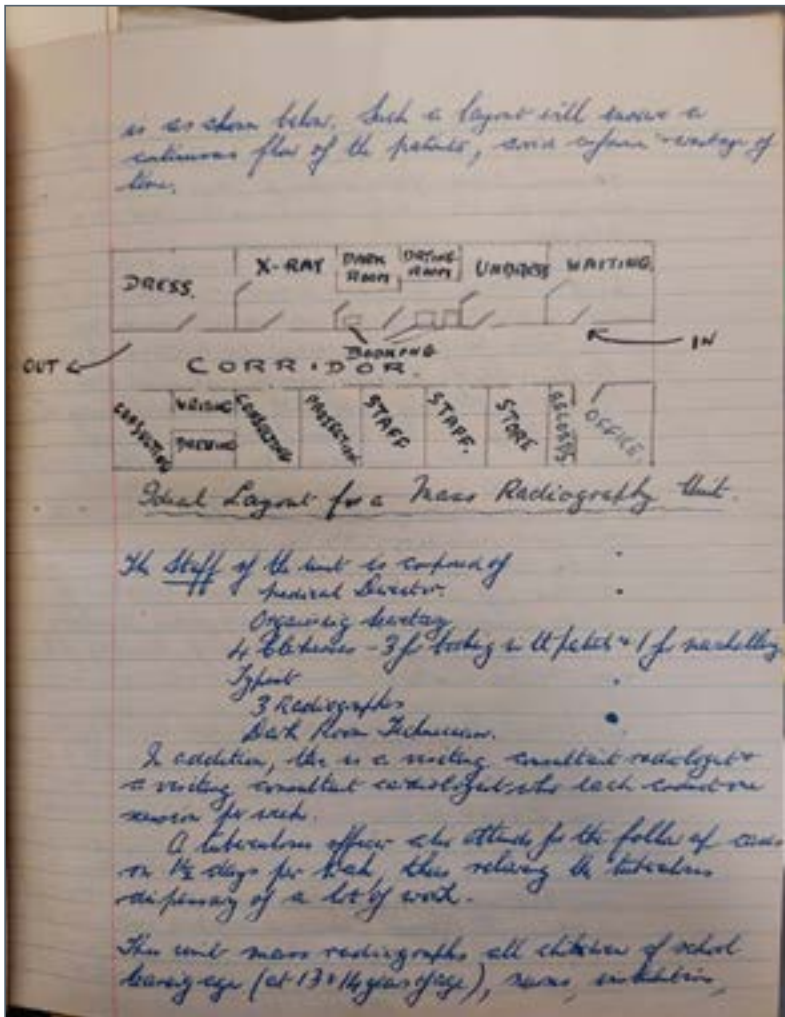
Master of Public Health

By Resolution no. 217 of the University Court, effective 24 June 1981, the postgraduate degree of Master of Public Health (MPH) was established. Candidates were required to have a degree in Medicine or Dentistry, or a First or Upper Second class degree in a subject related to Medicine or Public Health. The course comprised modules in Epidemiology, Statistics and Computing Science, Social Science in relation to Health, Environmental and Occupational Health, and Organisation and Delivery of Healthcare, which were taught in the first two terms. In the third term, candidates were required to study any two of these topics to an advanced level. They were also required to undertake a research project and submit a dissertation of no more than 20,000 words, in the form of two typewritten copies. There was a close link with the Diploma course, by now termed the Diploma in Community Health Studies (DCHS), and candidates whose dissertation was unsatisfactory but who had otherwise passed the examinations could be awarded the Diploma; others who failed the course could transfer to the DCHS course.



Health inequalities in Glasgow 2001-2005, illustrated by a map of the railway line showing a drop in life expectancy for each station from Jordanhill in the west to Bridgeton in the east of 2 years for men and 1.2 years for women. Source: Molony E & Duncan C. "Income, wealth and health inequalities—A Scottish social justice perspective." *AIMS Public Health* 2016 3(2): 255, from an original concept by Dr Gerry McCartney "Illustrating health inequalities in Glasgow" *JECH* 2011;65:94

From its inception, the MPH course had a strong international following. The first candidate to graduate, in December 1982, was from Nigeria. In the first six years, a total of 11 Scots graduated MPH, together with 4 candidates from England, 4 from Nigeria, 2 each from India, Pakistan, Iraq and Malaysia and one each from Japan and South Africa. Today the international appeal of the course remains strong, and overseas participation has been greatly facilitated by the addition of an online distance learning option, a development which was to prove invaluable as the COVID-19 pandemic impacted on face-to-face teaching for all students. Student numbers today are in excess of 150, representing a remarkable increase from the average of 6 students per year 40 years ago.



Page from a DPH student's notebook, 1940s, describing a Mass Radiography clinic

Public Health in Glasgow in the 1940s

Insights from a Student's Notebook

Housing

“The main features to be noted were the age of the building, bad condition of the stonework, broken gutters, eaves, broken stairtreads, broken sanitary fittings & unpaved back court. Collections of refuse were heaped around the back court and drains were choked . . . Lighting by natural daylight was not possible in the lower stories [sic].”

Tuberculosis

“The Tuberculosis clinic (excluding the UV light clinic) consists of dressing rooms, viewing room containing the screening apparatus & a large treatment room where artificial pneumothorax, pneumoperitoneum etc treatment is carried out. . . .Each division of the Public Health Department of the Corporation has the use of the clinic on one day each week . . .”

“Open cases of tuberculosis as soon as they are diagnosed are notified & arrangements made, if necessary, for their admission to hospital. Unfortunately in Glasgow at present there is a long waiting list so the patient is advised as to treatment to be carried out at home. One of the sisters in the Clinic visits such cases from time to time . . .”

Food Safety

“All basement bakehouses must be inspected . . . every 5th year . . .general sanitary conditions including the exclusion of sanitary conveniences and drain inlets from baking rooms, the twice yearly cleaning of walls & ceilings & the effectual separation of any sleeping apartment from a bakehouse.”

“Under the previous proprietor, this small restaurant [in Gorbals Cross] was in a filthy state but the new owner has commenced to modernise & renovate the premises.”

Homeless Accommodation

Model Lodging House, 1 Pitt Street. "This is run by private ownership & caters for about 300 men. A charge of 1/3d [6p] per night or 9/- [45p] per week is made. The building is in an old warehouse . . . The sleeping accommodation was composed of tiny cubicles only 5-6ft in height & netted over the top to prevent theft etc. The cubicles, bedding etc were filthy & squalor was marked. A few day sleepers were noted."

