

Public Health

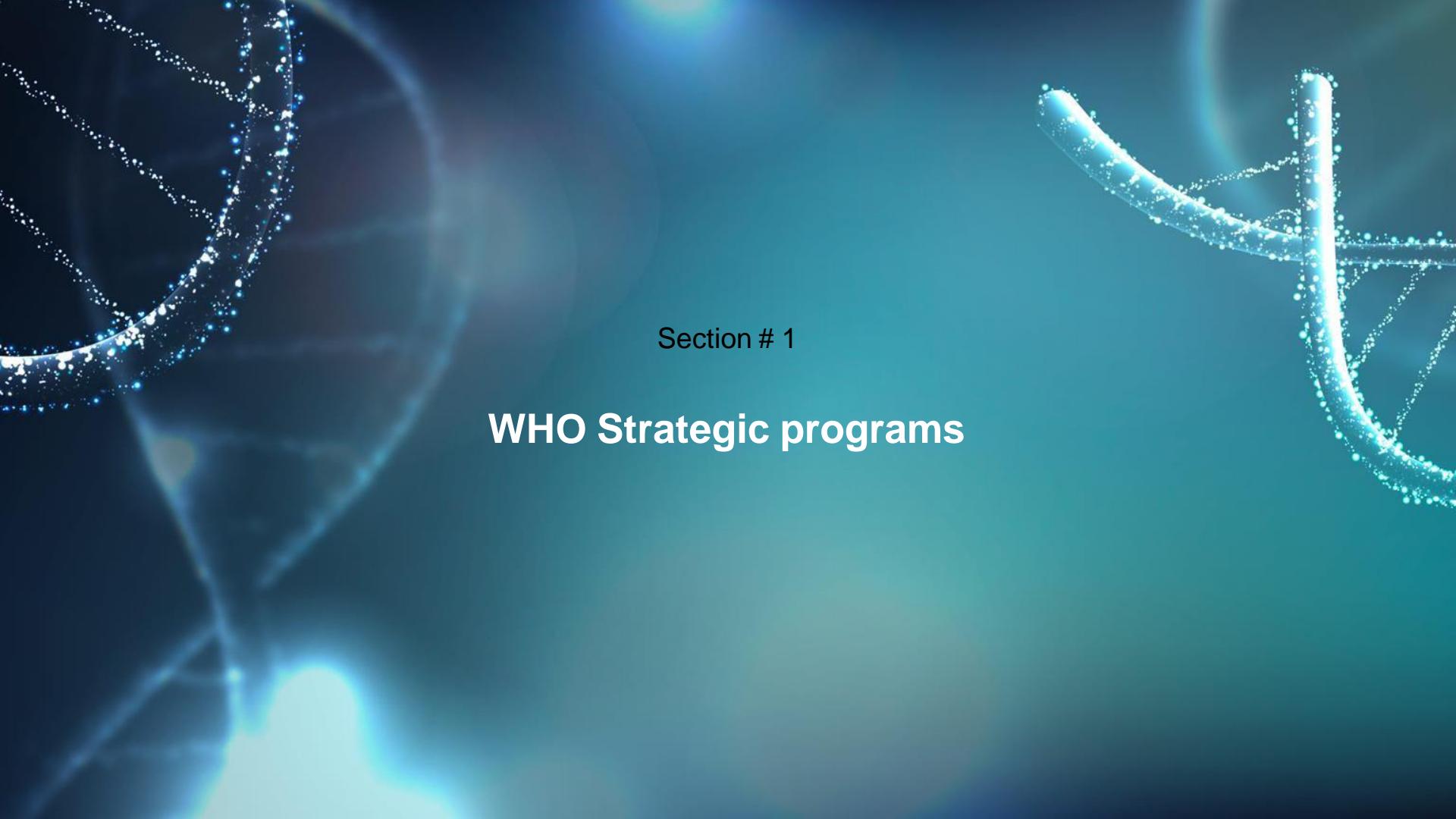
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MNG/PTA01

Agenda

#	Section Name
1	WHO strategic programs
2	Changes in the health status during centuries; social impact of diseases
3	The position of the Public Health in the 21st century, new challenges, new tasks
4	Public Health as the system. Health institutions, health care providers, education
5	Health and its social value
6	Health condition of population in the Czech Republic
7	The main determinants of health, possibilities of their influences, quality of life in elderly
8	Prevention, health insurance in the Czech Republic.
9	Resources

The background of the slide features a complex, abstract design in shades of blue and teal. It consists of several glowing, particle-filled lines that curve and twist across the frame, creating a sense of depth and motion. One prominent line on the left forms a circular loop, while another on the right is more linear and vertical. The overall effect is reminiscent of a glowing DNA helix or a network of interconnected data points.

Section # 1

WHO Strategic programs

About WHO



They champion health and a better future for all

Dedicated to the well-being of all people and guided by science, the World Health Organization leads and champions global efforts to give everyone, everywhere an equal chance to live a healthy life.

About WHO

The World Health Organization

Founded in 1948, WHO is the United Nations agency that connects nations, partners and people to promote health, keep the world safe and serve the vulnerable, so everyone, everywhere can attain the highest level of health.

What does the WHO do?

WHO leads global efforts to expand universal health coverage. They direct and coordinate the world's response to health emergencies. And they promote healthier lives from pregnancy care through old age. Their Triple Billion targets outline an ambitious plan for the world to achieve good health for all, using science-based policies and programmes.

About WHO

They are champions for healthier, safer lives



WHO team of 8000+ professionals includes the world's leading public health experts, including doctors, epidemiologists, scientists and managers. Together, they coordinate the world's response to health emergencies, promote well-being, prevent disease, and expand access to health care. By connecting nations, people and partners to scientific evidence they can rely on, they strive to give everyone an equal chance at a safe and healthy life.

They are professionals committed to integrity and excellence in health. With a spirit of collaboration and a steadfast commitment to science, they are trusted to care for the world's health.

About WHO

WHO Values

WHO, as the directing and coordinating authority on international health within the United Nations system, adheres to the UN values of integrity, professionalism and respect for diversity.

The values of the WHO workforce furthermore reflect the principles of human rights, universality and equity established in WHO's Constitution as well as the ethical standards of the Organization.

These values are inspired by the WHO vision of a world in which all peoples attain the highest possible level of health, and their mission to promote health, keep the world safe and serve the vulnerable, with measurable impact for people at country level. They are individually and collectively committed to put these values into practice.

Trusted to serve public health at all times
We put people's health interests first
Our actions and recommendations are independent
Our decisions are fair, transparent and timely

Professionals committed to excellence in health
We uphold the highest standards of professionalism across all roles and specializations
We are guided by the best available science, evidence and technical expertise
We continuously develop ourselves and innovate to respond to a changing world

Persons of integrity
We practice the advice we give to the world
We engage with everyone honestly and in good faith
We hold ourselves and others accountable for words and actions

Collaborative colleagues and partners
We engage with colleagues and partners to strengthen impact at country level
We recognize and use the power of diversity to achieve more together
We communicate openly with everyone and learn from one another

People caring about people
We courageously and selflessly defend everyone's right to health
We show compassion for all human beings and promote sustainable approaches to health
We strive to make people feel safe, respected, empowered, fairly treated and duly recognized

Promote health | Keep the world safe | Serve the vulnerable

About WHO

WHO structure

WHO is an organization of 194 Member States. The Member States elect the Director-General, who leads the organization in achieving its global health goals.