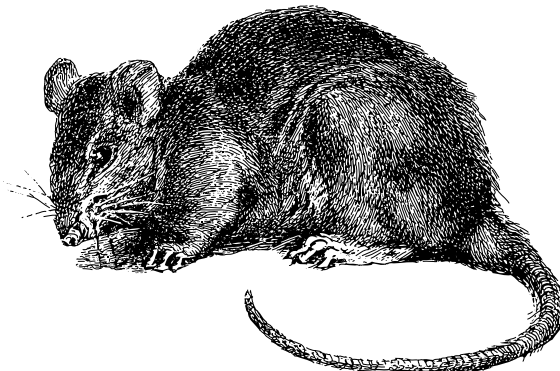
Port Health

"Each morning, the Port Health Authority is informed of any ships arriving that day. An inspector of the Authority boards the ship on docking . . . This ship had come from Syracuse with a cargo of lemons & oranges . . . We next inspected the galleys, lavatories & living quarters. Some of the crew complained of bugs and there was evidence of dusting with DDT powder in the crew's quarters. No actual bugs were seen." "The ratcatchers boarded the ship at the same time . . ."

Refuse Disposal

"[Govan] is the biggest of the four refuse destructors in the city . . . It deals with 6-700 tons [daily] of which 200 tons are in the form of fire dust. All refuse collection in the city by electrically driven vehicles & that collected by horse drawn vehicles in this locality are disposed of at the Govan plant."

From the Day Book of Dr Andrew Patrick Curran
University of Glasgow Archives UGC 013/3/1



Public Health in Glasgow in the 1960s

Insights from a Student's Notebook

Abattoir

60 Melbourne Street. "We saw cattle being killed after being stunned . . . There is a first aid room with a nurse in charge. None of the people employed at the abattoir receive a medical examination prior to employment. There were no wash hand basins, no soap nor towels nor toilet paper in the lavatories. There was no canteen. None of the men or boys employed ever seemed to wash their hands, despite the fact that they were handling meat. The cattle were kept in lairs prior to being killed. The floors all over were wet and slippery. There were no locker facilities for the people employed there. The smell was awful."

Port Health

"Cyanide is being used to fumigate ships. A firm is called in and the Inspector from the Port Health Department boards the ship and checks up. There is less rat infestation now due to cooperation with the shipping authorities. . . There were no proper toilet facilities ashore. Refuse is collected daily by arrangement with the Cleansing Department."

Immunisation Clinic

101 Denmark Street. "This clinic . . . forms part of the Ante Natal and Child Welfare Clinics. The Clinic is a public centre for Vaccination, Poliomyelitis and Triple Antigen Innoculations. . . There is a refrigerator for storage of lymph and vaccines. . . The Clinic seems to be adequately equipped and large enough for the people who attend."

Milk Production

Old Crookston Farm. "The farm is owned by Glasgow Corporation. Prior to the National Health Service in 1948, the milk produced on the farm was supplied to Corporation Hospitals. Now, the milk goes to Crookston Old Peoples' Homes and the Southern General Hospital. The herd consists of Ayrshires and Shorthorns and there are one hundred of them. The stalls and gutters are cleaned twice daily. . . The milk is transported in cans which are cleaned after use."

Changing Hospital Requirements

Mearns Kirk Hospital. "This hospital is situated in Newton Mearns and was built in 1930 . . . to deal with orthopaedic patients especially bone and joint tuberculosis, spastics and Poliomyelitis. The [swimming? hydrotherapy?] bath was built in 1949 for the Poliomyelitis Unit. The Maintenance Department made splints for the orthopaedic patients; now due to lack of orthopaedic patients it makes splints for the city clinics. . . In 1939-45 War, the hospital was used as a Naval Hospital. Hutted wards were built in the grounds. One of them now houses a Sterilisation Unit. The cost of the Steriliser was between £3000 and £4000. There is also a Chest and Heart Unit."

"Now there are very few patients suffering from [tuberculosis]. This indicates better diagnosis, early, and treatment with modern drugs has reduced the incidence of Tuberculosis. It is now used as a General Hospital and the wards are rather too much spread out. Pasteurisation of milk has benefited the community [by helping to control bovine TB]."

From the Day Book of Dr Sarah McEwan
University of Glasgow Archives DC 335/1

DC157/18/33

STUDENT'S HANDBOOK



1923-24

**A CENTURY OF
PUBLIC HEALTH
IN
GLASGOW, SCOTLAND
AND BEYOND**

**Influences, Challenges
and Achievements**

1923-1929

At the Birth of Public Health at the University of Glasgow

As the new decade dawned, Scotland was facing unprecedented challenges. Following the end of the Great War in 1918, the “land fit for heroes” promised by Prime Minister David Lloyd George had failed to materialise and the economy was heading rapidly into what would become a profound and long-lasting depression. Throughout the decade, unemployment never fell below 14%, and many of the traditional industries such as shipbuilding, steelmaking and textiles collapsed. Gang violence and religious sectarianism only added to a dismal picture. As many as 8% of the Scottish population left to seek a better life elsewhere.

Housing was a major problem, with much of the post-Industrial Revolution housing stock no longer fit for purpose, especially south of the River Clyde. Many houses lacked indoor sanitation, and even where water closets existed, one was often shared between several families. A major effort to construct 57,000 new dwellings, subsidised by the State, helped to alleviate the problems although progress was slower than expected and the rebuilding programme would take many years to complete.



Housing in the Gorbals c.1925 © Glasgow City Archives

Against that background, poor health affecting a large proportion of the population was inevitable. Communicable diseases were common, including tuberculosis, sexually transmitted infections, pneumonia, smallpox, measles, diphtheria and typhus. Infant mortality, and maternal mortality from puerperal sepsis, remained high despite improvements in maternal and child welfare services, and mandatory school medical examinations revealed the burden of rickets. Medical examination of people unable to work through ill-health revealed a wide range of conditions; among women, anaemia and pregnancy-related disorders predominated, whilst both sexes were affected by bronchitis, tuberculosis, rheumatism and mental health disorders, of which neurasthenia was the most common. This last condition, often thought to be associated with war service, was clearly more widespread and also affected women; it was reported that sufferers often did not do well, especially in hospital where forced inactivity encouraged introspection. In older men, there was a considerable burden from cardiovascular disease, rheumatism and bronchitis, the latter especially affecting miners although smoking was almost universal in men who had seen war service.

What was Going On

- Aftermath of the First World War
- 1921—Irish Partition
- 1924—First Labour Government
- 1926—First TV demonstrated by John Logie Baird
- 1926—General Strike
- 1927—BBC founded as a public entity
- 1928—All women over age 21 able to vote
- 1929—Stock market crash and start of the Great Depression

Infant and Maternal Mortality in Scotland 1924

- 97 children out of every 1,000 did not reach their 1st birthday
- A further 16 children in every 1,000 did not reach 5 years of age
- 6 women died per 1,000 giving birth
- Little change in maternal mortality since mid-19th century

Rickets in Glasgow 1925

- 628 schoolchildren examined
- 18% had rickets
 - 49 mild
 - 37 moderate
 - 27 severe
 - 170 “slight or doubtful”
- “Improved in last 20 years”
- 1909—40% had rickets
- Cases included affluent children
- No clear link to malnutrition
- Benefits of sunlight recognised
- Role of vitamin D not yet known

Principal Causes of Death 1929

1. Heart disease
2. Pneumonia
3. Malignant disease
4. Apoplexy [stroke]
5. Bronchitis
6. Diseases of early infancy
7. Influenza (epidemic year)
8. Pulmonary tuberculosis
9. Tuberculosis other sites
10. Nephritis
11. Whooping cough
12. Arterial disease
13. Diarrhoea
(under 2 years old)
14. Liver disease
15. Appendicitis
16. Diphtheria

1930-1939

The Evolution of Cancer Services Amidst Economic Strife, and the Gathering Clouds of War



Apparatus for delivering 5g radium source to patient, 1937
Images source: Grimmett LG BJR 1937; 10(110):105-11



Not all the early uses promoted for radium were scientifically sound, or even safe

In 1898, **Marie and Pierre Curie** had isolated **radium**, paving the way for radiotherapy, which would later become an established **treatment for cancer**. It was a Glaswegian chemist, John Stewart MacArthur (1856-1920), who set up one of the first radium works in Britain in 1911. Initially based at Halton, it moved to Balloch as the Loch Lomond Radium Works in 1915 in order to ensure the supply of pure water that was necessary for the manufacturing process. There was much public and philanthropic interest in the new technology, especially as the incidence of cancer was growing alarmingly, perhaps in consequence of the increasing prevalence of tobacco smoking in the community in the aftermath of the First World War, which had seen the majority of men take up the habit. At a public meeting in the Merchants' House in Glasgow in 1914 under the chairmanship of **Sir John Stirling Maxwell** of Pollok House, the **Glasgow and West of Scotland Radium Committee** was formed. The aim of the Committee was to ensure equality of access to supplies of radium, both for treatment in hospitals and to enable research in the universities. The **Radium Commission**, established by Royal Charter in 1929, placed this aim on a national footing. Until the **National Health Service** was established in 1948, radium treatment was supported by public donation under the auspices of the National Radium Trust. **Sir Henry Mechan** was Vice-Chairman of the Board of the **Western Infirmary** in Glasgow from 1929 to 1938, and in 1929 he and Lady Mechan generously donated £5,000 (around £335,000 at today's value) to the hospital for the purchase of radium and the necessary equipment for the treatment of cancer. In consequence of this, the Radium Commission selected the Western Infirmary to be the National Radium Centre for the West of Scotland.

What was Going On

Worldwide severe economic depression

- 1930—20% of workforce unemployed
- 1931—Labour Government proposes to raise taxes and cut benefits
- 1932—National Hunger March
- 1933—30% of Glaswegians unemployed due to loss of heavy industry
- Late 1930s—Growth in motor car and electrical manufacturing
- 1938—Emerging threat of war in Europe
- 1939—Start of Second World War. Emergency Hospital Service established

In an attempt to remedy the desperate conditions of poverty and unemployment in the early 1930s, the Government set up a committee under Professor Edward Cathcart, Professor of Physiology at the University of Glasgow, “to review the existing health services in Scotland in the light of modern conditions and knowledge”. The wide-ranging *Report of the Committee on Scottish Health Services* was published in July 1936 and proposed a “State Medical Service” which was broadly welcomed and would have been a forerunner to the NHS, but it was never implemented owing to the outbreak of war and was eventually superseded by the 1942 Beveridge Report, although the Cathcart Report was to play a key part in shaping the NHS in Scotland.

Infant and Maternal Mortality in Scotland 1935

- 6 women died per 1,000 giving birth
- 77 children out of every 1,000 did not reach their 1st birthday (“the lowest on record but still too high”)
- 3,000 stillbirths and 3,000 neonatal deaths (under 1 month) per year

Infectious Diseases 1935

- Aberdeen typhoid outbreak
- Tuberculosis—8,000 people
- Diphtheria
- Whooping cough
- Measles
- Influenza—92,000 people

Principal Causes of Death 1935

1. Heart disease
2. Malignant disease
3. Cerebral haemorrhage
4. Pneumonia
5. Tuberculosis

Days off Work (insured people)

Total for 1935—18,572,238

Equivalent to 46 days per sick person

1940-1949

War and its Aftermath

Birth of the National Health Service



Aftermath of the Clydebank Blitz, 1941
Image: West Dunbartonshire Council Arts and Heritage

Notwithstanding the privations of war, the health of the Scottish people continued to improve during the first half of the 1940s. In 1945 the Secretary to the Department of Health for Scotland reported that the rates for stillbirths, maternal mortality and infant mortality were the lowest ever recorded in Scotland. He noted that looking back over the period of the war, there had been an initial “anxious adjustment to war-time conditions of living”, followed by a phase of stabilisation, and then a gradual improvement from 1943 onwards, although room for further improvement remained. Even infectious diseases (including the sexually transmitted infections), which typically increase during conflict, fell steadily, with the exception of tuberculosis and dysentery. He summarised by saying that “Despite the heavy strain placed upon the health services during the war, the nation [was] emerging from its trials with a health record which compares favourably with the best pre-war levels.”

In February 1944 a White Paper was published setting out proposals for a post-war health service. By 1946 the National Health Service (Scotland) Bill was going through Parliament, and in 1948 the groundbreaking National Health Service came into existence. No longer would people’s access to medical care be determined by their ability to pay; everyone was to be entitled to a comprehensive healthcare system including access to a general practitioner, dentist, optician, pharmacist, midwife, vaccinations and a full range of hospital services. Many of the doctors that would be required for the new service had recently been released from the Forces, and refresher courses were provided for those who had not worked with children or older people for many years - or indeed ever, for those doctors who had gone straight from medical school into uniform. Ex-Servicemen and women who had been demobilised were encouraged to take up careers in healthcare. Men especially were welcomed into the nursing profession; hitherto, male nurses had generally only worked in mental health.