Secretariat

WHO's Secretariat includes experts, staff, and field workers at our Geneva-based headquarters, six Regional Offices or other stations located in 150+ countries around the world.



Member States

WHO works with all Member States to support them to achieve the highest standard of health for all people. Our staff working in countries advise ministries of health and other sectors on public health issues and provide support to plan, implement and monitor health programmes.



World Health Assembly

The World Health Assembly is WHO's highest level decision-making forum. Every year, delegates from all Member States convene at the World Health Assembly to set priorities and chart a course for global health progress.

About WHO

A global presence that puts countries at the centre of their work

From longstanding Geneva headquarters to 6 regional offices, 150 country offices and other offices around the world, WHO plays an essential role improving local health systems and coordinating the global response to health threats.



About WHO

Working together for the good of all people, everywhere

Collaboration is at the heart of all they do. Every day they connect nations, partners and experts so that they can go further, together. Their partners help support WHO's scientific work and field programmes, contribute funding and resources, engage in campaigns and programmes and join them in advocacy to bring policy and behaviour change for better health.



United Nations and multilateral organizations

As the only UN agency dedicated to global health, WHO works to harness global knowledge and resources to help Member States improve health for all.



Governments and leaders

Every part of WHO's work involves strong collaboration with government leaders. Political will and leadership are essential agents of change to improve the health and well-being of everyone, everywhere.



Experts

WHO brings together individual experts to provide scientific, technical and strategic advice on specific health issues. These experts act in a personal capacity and do not represent any external entity, authority or government.



Non-State actors

WHO collaborates with non-governmental and private sector organizations, philanthropic foundations, academic institutions and other non-State actors. More than 800 collaborating centres support WHO on issues such as nursing, occupational health, communicable diseases, nutrition and more.



Partnerships and special programmes

WHO hosts five distinct global health partnerships on topics ranging from health research and policy to financing for vital health services. In addition to other collaborative arrangements WHO hosts six special programmes tackling global threats such as HIV, tobacco and polio.



Goodwill ambassadors

Ambassadors are well-known personalities from the worlds of arts, literature, entertainment, sport or other fields of public life who commit to contribute to WHO's efforts to raise awareness of important health problems and solutions.

About WHO

WHO Governance takes place through the World Health Assembly, which is the supreme decision-making body; and the Executive Board, which gives effect to the decisions and policies of the Health Assembly. The Organization is headed by the Director-General, who is appointed by the Health Assembly on the nomination of the Executive Board.



World Health Assembly

The World Health Assembly is the decision-making body of WHO. It is attended by delegations from all WHO Member States and focuses on a specific health agenda prepared by the Executive Board. The main functions of the World Health Assembly are to determine the policies of the Organization, appoint the Director-General, supervise financial policies, and review and approve the proposed programme budget.



Executive Board

The Executive Board is composed of 34 technically qualified members elected for three-year terms. The annual Board meeting is held in January when the members agree upon the agenda for the World Health Assembly and the resolutions to be considered by the Health Assembly.



Constitution

WHO's work remains firmly rooted in the basic principles of the right to health and well-being for all people, as outlined in our 1948 Constitution. The Constitution was adopted by the International Health Conference held in New York 1946 and entered into force on 7 April 1948.



Election of Director-General

The appointment of the next WHO Director-General will take place at the Seventy-fifth World Health Assembly in May 2022 (WHA75). The election process begins when Member States, through a circular letter sent by the WHO Secretariat, are invited to submit proposals for candidates for the Director-General position. The World Health Assembly will appoint the next Director-General by secret ballot.

About WHO

WHO Accountability

Independent Expert Oversight Advisory Committee (IEOAC)

As an independent advisory committee established by the Executive Board of WHO, and reporting to the Programme, Budget and Administration Committee, the purpose of the Independent Expert Oversight Advisory Committee is to advise the Programme, Budget and Administration Committee, and, through it, the Executive Board, in fulfilling their oversight advisory responsibility and, upon request, to advise the Director-General on issues within its mandate.



Compliance, risk management and ethics

The Office of Compliance, Risk Management and Ethics (CRE) was established as part of the WHO reform. It is CRE's objective to pursue excellence at all levels of WHO in an effective, efficient, transparent and accountable way. Operational since January 2014, CRE's work is geared towards improving transparency and accountability through enhanced compliance, the development and management of a corporate risk framework, and improved focus and emphasis on ethical values.

About WHO

How WHO is funded?

WHO gets its funding from two main sources: Member States paying their assessed contributions (countries' membership dues), and voluntary contributions from Member States and other partners.

Assessed contributions (AC) are a percentage of a country's Gross Domestic Product (the percentage is agreed by the United Nations General Assembly). Member States approve them every two years at the World Health Assembly. They cover less than 20% of the total budget.

The remainder of WHO's financing is in the form of **voluntary contributions (VC)**, largely from Member States as well as from other United Nations organizations, intergovernmental organizations, philanthropic foundations, the private sector, and other sources.

WHO Strategic programs



WHO Strategic programs

A measurable impact

Tracking the work of WHO, countries, regions and partners to meet the Triple Billion targets and health-related SDGs equitably.

[Learn More](#)



Tracking the Triple Billion targets



Universal Health Coverage

One billion more people benefiting from Universal Health Coverage, monitored on two dimensions (coverage of essential health services and financial hardship) and tracked via 15 indicators.



Health Emergencies Protection

One billion more people better protected from health emergencies, tracked via six indicators.