What was Going On

1940-1945	Impact of the Second World War in Scotland Clydebank Blitz 1941—targeted local heavy industries 528 people killed & 617 seriously injured Only 7 homes undamaged Over 11,000 people made homeless 20,500 additional hospital beds created by the Emergency Hospital Service Hotels requisitioned as convalescent facilities
1942	Publication of the Beveridge Report, setting out a vision of a Welfare State to tackle “want, ignorance, squalor, idleness and disease”. This would set the scene for the birth of the National Health Service on 5 July 1948
1945-1949	Counting the cost of war 400,000 UK military personnel killed 65,000 UK civilians killed (2,298 in Scotland) 2 million UK homes destroyed 800 churches damaged in Scotland Food rationing continued until 1954

Infant and Maternal Mortality in Scotland 1945

- 3 women died per 1,000 giving birth
- 33 stillbirths per 1,000 total births
- 33 deaths of children under 1 month per 1,000 live births
- 76 children out of every 1,000 did not reach their 1st birthday

Infectious Diseases 1944

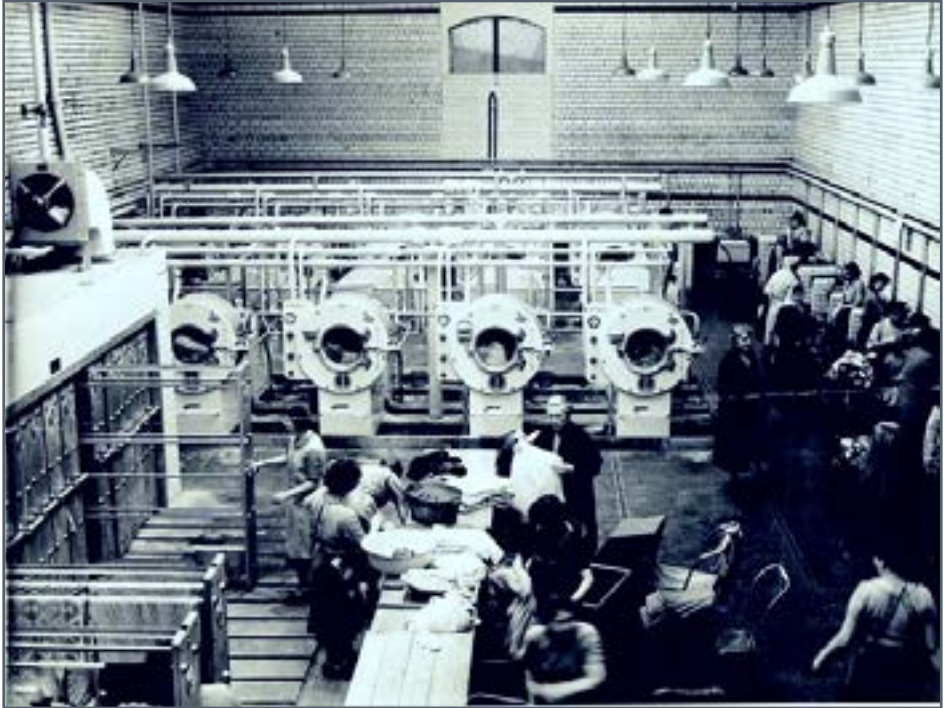
Disease	Cases	Deaths
Tuberculosis	9,548	3,935
Diphtheria	6,835	183
Syphilis	3,542	
Gonorrhoea	4,270	
Smallpox	Nil	
Meningitis	518	N/K
Dysentery	4,373	
Scarlet fever	12,057	

Medical Student Statistics 1946

Medical student admissions —
552 of whom:
390 (71%) were men of whom:
302 (77%) had just left the Forces
and
162 (29%) were women
of whom:
37 (23%) had just left the Forces

1950-1959

The Post-War Years



The Weekly Wash—a Glasgow 'steamie' (wash-house) 1959

Image: National Records of Scotland, Glasgow Sheriff Court Records



Young polio victims struggling to stand, with callipers supporting weakened legs, and polio patients with respiratory paralysis being nursed in 'iron lung' ventilators
Image source: <https://www.quora.com/>

What was Going On

“ . . . a state of prosperity such as we have never had in my lifetime – nor indeed in the history of this country . . . most of our people have never had it so good . . . ”

Prime Minister Harold Macmillan, 1957

The health of the nation, and subsequent economic events, painted a very different picture. Most cities bore the scars of the wartime bombing raids, and rebuilding would take many years. Overcrowding in the inner cities remained rife, as did extreme poverty. It also took some time for employment to recover. Health was affected by several major epidemics and pandemics throughout the period. Until the widespread implementation of a vaccination programme, polio would have a lifelong impact on the health of a substantial number of children. Some had to have their breathing supported by an “iron lung”. Intended to be used for only a few weeks during the acute illness, some remained confined to it for the rest of their lives. The last patient in the UK to use an iron lung died in 2017 at the age of 75.

The cost of running a health service which was free at the point of use was beginning to show, and in 1952 a prescription charge of one shilling (5p) was introduced, together with a charge for dental care of £1. Prescription charges in Scotland were abolished for all in 2011.

Epidemics and Pandemics

- Poliomyelitis throughout 1950s
- Influenza 1951, 1957-58
- Smallpox—Scotland 1950

Endemic Diseases

- Measles
- Infectious hepatitis
- Dysentery

Key Public Health Developments

- 1951—Publication of paper by Doll & Bradford Hill demonstrating the link between smoking and lung cancer
- 1954—Launch of Salk (injectable) polio vaccine
- Late 1950s—Development of Sabin (oral) polio vaccine
- 1958—Development in Glasgow of the first ultrasound scanner by Prof Ian Donald, Tom Brown and John MacVicar

1960-1969

A Decade of Contrasts and Social Change



Mother and baby, Glasgow slum, 1960s
Image ©Nick Hedges, reproduced by kind permission



'Ban the Bomb' marchers in
Trafalgar Square, London, 1960
Image source: <https://flashbak.com/ban-the-bomb-movement-walks-from-aldermaston-to-london-1952-1963-2458/>

What was Going On

Economics and Living Conditions

By 1961, the optimism of the Prime Minister's speech in 1957 had faded as inflation began to rise, accompanied by spending cuts and a wage freeze. National income was declining. The bulk of the working population was still living in appalling poverty, and in Glasgow, 11,000 homes remained unfit for habitation. A slum clearance programme was under way, with gradual replacement of the overcrowded tenements with high-rise blocks, but there was still a long way to go.

Nuclear Threat and Civil Unrest

The threat of nuclear war continued to dominate the wider picture. A failed invasion of Cuba was followed by the Cuban missile crisis in 1962, and fallout from the nuclear tests in the Pacific gave rise to concerns about rising levels of Strontium-90 in milk as rainfall brought it to Scotland's soils. The Ban the Bomb movement led to widespread marches, organised by the Committee for Nuclear Disarmament (CND). Civil tension was building up, with race riots in the US in 1967, followed a year later by widespread student unrest in the "long hot summer".

Societal Changes

Changes in the UK divorce laws in 1969 paved the way for an increasing number of lone parent families, and the growing "hippy culture" led to an increase in recreational drug abuse. The newly-available contraceptive pill, the women's liberation movement, the 1967 Abortion Act and the decriminalisation of male homosexuality gave rise to rapid changes in societal attitudes to sexuality and morality, generally embraced by young people but difficult for some of the older generation born in the late Victorian era to understand and accept.

Changes in Disease Profile

Falling

- All communicable diseases

Rising

- Lung cancer
- Coronary heart disease
- Chronic bronchitis

Medical Progress

- First successful kidney transplant in UK by Prof (Sir) Michael Woodruff in Edinburgh

Key Public Health Concerns

- Tobacco-related disease
- Air pollution
- 1961—Thalidomide causing birth defects
- 1964 Aberdeen typhoid outbreak
 - Over 400 cases
 - No fatalities
 - Contaminated corned beef
- Worklessness due to ill-health
 - Review of National Assistance
 - Most claimants found fit to work
 - Industrial Rehabilitation Units

1970-1979

Organisational Reform



Images of 1970s Glasgow
© Glasgow Live (images 1 & 3)
Protests against closure of the Upper Clyde shipyards, and new high-rise flats

What was Going On

Health Services

The 1970s saw widespread reforms in both the health services and local authorities. A new National Health Service (Scotland) Act 1972 set up the Health Boards which continue to underpin the structural framework of the NHS in Scotland. The appointment of the Medical Officer of Health which had been in place since the late 1800s was swept away and replaced with a “designated medical officer” in each local authority. Fifty years after the first Scottish family planning clinic was opened in Glasgow in 1925, free family planning services were made available to everyone in Scotland from 1974, irrespective of age, gender or marital status. Hitherto, access had been restricted in line with perceived societal “norms”, and some highly vulnerable groups such as teenagers had been unable to access services. A further National Health Service (Scotland) Act in 1978 introduced a focus on primary care, including GP services, dentistry, ophthalmology and pharmacy services, in an important move towards greater provision in the community.

Local Government

At the same time, major changes to local government were taking place under the Local Government (Scotland) Act 1973, replacing the old structures with regional and district councils arranged into 32 local authorities.

Health and Safety

In 1974, the Health and Safety at Work Act came into law, placing a responsibility on employers to protect their workforce from injury and illness and thereby revolutionising Occupational Health and Safety. A new phrase, “Health and Safety”, came into popular speech. Although often derided by the public as overly concerned with trivia, countless lives have been saved and life-changing injuries and illnesses prevented.

Medical Imaging

In 1971 the first commercial CT scanner was produced, allowing for the first time non-invasive imaging not only of bones but of soft tissues, and enabling diagnosis and monitoring of a far wider range of conditions than previously possible, without resorting to surgery.

Changes in Demography and Disease

Falling

- Birth rate
- Stillbirths
- Infant mortality
- Puerperal fever

Rising

- Alcoholic intoxication and psychosis
- Peptic ulcer surgery

Key Health Developments

- Growth of non-surgical treatments for peptic ulcer
 - Discovery of H2 antagonist drug
 - Discovery of Helicobacter pylori
 - Treatment by antibiotics
- Developments in cancer treatment
 - New chemotherapy drugs
 - Patient-driven palliative care
- Glasgow Coma Scale developed in 1974 by Prof Bryan Jennett and Sir Graham Teasdale

1980-1989

New Diseases, New Public Health Challenges



Above: 'Safe Sex' posters

Images courtesy of Lothian Health Service Archives



Left: Cow with Bovine Spongiform Encephalopathy (BSE)

Below: The damaged nuclear reactor at Chernobyl



What was Going On

As the traditional threats to public health of overcrowding, poor housing stock and sanitation and poor maternal and child health outcomes began to fade into history, and the emerging “lifestyle” threats such as obesity and lack of exercise had not yet reached centre stage, so a number of novel and unexpected threats came to dominate Public Health in the 1980s.

Inequalities

The report in 1980 by Sir Douglas Black, *Inequalities in Health*, drew attention to the growing health gap between the wealthy and the poor in the UK, despite years of investment in the welfare state and the NHS. The estimated level of expenditure required to implement its recommendations, £2bn per year, was deemed economically unaffordable.

Medical Advances

On the positive side however, the first MRI scanner was developed in Aberdeen in 1980, complementing the CT scanner of the previous decade, and medical ethics began to emerge as a separate discipline, with formal training for medical students. The Arts and Humanities began to be accepted as an adjunct to medicine, both in teaching and in encouraging and supporting patients.

HIV/AIDS

In 1981, cases of an unusual type of pneumonia began to be reported in the USA among gay men and injecting drug users. Other rare diseases then began to appear, often in age groups that had not previously been susceptible. By 1983, a novel retrovirus which is now believed to have originated in monkeys and chimpanzees had been identified as the causal organism. The same year, the first cases were identified in Scotland, chiefly among drug users. Widespread public information campaigns were implemented to encourage people to protect themselves, often using frank language which, even two decades after the liberalisation of the 1960s, was to prove controversial. Effective drug treatment took many years to develop, and there were many deaths in the intervening years.