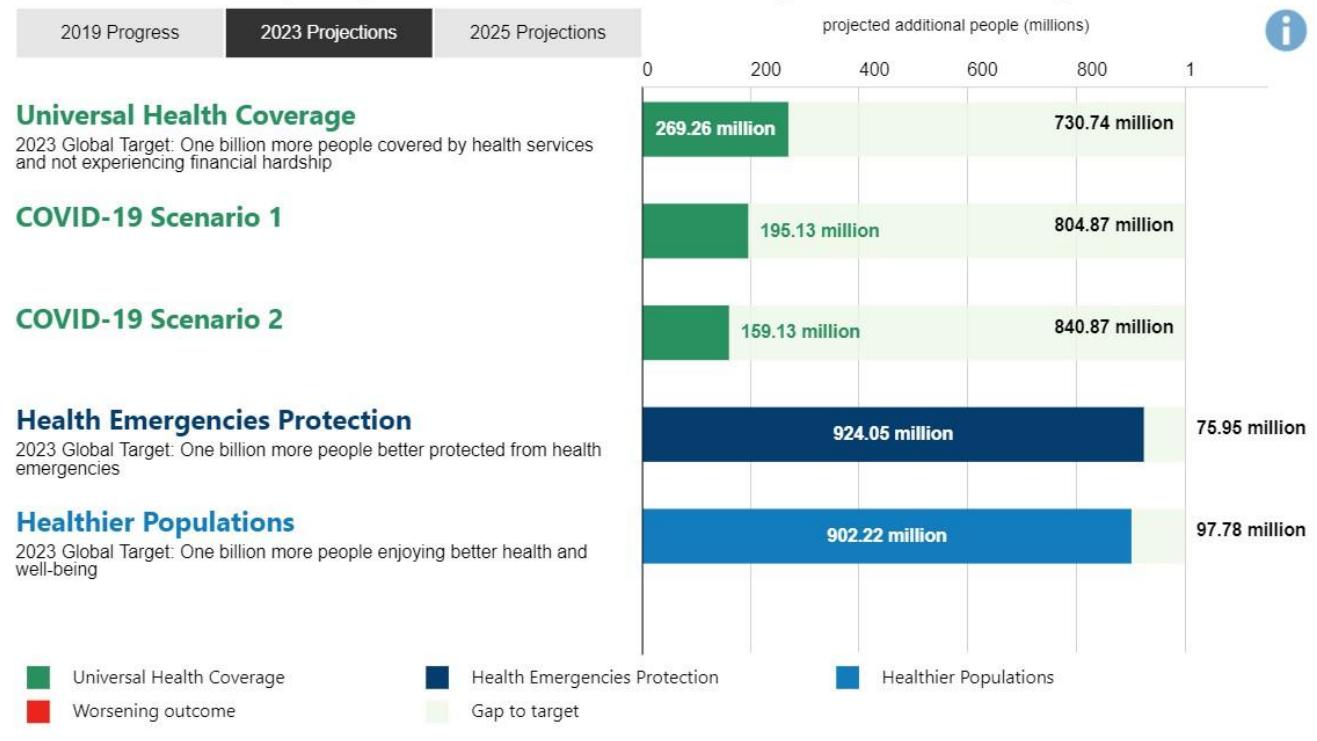


Healthier Populations

One billion more people enjoying better health and well-being, tracked via 16 SDG indicators.

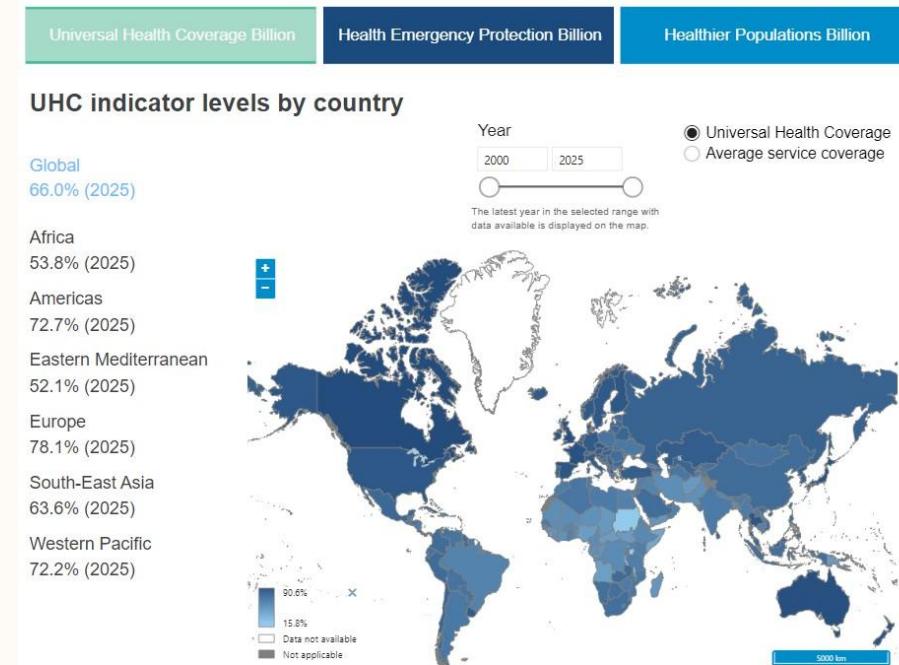
WHO Strategic programs

Global progress towards the Triple Billion targets



WHO Strategic programs

Country progress towards the Triple Billion targets



WHO Activities

#	Name	#	Name
1	Strengthening national food control systems	32	Integrating rehabilitation into health systems
2	Translating science for better health emergency preparedness	33	Strengthening data on adolescent health
3	Treating malaria	34	Setting standards for adolescent care
4	Supporting malaria vector control	35	Strengthening adolescent-responsive health systems
5	Developing an urban health research agenda	36	Improving safety, quality and choice
6	Promoting the health of refugees and migrants during COVID-19 pandemic	37	Ensuring responsible use of life sciences research
7	Setting evidence-informed norms and standards on refugee and migrant health	38	Promoting national medicines policies
8	Strengthening health information systems for refugee- and migrant-sensitive healthcare	39	Safeguarding biosafety and biosecurity in laboratories
9	Improving the health and well-being of LGBTQI+ people	40	Strengthening rehabilitation research
10	Improving measurement, monitoring and evaluation of the Decade of Healthy Ageing 2021-2030	41	Promoting walking and cycling
11	Strengthening partnerships with the faith community	42	Strengthening partnerships
12	Improving our understanding of healthy ageing and trends	43	Investing in physical activity
13	Achieving UHC for older people	44	Monitoring financial protection
14	Transforming health and social services towards a more person-centred and integrated care	45	Ensuring sports for all
15	Addressing TB comorbidities and health-related risk factors	46	Mainstreaming gender in WHO's programmes and actions
16	Engaging the global community in health ethics	47	Providing clinical guidance
17	Developing normative guidance to address ethical challenges in global health	48	Promoting rational use of medicines
18	Supporting countries to manage ethical issues during outbreaks and emergencies	49	Improving efficiency across health programmes
19	Building ethics capacity	50	Improving the prevention, diagnosis and clinical management of sepsis
20	Tackling comorbidities and addressing TB in vulnerable populations	51	Synthesizing evidence on clean house energy
21	Reducing population sodium/salt intake	52	Building partnerships to increase access to contraceptive methods
22	Preventing impacts of electronic waste on child health	53	Monitoring tobacco use
23	Monitoring emerging technologies and building futures-thinking - WHO Foresight	54	Public-Private Mix (PPM) for TB care and prevention
24	Screening for TB disease	55	Protecting people from tobacco smoke
25	Building the evidence for action	56	Enforcing tobacco advertising, promotion & sponsorship bans
26	Strengthening health services with quality	57	Promoting joint implementation of foodborne trematode infections with other NTD interventions
27	Managing childhood illness	58	Empowering health care providers to prevent female genital mutilation
28	Promoting healthy growth and development	59	Improving sanitation safety
29	Rethinking the child health agenda	60	Strengthening quality of care by improving WASH and waste management in health care facilities
30	Tracking SARS-CoV-2 variants	61	Monitoring regional and country progress towards the elimination of onchocerciasis transmission
31	Strengthening rehabilitation in emergencies	62	Certifying the elimination of onchocerciasis