BSE/vCJD

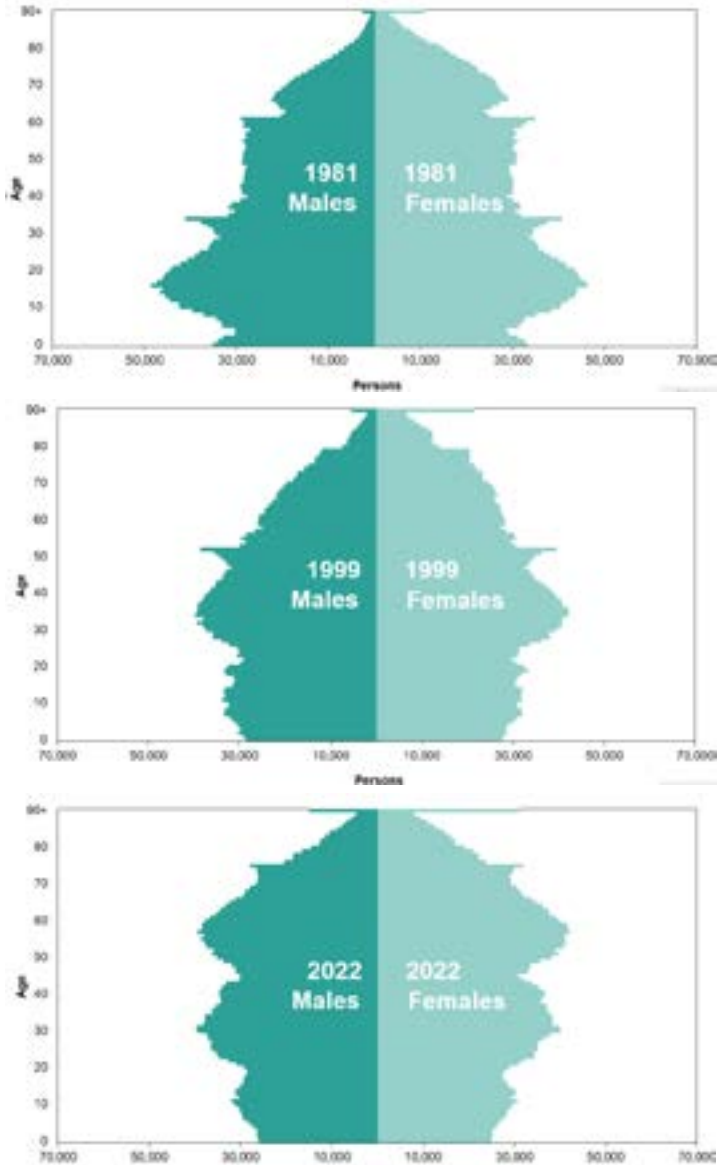
In 1985, a cow in England died of an unusual neurological illness which was given the name of Bovine Spongiform Encephalopathy, which was attributed to feeding cattle with animal proteins in artificial feedstuffs. Initially it was thought that there was no threat to humans; by the early 1990s, it was to become clear that this reassurance had been over-optimistic.

Industrial Accidents

In 1984, an explosion in a pesticide plant in Bhopal, India led to the release of a large amount of methyl isocyanate, costing the lives of over 4,000 people and leaving many more with life-threatening after-effects including blindness, pulmonary fibrosis and PTSD. Even this catastrophe was eclipsed by the massive explosion of a nuclear reactor at the Chernobyl power plant in the Ukraine on 26 April 1986, as a result of a botched safety test. A total of 237 people suffered acute radiation sickness but much of Europe was affected by the resulting radioactive fallout, which persisted for many years. Increased levels of radioactive caesium-137 were detected in Scotland, rendering meat from sheep grazed on the hills unfit for human consumption in some areas. The last remaining restrictions in Scotland were not lifted until 2010.

1990-1999

Vaccines, vCJD and Scotland's Changing Population



Population pyramids from National Records of Scotland © Crown Copyright 2020

What was Going On

BSE/vCJD

Evidence was beginning to accumulate that BSE was not just a disease of cattle but could jump the species barrier, most worryingly into the human population in the form of variant Creutzfeld-Jakob Disease (vCJD). The first human death from vCJD was reported in 1995, and there were fears that this was the start of a major human epidemic—fears which were to prove unfounded in retrospect. UK-wide, cases peaked in 2000 with 28 cases, and only 178 definite or probable cases have been reported in total, the last in 2016.

MMR Vaccine Concerns

In 1998, Andrew Wakefield published a paper purporting to claim a link between the MMR vaccine and autism. The paper was quickly exposed as fraudulent and was withdrawn, and its author was eventually struck off the medical register after a professional disciplinary hearing. However the damage to public confidence in the vaccine had already been done and there was a worldwide rapid fall in the number of children receiving the protection of the MMR vaccine, leading to a number of outbreaks and epidemics of measles, mumps and rubella. Wakefield, now living in the US, remains a prominent “anti-vax” campaigner and continues to misrepresent science.

Scotland’s Changing Population

By the 1990s, it was clear that the demographic shape of Scotland was changing, illustrated in the middle “population pyramid” opposite. The post-war “baby boomers”, teenagers in 1981 on the upper pyramid, are now approaching middle age, whilst the “notch” in the older population, representing the fall in births as a consequence of the First World War, has disappeared entirely. However there is also a sharp fall in the number of young adults, representing the reduction in the birth rate following the widespread availability of family planning services, and especially oral contraception, which began in the 1960s. Meanwhile, the pyramid is widening in the oldest age groups, representing a substantial increase in the proportion of older adults. By 1991, there were as many people aged over 90 in Scotland as there had been people aged over 75 thirty years earlier, although the overall population size had scarcely changed. At the same time, life expectancy at birth was changing, rising from 49 years in 1920 to 72 years in 1970 and 81 years in 2020. Looking forward another 20 years (lowest pyramid), these trends towards reducing numbers of young people and increasing numbers of older people continue, with important economic, healthcare and welfare implications.

Health Inequalities

The publication of *Deprivation and Health in Scotland* by Vera Carstairs and Russell Morris in 1991 built on the 1980 Black Report, highlighting not only the irrefutable correlation between deprivation and poor health outcomes, but also the contrasts that existed in Glasgow between adjacent areas having the highest and lowest life expectancies. The authors concluded that widening income inequalities did not augur well for any reduction in the health consequences of inequalities. The Acheson Report, entitled *Independent Inquiry into Inequalities in Health*, was published in 1998 and similarly confirmed the link between health inequalities and social class, highlighting that improvements in health were progressing more rapidly amongst the more affluent classes and further widening inequalities. Government commitment to health improvement was underlined by the publication of the 1999 White Paper, *Saving Lives: Our Healthier Nation*.

2000-2009

The Rise of Global Terrorism Epizootic and Zoonotic Diseases



What was Going On

Millennium Bug

The dawn of the new millennium was met with trepidation by many people as widespread disruption of safety-critical computer systems was widely predicted due to a so-called “millennium bug” or “Y2K bug”, as they rolled over to the new date format. In the event, the catastrophe largely failed to materialise, although technology shares subsequently plummeted in value as many businesses had invested in new systems ahead of the date change, creating a short-term but unsustainable surge in demand for IT equipment.

11 September 2001 ('9/11')

If the millennium bug had proved to be a damp squib, the 9/11 bombing of the World Trade Centre and the Pentagon by al-Qaeda using hijacked airliners was to change the world order irrevocably, heralding the beginning of the “global war on terror” which would involve Western nations in military operations in Afghanistan and beyond over many years and create an enduring burden of both physical and mental injuries.

Foot and Mouth Disease

In 2001, the first major outbreak of foot and mouth disease since 1967 saw the slaughter of over 10 million sheep, cattle and pigs across 2,000 farms. Affected carcasses were disposed of by large-scale burning. Public access to the countryside was restricted, and many sporting events were cancelled or delayed. The cost to the UK is estimated to have been around £8 billion. Many herds built up over generations were lost, and some farmers, especially those with smallholdings, never returned to farming. There was a substantial negative impact on the mental health of farmers and other agricultural workers, as well as among those involved in the culling and incineration of animals. Military assistance, involving coordination and oversight of civilian contractors carrying out the cull, went under the uninspiring code-name of Operation SLUBBER. It was to be followed by Operation PENINSULA which was the subsequent clean-up operation. Military participation was officially classified as “work of an objectionable nature”, for which an additional allowance is payable, but many were affected by what they had witnessed.