WHO Activities

#	Name	#	Name
63	Building national programme capacity to implement WHO-recommended strategies	95	Strengthening multisectoral accountability to end TB
64	Providing evidence-based guidance to countries for onchocerciasis elimination	96	Harnessing digital technologies for the TB response
65	Environmental health impacts	97	Raising awareness on ultraviolet radiation
66	Estimating WASH-related burden of disease	98	Supporting the development of national policies on electromagnetic fields
67	Monitoring water, sanitation and hygiene	99	Promoting healthy pregnancy
68	Investing in WASH as a core element of health emergency preparedness, response and recovery	100	Preventing TB
69	Improving water safety	101	Supporting the development of diagnostic tools for <i>Taenia solium</i> infection
70	Promoting rights-based policy & law for mental health	102	Interrupting transmission of Chagas disease to humans
71	Encouraging medical education to bolster the global health care workforce	103	Improving data on <i>Taenia solium</i> infections
72	Prioritizing quality of care in maternal health	104	Promoting prevention and control of <i>Taenia solium</i> infection through animals with the One Health approach
73	Strengthening health systems and communities	105	Supporting countries in their cysticercosis control efforts
74	Raising the importance of postnatal care	106	Implementing an information and surveillance system of Chagas disease
75	Framing the ethics of public health surveillance	107	Providing information, education and communication for key people involved in Chagas disease control
76	Scaling up diagnosis of TB and drug-resistant TB	108	Providing care to populations affected by Chagas disease
77	Ending TB in children and adolescents	109	Supporting a better clinical management of neurocysticercosis
78	Overcoming health consequences of Fukushima nuclear accident	110	Enhancing radiation safety in health care
79	Supporting countries endemic for leprosy	111	Intensifying TB research and innovation
80	Monitoring the global leprosy situation	112	Standardizing biotherapeutic products
81	Facilitating the provision of medicines for leprosy	113	Laboratory quality management
82	Promoting advocacy and partner coordination for leprosy elimination	114	Providing evidence-based guidance to eliminate and control STH
83	Publishing state-of-the art guidance to reduce the leprosy burden	115	Building capacity of national control programmes to implement WHO-recommended strategies to eliminate STH
84	Engaging affected communities and civil society to end TB	116	Establishing targets and monitoring progress towards the elimination of STH as a public health problem
85	Capacity-building for health workers dealing with leishmaniasis	117	Donating high-quality medicines and diagnostics for the control of STH in children
86	Implementing a global surveillance system for leishmaniasis	118	Measuring child growth through data
87	Supplying antileishmanial medicines to the most vulnerable populations	119	Improving the mental and brain health of children and adolescents
88	Tackling the drug-resistant TB crisis	120	TB monitoring and evaluation
89	Scaling up care for mental, neurological, and substance use disorders: mhGAP	121	Transforming services and promoting human rights in mental health and related areas
90	Making childbirth a positive experience	122	Preventing violence against children
91	Expanding preventive chemotherapy to all in need	123	Advocating for road safety
92	Enhancing implementation of schistosomiasis control and elimination programmes	124	Caring for child victims of violence
93	Reinforcing snail control activities for schistosomiasis	125	Regulating nicotine and tobacco products
94	Increasing awareness on genital manifestations of schistosomiasis	126	Improving access to recommended medicines and diagnostics for lymphatic filariasis

WHO Activities

#	Name	#	Name
127	Building capacity of national programmes to implement WHO recommended strategies	159	Strengthening echinococcosis prevention and control
128	Facilitating and monitoring progress of countries towards elimination of lymphatic filariasis as a public health problem	160	Improving surveillance data on cystic echinococcosis
129	Providing evidence-based guidance to countries for lymphatic filariasis	161	Working with veterinary and food safety authorities to support the development of echinococcosis control programmes
130	Preventing and controlling meningitis outbreaks	162	Supporting endemic countries to implement yaws eradication strategy
131	Ensuring effective meningitis surveillance	163	Promoting and coordinating operational research on yaws
132	Improving meningitis diagnosis at all levels of health care	164	Managing health risks during mass gatherings
133	Promoting health and well-being	165	Minimizing health risks at airports, ports and ground crossings
134	Measuring and evaluating child maltreatment	166	Preventing epidemics and pandemics
135	Strengthening access to essential medicines	167	Accessing essential health services in fragile, conflict-affected and vulnerable settings
136	Ensuring fair prices for medicines	168	Rapidly detecting and responding to health emergencies
137	Improving health literacy	169	Managing environmental health risks in emergencies
138	Implementing health emergency and disaster risk management	170	Building a skilled workforce to prepare for and respond to emergencies
139	Creating healthy cities	171	Strengthening national emergency preparedness
140	Promoting health through good governance	172	Treating invasive cervical cancer
141	Screening and brief interventions for substance use problems	173	Issuing medical product alerts
142	Delivering health through mobile clinics and medical teams	174	Immunizing against HPV
143	Integrated surveillance and climate-informed health early warning systems	175	Screening for cervical cancer
144	Stopping attacks on health care	176	Pooling revenues and reducing fragmentation
145	Making health facilities safe in emergencies and disasters	177	Promoting strategic purchasing
146	Promoting baby-friendly hospitals	178	Tsunamis
147	Integrating nutrition into improving the prevention, care and management of HIV/AIDS	179	Supporting health care providers to manage complications of FGM
148	Establishing global nutrient requirements	180	Focusing on postnatal care in low- and middle-income countries
149	Controlling the global obesity epidemic	181	Promoting adolescent well-being
150	Addressing nutrition in emergencies	182	Strengthening home-based records implementation
151	Certifying countries for interruption of yaws transmission	183	Identifying common areas of progress with the Every Newborn Action Plan
152	Parenting for Lifelong Health	184	Research in maternal, perinatal, and adolescent health
153	Preventing environmental health emergencies	185	Addressing critical knowledge gaps in newborn health
154	Detection and alert in environmental health emergencies	186	Implementation of the WHO Traditional Medicine Strategy 2014-2023
155	Preparedness environmental health emergencies	187	Developing nutrition guidelines
156	Recovery in environmental health emergencies	188	Addressing mobile health
157	Response in environmental health emergencies	189	Certifying eradication of dracunculiasis
158	Building capacity to enhance early diagnosis and clinical management of cystic echinococcosis	190	Eradicating dracunculiasis

WHO Activities

#	Name	#	Name
191	Implementing dracunculiasis surveillance and control	222	Streamlining operational R&D response during outbreaks
192	Providing information on the health effects of chemicals	223	Developing norms and standards in the epidemic context
193	Strengthening capacities for the public health management of chemical incidents	224	Synthesizing evidence and knowledge on air pollution
194	Working together through the WHO Chemical Risk Assessment Network	225	Working with partners
195	Harmonizing global approaches to chemical risk assessment	226	Developing the Global Dementia Observatory
196	Health and Climate Change Global Survey	227	Improving Quality of Care for Maternal, Newborn and Child Health (Quality of Care Network)
197	Fostering fiscal dialogue between finance and health	228	Strengthening quality midwifery for all mothers and newborns
198	Building capacity for prevention and management of poisoning	229	Improving coordination and fostering an enabling environment
199	Prioritizing diseases for research and development in emergency contexts	230	Eliminating female genital mutilation
200	Capacity building and training materials	231	Addressing the international migration of health workers
201	Advocating for hearing care	232	Improving data on rabies
202	Highlighting priorities for ear and hearing care - World Report on Hearing	233	Vaccinating against rabies to save lives
203	Promoting the World Hearing Forum	234	Human rabies prevention and management
204	Urban health across sectors	235	Improving care of the injured
205	Assessing chemical risks in food	236	Strengthening the nursing and midwifery agenda globally
206	Assessing microbiological risks in food	237	Promoting safe food handling
207	Supporting countries endemic for Buruli ulcer	238	Improving health workforce data and evidence
208	Engaging communities to sustain dengue vector control	239	Integrating ear and hearing care into health systems
209	Promoting dengue vector surveillance and control	240	Expanding health coverage to all workers
210	Enhancing dengue diagnosis and case management	241	Promoting healthy, safe and resilient workplaces for all
211	Improving data for dengue	242	Protecting health and safety of health workers
212	Supporting countries endemic for mycetoma	243	Health workforce education and training
213	Promoting research on Buruli ulcer	244	Understanding the workforce situation through health labour market analysis
214	Strengthening research capacity into mycetoma	245	Estimating the burden of foodborne diseases
215	Promoting the integrated approach to skin-related neglected tropical diseases	246	Supporting community-based health workers (CHWs)
216	Engaging partnerships and global coordination for Buruli ulcer	247	Assessing country progress in health financing for UHC
217	Fostering partnerships and coordination for the control of mycetoma	248	Improving service access and quality
218	Raising revenues for health	249	Implementing the Urban Health Initiative
219	Leveraging public financial management for better health	250	Building capacity to prevent childhood diseases linked to the environment
220	Robust monitoring of maternal health data	251	Developing technical information on environmental risks to child health
221	Making listening safe	252	Raising awareness on e-waste and children's health

WHO Activities

#	Name	#	Name
253	Improving childhood cancer cure rate	289	Facilitating global surveillance of antimicrobial resistance and use
254	Addressing the political economy of health financing reform	290	Raising awareness and education on antimicrobial resistance
255	Building capacity for health financing	291	Raising taxes on tobacco
256	Management of noncommunicable diseases	292	Accelerating R&D processes
257	Preventing noncommunicable diseases	293	Implementing health financing reform
258	Integrated management of NCDs	294	Harnessing power of science and digital health
259	Monitoring science and evidence on climate change and health	295	Accelerating impact of innovations for health
260	Advocacy and Partnerships to protect human health from climate change	296	Shaping the research agenda
261	Supporting countries to protect human health from climate change	297	Conducting research and building capacity of researchers
262	Promoting participatory governance, social participation and accountability	298	Strengthening effective use of evidence for health impact
263	Supporting national health policies, strategies, plans	299	Providing technical leadership and coordination for trachoma elimination
264	Working with parliamentarians to achieve UHC	300	Eliminating trachoma through high-quality data
265	Promoting malaria chemoprevention	301	Facilitating research for trachoma elimination
266	Building capacity on climate change and human health	302	Eliminating malaria
267	Controlling Cancer	303	Protecting malaria high-risk groups
268	Ensuring quality cancer treatment	304	Protecting malaria high-risk groups
269	Supporting countries to strengthen palliative care	305	Monitoring malaria drug efficacy and resistance
270	Promoting Cancer Early Diagnosis	306	Building capacity on legal matters
271	Understanding the problem	307	Collecting and disseminating legal information
272	Identifying solutions for countries	308	Providing legal advisory services to Member States
273	Strengthening Private Sector Engagement for UHC	309	Ensuring gender-responsive health systems
274	Preventing cancer	310	Closing data gaps in gender
275	Strengthening legal frameworks for UHC	311	Advancing gender, equity and human rights through programmes and policies
276	Reducing health system corruption	312	Addressing antivenoms issues
277	What is PHC?	313	Leading and coordinating anti-rabies efforts with "One Health" partners
278	Moving towards PHC	314	Improving ecological and epidemiological data on snakebite envenoming
279	Assessing, measuring, improving PHC	315	Improving treatment for snakebite patients
280	Preventing and controlling cholera in endemic countries	316	Undertaking health law research
281	Supporting cholera outbreak response	317	Global Coordination Mechanism on NCDs
282	Hosting the GTFCC secretariat	318	Diagnostic testing for malaria
283	Monitoring progress on antimicrobial resistance	319	Preventing and controlling snakebite envenoming
284	Supporting countries with national action plan implementation	320	Health and Climate Change Country Profiles
285	Fostering international cooperation on antimicrobial resistance	321	Investing in school health
286	Coordinating R&D on antimicrobial resistance	322	WHO collaborative multi-centre research project on SARS diagnosis
287	Optimizing use of antimicrobial medicines	323	Supporting country programmes
288	Building capacity for infection prevention		

WHO Initiatives

#	Name	#	Name
1	Access to COVID-19 Tools (ACT) Accelerator	32	Health for All Film Festival
2	Arts and Health	33	Health Resources and Services Availability Monitoring System (HeRAMS)
3	Be healthy be mobile	34	High 5s: Standard operating procedures
4	Beijing+25: Generation Equality	35	Hub for Pandemic and Epidemic Intelligence
5	Cervical Cancer Elimination Initiative	36	The International EMF (electromagnetic field) Project
6	Comprehensive Mental Health Action Plan 2013-2030	37	International Regulatory Cooperation for Herbal Medicines (IRCH)
7	COVID-19 technology access pool	38	Joint UNODC/WHO Programme on Drug Dependence Treatment and Care
8	Decade of Healthy Ageing (2021-2030)	39	Malaria Vaccine Implementation Programme
9	Defeating meningitis by 2030	40	Maternal and Neonatal Tetanus Elimination
10	Eliminate yellow fever epidemics (EYE) 2017-2026	41	Medication Without Harm
11	Epidemic Intelligence from Open Sources (EIOS)	42	MPOWER
12	Every Newborn Action Plan	43	Pandemic Influenza Preparedness (PIP) Framework
13	EVIPNet : Evidence-informed Policy Network	44	Patients for patient safety
14	FAO/WHO Codex Trust Fund	45	Preventing and Responding to Sexual Exploitation, Abuse and Harassment
15	Find. Treat. All. #EndTB	46	Private Organizations for Patient Safety (POPS)
16	Food Systems for Health	47	Public health implications of the Nagoya Protocol
17	A Future for the World's Children	48	Rehabilitation 2030
18	Global Action Plan for Healthy Lives and Well-Being for All	49	SAFER - alcohol control initiative
19	Global Alliance for Care of the Injured	50	Strengthening national nutrition information systems (EC-NIS project)
20	Global Alliance to Eliminate Lead Paint	51	Tripartite Zoonoses Guide
21	Global Antimicrobial Resistance and Use Surveillance System (GLASS)	52	Twinning Partnerships for Improvement
22	Global Buruli Ulcer Initiative (GBUI)	53	United Against Rabies
23	Global Emergency and Trauma Care Initiative (GETI)	54	UN Decade of Action on Nutrition
24	Global Influenza Surveillance and Response System (GISRS)	55	Urban Health Initiative
25	Global Laboratory Leadership Programme (GLLP)	56	WHO 1+1 Initiative
26	Global Learning Opportunities for Vaccine Quality	57	WHO Alliance for the Global Elimination of Trachoma by 2020
27	Global Patient Safety Collaborative	58	WHO Health and Peace Initiative
28	Global Surveillance and Monitoring System	59	WHO collaborative multi-centre research project on Severe Acute Respiratory Syndrome (SARS) diagnosis
29	Global Vaccine Safety Initiative (GVSI)	60	WHO Global Diabetes Compact
30	Hand Hygiene for All Global Initiative	61	WHO Global Learning Laboratory for Quality UHC
31	Health and Energy Platform of Action (HEPA)	62	WHO public health research agenda for influenza

Section # 2

Changes in the health status during centuries

Social impact of diseases

Public Health

Public Health is the art and science of preventing disease, prolonging life, and promoting physical and mental health, sanitation, personal hygiene, control of infectious diseases, and organization of health services.