Anthrax

A serious outbreak of anthrax occurred among drug users in Scotland in 2009-2010, involving a total of 119 people, of whom 14 died. After an extensive investigation, the outbreak was eventually tentatively attributed to a batch of heroin having been transported to Scotland concealed in a contaminated animal hide, on the basis of the similarity of the anthrax strain to one identified in infected goats in Turkey.

Swine Flu

Also in 2009-2010, an H1N1 influenza virus was responsible for a pandemic which is estimated to have affected up to 1.4 billion people worldwide. However it did not prove as serious as earlier H1N1 pandemics (1917-1919 Spanish flu and 1977 Russian flu), probably owing to many older people having residual immunity from earlier exposure, as well as the protection afforded by vaccination. For the first time in the UK, anti-viral drugs were distributed to high-risk people as soon as they became symptomatic, although it was reported that failure to complete the course of treatment was common, usually due to side-effects.

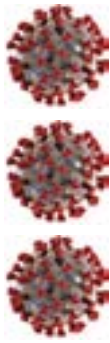
Smoking Ban

In 2006, legislation banning smoking in indoor public places came into force in Scotland.

2010-2022

Public Health in 21st Century Scotland

COVID-19—A Global Pandemic



Remember FACTS for a safer Scotland

F Face coverings 

A Avoid crowded places 

C Clean your hands regularly 

T Two metre distance 

S Self isolate and book a test if you have symptoms 

sharefacts.scot.nhs.uk/covid19 #WeAreScotland

**STAY SAFE
PROTECT OTHERS
SAVE LIVES**

What was Going On

Smoking—Beyond the 2006 Ban

The Institute of Health and Wellbeing at the University was one of the main research institutes evaluating the impact of the 2006 smoking ban, led by Professor Jill Pell. The benefits exceeded all expectations; in the first year, hospital admissions for heart attacks fell by 17%, and childhood asthma admissions fell by 18% per year. Bar workers experienced an 86% reduction in their exposure to second-hand smoke. New legislation followed; display of tobacco products in shops was banned from 2010, smoking in cars with children was banned in 2016, and in the same year legislation was enacted to prevent smoking anywhere near hospital premises. Smoking in prisons was banned in 2018. By 2019, only 17% of adults in Scotland smoked, down from 51% in 1974. Nonetheless, the rate is slightly higher than the UK figure of 14%, and the annual toll of 10,000 smoking-related deaths is likely to persist for some time owing to the long latency of diseases such as lung cancer and COPD. Few young teenagers are now smokers, although there has been a rise in their use of e-cigarettes.

Obesity

By 2018, 65% of adults in Scotland were overweight or obese, including 28% who were obese, and only one third of adults were a healthy weight. Among children aged 2 to 6 years, 11% were at risk of obesity, rising to 21% for those aged 12 to 15 years. The Scottish Health Survey shows a negative association between wellbeing and being overweight or obese. Importantly, there has been a steady rise in adverse health consequences associated with being overweight, such as type 2 diabetes which by 2018 was affecting 10% of adults in the most deprived areas although only 4% in the areas of least deprivation.

Alcohol

Scotland has a long-standing unenviable reputation for heavy alcohol consumption, but recent years have seen a gradual change, with a fall in the percentage of people drinking at hazardous levels from 34% in 2003 to 24% in 2018, and a fall in the average number of units of alcohol consumed per week from 16.1 to 12.5 over the same period. In 2018, a minimum price of 50 pence per unit of alcohol was mandated, and by 2020, the average price in the shops reached 63 pence per unit. In that year, alcohol retail sales were at the lowest level since recording began in 1994. Evaluation of the new policy showed an immediate impact in reducing purchasing of alcohol, which was sustained on review two years later. Nonetheless, there were still over 1,000 deaths per year from alcohol-related conditions; as with smoking, latency will mean that long-term health benefits will be slower. A new study (June 2022) has also shown that worryingly, the heaviest drinkers did not cut back but simply prioritised alcohol purchases over food or utilities.

COVID-19

As 2019 drew to a close, reports were emerging of a severe respiratory viral illness centred on Wuhan, China. By 1 March 2020, the first case had been confirmed in Scotland, and on 11 March 2020 the WHO declared the virus to be a pandemic. Two days later, the first death from COVID-19 occurred in Scotland, and on 16 March all large public events were cancelled. Schools and nurseries were to close by the end of the week, and a full lockdown was announced on 23 March. Any hopes of a swift end to the restrictions were dispelled as cases and fatalities continued to rise. A glimmer of hope was raised on 8 December 2020 when the first vaccination was performed in Scotland, but despite much progress being made with new treatments and increasing levels of vaccination in the population, by mid-2022 the virus, by now mutated to a range of variants, continued to cause widespread infection although mortality was much lower.

One Hundred Years of Public Health in Glasgow

1923

General Situation

- Aftermath of the First World War
- Beginning of a long-lasting economic depression
- High levels of unemployment—14% or more
- Very poor housing stock, often lacking indoor sanitation. Widespread poverty
- Maternal mortality 6 per 1,000
- Infant mortality 97 per 1,000
- Communicable diseases dominant

Medical Treatment

- No antibiotics
- No blood transfusion
- No cancer treatment apart from surgery
- No drug treatment for mental ill-health, leading to lengthy incarceration
- First human use of injected insulin for diabetes in 1922

Department of Public Health

- First Henry Mehan Professor appointed in 1923
- “Traditional” Public Health; sanitation, housing, food safety, maternal & child welfare
- Postgraduate students mainly local
- Taught courses and outside visits to dwellings, prisons, clinics and slaughterhouses

Principal Causes of Death 1929

- | | |
|------------------------------|-----------------------------------|
| 1. Heart disease | 9. Tuberculosis other sites |
| 2. Pneumonia | 10. Nephritis |
| 3. Malignant disease | 11. Whooping cough |
| 4. Apoplexy [stroke] | 12. Arterial disease |
| 5. Bronchitis | 13. Diarrhoea (under 2 years old) |
| 6. Diseases of early infancy | 14. Liver disease |
| 7. Influenza (epidemic year) | 15. Appendicitis |
| 8. Pulmonary tuberculosis | 16. Diphtheria |

What Has Changed?