From the normal human interactions involved in dealing with the many problems of social life, there has emerged a recognition of the importance of community action in the promotion of health and the prevention and treatment of disease, and this is expressed in the concept of public health.

The practice of public health draws heavily on medical science and concentrates especially on controlling the environment for the benefit of the public. It is concerned therefore with housing, water supplies, and food.

Noxious agents can be introduced into these through inadequate sewage disposal and drainage, defective heating and ventilating systems, machinery, and toxic chemicals.

Public health medicine is part of the greater system of preserving and improving the public health. Occupational medicine is concerned with the health, safety, and welfare of persons in the workplace. It may be viewed as a specialized part of public health medicine since its aim is to reduce the risks in the environment in which persons work.

Public Health

The journey of preserving, maintaining, and actively promoting public health requires special methods of information-gathering (epidemiology) and corporate arrangements to act upon significant findings and put them into practice.

Statistics collected by epidemiologists attempt to describe and explain the occurrence of disease in a population by correlating factors such as diet, environment, radiation exposure, or cigarette smoking with the incidence and prevalence of disease. The government, through laws and regulations, creates agencies to oversee and formally inspect and monitor water supplies, food processing, sewage treatment, drains, and pollution. Governments also are concerned with the control of epidemic and pandemic diseases, establishing guidelines for appropriate medical responses and isolation procedures, and issuing travel warnings to prevent the spread of disease from affected areas.

Various public health agencies have been established to help control and monitor disease within societies, on both national and international levels. For example, the United Kingdom's Public Health Act of 1848 established a special public health ministry for England and Wales. In the United States, public health is studied and coordinated on a national level by the Centers for Disease Control and Prevention (CDC). Internationally, the World Health Organization (WHO) plays an equivalent role.

History of Public Health

- A review of the historical development of public health, which began in ancient times, emphasizes how various public health concepts have evolved.
- Historical public health measures included quarantine of leprosy victims in the Middle Ages and efforts to improve sanitation following the 14th-century plague epidemics.
- Population increases in Europe brought with them increased awareness of infant deaths and a proliferation of hospitals.
- These developments in turn led to the establishment of modern public health agencies and organizations, designed to control disease within communities and to oversee the availability and distribution of medicines.

Beginnings in antiquity

Most of the world's ancient peoples practiced cleanliness and personal hygiene, often for religious reasons, including, apparently, a wish to be pure in the eyes of their gods. The Bible, for example, has many adjurations and prohibitions about clean and unclean living. Religion, law, and custom were inextricably interwoven.

For thousands of years societies looked upon epidemics as divine judgments on the wickedness of humankind. The idea that pestilence is due to natural causes, such as climate and physical environment, however, gradually developed.

This great advance in thought took place in Greece during the 5th and 4th centuries bce and represented the first attempt at a rational, scientific theory of disease causation. An association between malaria and swamps, for example, was established very early (503–403 bce), even though the reasons for the association were obscure. In the book *Airs, Waters, and Places*, thought to have been written by Greek physician Hippocrates in the 5th or 4th century bce, the first systematic attempt was made to set forth a causal relationship between human diseases and the environment. Until the new sciences of bacteriology and immunology emerged well into the 19th century, this book provided a theoretical basis for the comprehension of endemic disease (that persisting in a particular locality) and epidemic disease (that affecting a number of people within a relatively short period).

Middle Age



Diseases in epidemic proportions included leprosy, bubonic plague, smallpox, tuberculosis, scabies, erysipelas, anthrax, trachoma, sweating sickness, and dancing mania. The isolation of persons with communicable diseases first arose in response to the spread of leprosy. This disease became a serious problem in the Middle Ages and particularly in the 13th and 14th centuries.

The Black Death, an outbreak of plague, reached the Mediterranean ports of southern Europe in 1347 and in three years swept throughout Europe. The chief method of combating plague was to isolate known or suspected cases as well as persons who had been in contact with them. The period of isolation at first was about 14 days and gradually was increased to 40 days. Stirred by the Black Death, public officials created a system of sanitary control to combat contagious diseases, using observation stations, isolation hospitals, and disinfection procedures. Major efforts to improve sanitation included the development of pure water supplies, garbage and sewage disposal, and food inspection. These efforts were especially important in the cities, where people lived in crowded conditions in a rural manner with many animals around their homes.

During the Middle Ages a number of first steps in public health were made: attempts to cope with the unsanitary conditions of the cities and, by means of quarantine, to limit the spread of disease; the establishment of hospitals; and provision of medical care and social assistance.

The Renaissance

Centuries of technological advance culminated in the 16th and 17th centuries in a number of scientific accomplishments. Educated leaders of the time recognized that the political and economic strength of the state required that the population maintain good health.

No national health policies were developed on the Continent, however, because the government lacked the knowledge and administrative machinery to carry out such policies. As a result, public health problems continued to be handled on a local community basis, as they had been in medieval times.

Scientific advances of the 16th and 17th centuries laid the foundations of anatomy and physiology. Observation and classification made possible the more precise recognition of diseases. The idea that microscopic organisms might cause communicable diseases had begun to take shape.

Among the early pioneers in public health medicine was English statistician John Graunt, who in 1662 published a book of statistics, which had been compiled by parish and municipal councils, that gave numbers for deaths and sometimes suggested their causes. Inevitably the numbers were inaccurate but a start was made in epidemiology.

The Renaissance

Nineteenth-century movements to improve sanitation occurred simultaneously in several European countries and were built upon foundations laid in the period between 1750 and 1830. From about 1750 the population of Europe increased rapidly, and with this increase came a heightened awareness of the large numbers of infant deaths and of the unsavoury conditions in prisons and in mental institutions.

This period also witnessed the beginning and the rapid growth of hospitals. Hospitals founded in the United Kingdom, as the result of voluntary efforts by private citizens, helped to create a pattern that was to become familiar in public health services. These efforts mold public opinion and attract governmental attention. Finally, such agitation leads to governmental action.

This era was also characterized by efforts to educate people in health matters. In 1752 British physician Sir John Pringle published a book that discussed ventilation in barracks and the provision of latrines. Two years earlier he had written about jail fever (later thought to be typhus), and again he emphasized the same needs as well as personal hygiene. In 1754 James Lind, who had worked as a surgeon in the British navy, published a treatise on scurvy, a disease caused by a lack of vitamin C.

The Renaissance

- Advances in public health in England had a strong influence in the United States, where one of the basic problems, as in England, was the need to create effective administrative mechanisms for the supervision and regulation of community health.
- In America recurrent epidemics of yellow fever, cholera, smallpox, typhoid, and typhus made the need for effective public health administration a matter of urgency.
- The so-called Shattuck report, published in 1850 by the Massachusetts Sanitary Commission, reviewed the serious health problems and grossly unsatisfactory living conditions in Boston. Its recommendations included an outline for a sound public health organization based on a state health department and local boards of health in each town.
- In New York City (in 1866) such an organization was created for the first time in the United States.

The Renaissance

- France was preeminent in the areas of political and social theory. As a result, the public health movement in France was deeply influenced by a spirit of public reform. The French contributed significantly to the application of scientific methods for the identification, treatment, and control of communicable disease.
- Although many public health trends in Germany resembled those of England and France, the absence of a centralized government until after the Franco-German War did cause significant differences. After the end of that war and the formation of the Second Reich, a centralized public health unit was formed.
- Another development was the emergence of hygiene as an experimental laboratory science. In 1865 the creation at Munich of the first chair in experimental hygiene signaled the entrance of science into the field of public health.
- There were other advances. The use of statistical analysis in handling health problems emerged. The forerunner of the U.S. Public Health Service came into being, in 1798, with the establishment of the Marine Hospital Service. Almost one hundred years later, the service enforced port quarantine for the first time.

Developments from 1985

The work of Italian bacteriologist Agostino Bassi with silkworm infections early in the 19th century prepared the way for the later demonstration that specific organisms cause a number of diseases. Some questions, however, were still unanswered. These included problems related to variations in transmissibility of organisms and in susceptibility of individuals to disease. Light was thrown on these questions by discoveries of human and animal carriers of infectious diseases.

In the last decades of the 19th century, French chemist and microbiologist Louis Pasteur, German scientists Ferdinand Julius Cohn and Robert Koch, and others developed methods for isolating and characterizing bacteria. During this period, English surgeon Joseph Lister developed concepts of antiseptic surgery, and English physician Ronald Ross identified the mosquito as the carrier of malaria. In addition, French epidemiologist Paul-Louis Simond provided evidence that plague is primarily a disease of rodents spread by fleas, and the Americans Walter Reed and James Carroll demonstrated that yellow fever is caused by a filterable virus carried by mosquitoes.

Thus, modern public health and preventive medicine owe much to the early medical entomologists and bacteriologists. A further debt is owed bacteriology because of its offshoot, immunology. French chemist and microbiologist Louis Pasteur made many important contributions to science, including the discovery that microorganisms cause fermentation and disease.

Developments from 1985

The development of microbiology and immunology had immense consequences for community health. In the 19th century the efforts of health departments to control contagious disease consisted in attempts to improve environmental conditions. As bacteriologists identified the microorganisms that cause specific diseases, progress was made toward the rational control of specific infectious diseases.

In the United States the diagnostic bacteriologic laboratory was developed, a practical application of the theory of bacteriology, which evolved largely in Europe. These laboratories, established in many cities to protect and improve the health of the community, were a practical outgrowth of the study of microorganisms, just as the establishment of health departments was an outgrowth of an earlier movement toward sanitary reform. And just as the health department was the administrative mechanism for dealing with community health problems, the public health laboratory was the tool for the implementation of the public health program. Evidence of the effectiveness of this new phase of public health may be seen in statistics of immunization against diphtheria in New York City the mortality rate due to diphtheria fell from 785 per 100,000 in 1894 to 1.1 per 100,000 in 1940.

The Centers for Disease Control and Prevention (CDC; originally the Communicable Disease Center), an agency of the U.S. Department of Health and Human Services, was founded in 1946 and was tasked with the mission of preventing and controlling disease and promoting public health. The CDC serves a key role in gathering and disseminating information on disease and disease prevention to the general public. Today it is a leading center of epidemiology.

Developments from 1985

While improvements in environmental sanitation during the first decade of the 20th century were valuable in dealing with some problems, they were of only limited usefulness in solving the many health problems found among the poor. In the slums of England and the United States, malnutrition, venereal disease, alcoholism, and other diseases were widespread.

Nineteenth-century economic liberalism held that increased production of goods would eventually bring an end to scarcity, poverty, and suffering. By the turn of the century, it seemed clear that deliberate and positive intervention by reform-minded groups, including the state, also would be necessary.

For this reason many physicians, clergymen, social workers, public-spirited citizens, and government officials promoted social action. Organized efforts were undertaken to prevent tuberculosis, lessen occupational hazards, and improve children's health.

The first half of the 20th century saw further advances in community health care, particularly in the welfare of mothers and children and the health of schoolchildren, the emergence of the public health nurse, and the development of voluntary health agencies, health education programs, and occupational health programs.

Developments from 1985

In the second half of the 19th century, two significant attempts were made to provide medical care for large populations. One was by Russia and took the form of a system of medical services in rural districts; after the communist revolution, this was expanded to include complete government-supported medical and public health services for everyone. Similar programs have since been adopted by a number of European and Asian countries. The other attempt was prepayment for medical care, a form of social insurance first adopted toward the close of the 19th century in Germany, where prepayment for medical care had long been familiar. A number of other European countries adopted similar insurance programs. Later, prenatal care made a substantial contribution to preventive medicine, with the education of mothers influencing the physical and psychological health of families and being passed on to succeeding generations. Prenatal care provides the opportunity to educate the mother in personal hygiene, diet, exercise, the damaging effects of smoking, the careful use of alcohol, and the dangers of drug abuse.

Public Health interests also have turned to disorders such as cancer, cardiovascular disease, thrombosis, lung disease, and arthritis, among others. There is increasing evidence that several of these disorders are caused by factors in the environment. For example, there exists a clear association between cigarette smoking and the eventual onset of certain lung and cardiovascular diseases. Theoretically, these disorders are preventable if the environment can be altered. Health education, particularly aimed at disease prevention, is of great importance and is a responsibility of national and local government agencies as well as voluntary bodies. Life expectancy has increased in almost every country that has taken steps toward reducing the incidence of preventable disease.

International organizations

Since ancient times, the spread of epidemic disease demonstrated the need for international cooperation for health protection. Early efforts toward international control of disease appeared in national quarantines in Europe and the Middle East.

The first formal international health conference, held in Paris in 1851, was followed by a series of similar conferences aimed at drafting international quarantine regulations. A permanent health organization, the International Office of Public Health (L'Office International d'Hygiène Publique), was established in Paris in 1907 to receive notification of serious communicable diseases from participating countries, to transmit this information to the member countries, and to study and develop sanitary conventions and quarantine regulations on shipping and train travel. This organization was ultimately absorbed by the World Health Organization (WHO) in 1948.

In the Americas, the organization of international health probably began with a regional health conference in Rio de Janeiro in 1887. From 1889 onward there were several conferences of American countries, which led ultimately to the establishment of the Pan-American Sanitary Bureau, which was made a regional office of WHO in 1949, when it became known as the Pan-American Health Organization.

International organizations

The rise and decline of health organizations has been influenced by wars and their aftermaths. After World War I a Health Section of the League of Nations was established (1923) and functioned until World War II.

After the war, the United Nations Relief and Rehabilitation Administration (UNRRA) was set up; it processed displaced persons in such a way as to prevent the spread of disease. It was responsible for the planning steps that led to the establishment of WHO as a special agency of the United Nations.