2022

General Situation

- Impact of the COVID-19 pandemic
- Economic uncertainty due to war in Ukraine
- Unemployment only 3% but significant impact of Brexit on low-paid migrant workers
- Housing generally improved but social problems remain. 37,000 children living in poverty in Glasgow
- Maternal mortality less than 1 per 10,000
- Infant mortality less than 4 per 1,000
- “Lifestyle”-related diseases dominant

Medical Treatment

- Antibiotics widely available, but resistance becoming problematic
- Wide range of blood and related products including stem cells
- Chemotherapy, radiotherapy and nuclear medicine well advanced
- Wide range of psychotropic medications, maintaining patients in the community
- Insulin and oral antidiabetic drugs, and novel delivery systems

Department of Public Health

- First female Henry Mechan Professor appointed in 2007
- “Modern” Public Health; determinants of health & inequalities, data science, solutions focus
- Many overseas postgraduate students
- Taught courses and online learning

Principal Causes of Death 2020

1. Ischaemic heart disease
2. Coronavirus (pandemic)
3. Cerebrovascular diseases
4. Dementia
5. Lung cancer
6. COPD and other lung diseases
7. Alzheimer’s disease
8. Other heart diseases
9. Accidents
10. Drug abuse and poisoning

*Memories of Glasgow from
Former Staff and Students*



What did you enjoy most about working/studying in University of Glasgow?

“

The diversity of students, from all over the world, playing curling ... and thought-provoking moments in the university library.

”

“

The quality of the teaching, the sense of time and place in such an historic and respected seat of learning, the excellence of the content and organisation of the course.

”

“

The quality of the teaching and mentoring.

”

“

The world class library and gym. I learned a lot from the free library sessions while the gym really helped with mental and physical health throughout the period.

”

“

I enjoyed the wealth of resources and dedicated support provided by my project supervisor, academic advisor, and the careers service team at the University. As an international student, I also enjoyed interacting with the Glaswegian culture, lifestyle, and etiquette, and I feel the Scots are some of the warmest people you will ever meet.”

”

“

The staff nurtured my passion for public health. I really enjoyed the teaching on the course, the staff, and the students.

”

“

I was proud of the conducive learning environment. It inspired me to strive for excellence with leadership mindset and sowed the seeds for many national and international professional achievements made in the future.”

”



What were you most proud of during your time in Glasgow?

“

Assisting in the development of the Glasgow Coma Scale.

”

“

Helping four PhD students gain their doctorates and see their careers progress thereafter.

”

“

Completing my MPH whilst in full time employment in a highly demanding job.

”

“

“I was most proud of my colleagues and I, who studied hard and excelled through a challenging pandemic. I was also proud to be a student of a world-changing and research-intensive institution.

”

“

Working on a real-life MPH project in collaboration with NHS Greater Glasgow and Clyde. I published the paper in a record six months after graduation.

”

Was there anyone who particularly inspired or helped you?

“

Wilfrid Card, Bryan Jennett and Graham Teasdale - the latter two had the problem(s) to solve, and Prof Card was the connector between clinical data and the statistical world. We employed Lilian Parker who has done brilliantly since!

”

“

All my lecturers were inspiring and supportive.

”

“

“Dr Raj Bhopal encouraged me to come to Glasgow to do the MPH. This set in motion what has proved to be a successful and fulfilling career in public health. He and I have remained close friends and colleagues since then.

”

“

Professor Jim McEwen, Henry Mechan Chair of Public Health.

”

“

I was inspired and supported by several individuals throughout my study. However, I will specifically acknowledge two persons, Professor Sara Macdonald (my Project Supervisor) and Dr Claire Hastie (my Academic Advisor). Sara was patient and keen to understand my research interests even when they were sketchy, provided all the resources I needed, and has continued to support my career progression post-study. I enjoyed Claire’s delivery of statistics lectures in the most practical and relatable format. As my academic advisor, Claire taught me the importance of critical writing and has remained very supportive of my growth and career advancement post-study

”

“

Harper Gilmour helped me to understand statistics from a standing start!

”

“

My MPH supervisors: Dr Claire Hastie and Dr Nicola McMeekin. They unconditionally guided me throughout the process and made it a very interesting and life-changing journey. We also chatted about non-academic related stuff often.

”

“

Dr Andrew Tannabill, my supervisor, made me feel at home as well as stretched me to excel at early stage of my professional career. He was approachable, offered practical help and led by example for professional endeavours.

”



What would you say to someone thinking of coming to University of Glasgow?

“

Go!

”

“

Go for it: you're unlikely to regret it.

”

“

No doubt, this is the place which will change your life for good, provided you aim high and the purpose of your learning is to be beneficial for other human beings globally (rather than just getting a qualification!)

”

“

Best decision you will ever make regarding your education.

”

“

You will not regret it – the university, the city, and the people are all fantastic.

”

“

The reputation of the University is well deserved and the sense of history is very powerful.

”

“

Embrace the lifetime opportunity to study at a prestigious and world-changing university!

”

“

Studying at the University of Glasgow honed my critical thinking, adaptability, and problem-solving skills. With each task and assessment, I learned to be more open-minded, detailed, and thorough in my approach to research and knowledge acquisition. Beyond a doubt, I am confident that the University of Glasgow has positioned and empowered me to impact my world positively. Make the most of both academic and non-academic activities. Do not forget to take part in the ceilidh dances.

”

What would you say to your younger self?

“

*A less obsessional approach....
(maybe?)*

”

“

*No advice from me now would have
made any difference to me then!*

”

“

*Never give up pursuing your
dreams.*

”

“

*Work harder and turn up more
often to classes.*

”

“

*Enjoy the experience of learning –
it is your greatest opportunity for
achievement*

”

“

*Today is a fleeting gift. Embrace
your journey and live in the
moment.*

”

“

*Keep going and trust the process.
Everything beautiful takes time.*

”

“

*Workwise and educationally, do
something that you enjoy to get the
most out of life.*

”



Any wisdom or quote you would like to share?

“

Drinks in the Chip can lead to results!

”

“

“If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

”

“

The city motto is Let Glasgow Flourish and the University is very much part of that.

”

“

Never assume anything” - Professor Tony Hedley, referring to analysing health data.

”

“

Whatever is worth doing at all, is worth doing well” - Philip Stanhope

”

“

Every master was once a beginner.

”

“

Great people are those who make others feel that they, too, can become great” - Mark Twain

”



Contributors

Compiled by
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with valued contributions from
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All those who responded to the online questionnaire

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Funded by the Ferguson Bequest. Professor Thomas Ferguson (1900-1977), Henry Mehan Chair of Public Health (1944-64), bequeathed his estate to the University, with the instruction that the money should be used to foster the social side of University life.

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