WHO maintains close relationships with other United Nations agencies, particularly the United Nations Children's Fund (UNICEF) and the Food and Agriculture Organization (FAO), and with international labour organizations. From its inception in 1946, UNICEF focused its aid on maternal and child health services and the control of infections, especially in children. Priority has been given to the production of vaccines, the institution of environmental sanitation, the provision of clean water, and the training of local personnel in their own countries (especially in rural areas). Aid is channeled through organized health services in less-developed countries. Recent efforts have concentrated on persuading governments to undertake national surveys to identify the basic needs of their children and to devise appropriate national policies.

Patterns among developed countries

The official responsible for the administration of national health affairs is in most cases a member of the cabinet. Advisory councils are frequently used to bring the ideas of leading scientists, health experts, and community leaders to bear on major national health problems.

An organization that provides basic community health services under the direction of a medical officer is called a local health unit. It is usually governed by a local authority. Its programs may include maternal and child health, communicable-disease control, environmental sanitation, maintenance of records for statistical purposes, health education of the public, public health nursing, medical care, and, often, school health services.

The population served by a local health unit may be only a few thousand or several hundred thousand. There are substantially different problems involved in administering health services for a large rural area that is sparsely populated and a municipality with a population of one or two million.

Medical care is provided as a public service to some degree in most countries. It may be limited to the hospitalization of persons afflicted with certain ailments, for example, mental disease, tuberculosis, chronic illness, and acute infections. Comprehensive health services may be provided for some specific population groups, as in Canada and the United States, where the federal government provides care for Indians and Eskimos. Many countries have compulsory medical insurance, and some combine the socialization of hospitals with medical insurance covering general medical care, as in Denmark. Full-scale socialization of health services exists in a few countries, including the United Kingdom and New Zealand. Such socialized health services are often alternatively described as systems of public, or universal, health care.

There is a trend toward regional planning of comprehensive health services for defined populations. In an idealized plan, the first level of contact between the population and the system, which can be called primary care, is provided by health personnel who work in community health centres and who reach beyond the health centres into the communities and homes with preventive, promotive, and educational services. At the next level of care, specialists in community hospitals provide secondary care for patients referred from the primary-care centres. Finally, tertiary, or superspecialty, care is provided by a major medical centre.

Variations among developed countries

Among the developed countries, there is substantial variation in the organization and administration of health services. The United Kingdom, for example, has a National Health Service with substantial autonomy given to local government for implementation. The United States has a pluralistic approach to health services, in which local, state, and national governments have varying areas of responsibility, with the private sector playing a prominent role.

The health services of the United States can be considered at three levels: local, state, and federal. Locally, in cities or counties, there is substantial autonomy within broad guidelines developed by the state. The size and scope of local programs vary, but some of their functions are control of communicable diseases; clinics for mothers and children, particularly for certain preventive and diagnostic services; public health nursing services; environmental health services; health education; vital statistics; community health centres, hospitals, and other medical care facilities; community health planning and coordination. At the state level, a department of health is charged with overall responsibility for health, though a number of agencies may actually be involved. The state department of health usually has five functions: public health and preventive programs; medical and custodial care such as the operation of hospitals for mental illness; expansion and improvement of hospitals, medical facilities, and health centres; licensure for health purposes of individuals, agencies, and enterprises serving the public; and financial and technical assistance to local governments for conducting health programs. At the federal, or national, level, the Public Health Service of the Department of Health and Human Services is the principal health agency, but several other departments have health interests and responsibilities. Federal health agencies accept responsibility for improving state and local services, for controlling interstate health hazards, and for working with other countries on international health matters. In addition, the federal government promotes and supports medical research, health services, and educational programs throughout the country. Voluntary effort is a significant part of health work in the United States. Voluntary agencies in the health field function mostly at the local level, though they also may be active at state and national levels. Supported largely through private sources, these agencies contribute to programs related to education, research, and health services. Medical care is provided and paid for through many channels, including public institutions, such as municipal, county, state, and federal health centres, hospitals, and medical care programs, and through private hospitals and private practitioners working either alone or, increasingly, in groups. Generally, medical care is financed by public funds, voluntary health insurance, or personal payment. Thus, in the United States there is great variety in the content, scope, and quality of health services. These services are provided by several independent agencies. In effect, however, they constitute a working partnership for the protection and promotion of human health.

Developing countries have sometimes been influenced in their approaches to health care problems by the developed countries that have had a role in their history. For example, the countries in Africa and Asia that were once colonies of Britain have educational programs and health care systems that reflect British patterns, though there have been adaptations to local needs. Similar effects may be observed in countries influenced by France, the Netherlands, and Belgium. However, whereas clear patterns in health care organization can be found among some less-developed countries, there also exist wide variations and gaps in the health resources and administration found in other less-developed countries. These variations and gaps are more pronounced in less-developed versus developed regions because within the former are complex factors (such as political or societal instability) capable of complicating and sometimes even entirely disrupting the administration of health care. Countries with such unstable health care infrastructure often are dependent on aid from international organizations.

Patterns among less-developed countries

All health services, except for a small amount of private practice, are under a ministry of health, in which there are bureaus, or departments, hospital services, health services, education and training, personnel, and research and planning. Hospital and health services are distributed throughout the country. At the periphery of the system are dispensaries, or health outposts, often staffed by one or two persons with limited training. The dispensaries are often of limited effectiveness and are upgraded to full health centres when possible. Health centres and their activities are the foundation of the system. Health centres are usually staffed by auxiliaries who have four to 10 years of basic education plus one to four years of technical training. The staff may include a midwife, an auxiliary nurse, a sanitarian, and a medical assistant. The assistants, trained in the diagnosis and treatment of sickness, refer to a physician the problems that are beyond their own competence. Together, these auxiliaries provide comprehensive care for a population of 10,000 to 25,000. Several health centres together with a district hospital serve a district of about 100,000 to 200,000 people.

The district hospital is dependent on a regional hospital, to which patients with complex problems can be referred for more-specialized services. Administrative direction of both regional health services and regional hospital services can be combined at this level under a regional medical officer. The central administration of the ministry of health provides policies and guidance for an entire health service and, in some instances, also provides a central planning unit.

Problems of transportation and communication over great distances, shortages of staff and other resources, and inadequacies in staff preparation and motivation often lead to malfunctions in the system. Nonetheless, the public health services developed in African and Asian countries have generally provided a sound basis for future development within the framework of national development.

Variations among less-developed countries

The organization of public health services in Latin American countries differs substantially from those of Africa and Asia. These differences are an expression of the different historical backgrounds of the regions.

The Latin American countries are generally more affluent than those of Asia and Africa. Private practice is more widespread, and private or voluntary agencies are more prominent. Health services are provided largely by local and national governments. Many Latin American countries also have systems of clinics and hospitals for workers financed by employers and workers. The distribution of health services, with health centres, hospitals, and preventive services, is roughly similar to Africa and Asia. The Latin American countries, however, have used auxiliaries less than African and Asian countries. Latin America has pioneered in the development of health planning methods. Chile has one of the most-advanced approaches to health planning in the world.

Thailand was never colonized and therefore has no historical influence favouring any particular pattern of health services. The Thai Ministry of Health has a well-developed system of hospitals and health centres across the country to serve both rural and urban people. In 2001 the country adopted a universal health care plan, supported in large part by government financing and supplemented by private funds. Within the public health services of Thailand, there are a number of separate divisions—e.g., for tuberculosis, sexually transmitted diseases, and nutrition.

Section # 3

The position of the Public Health in the 21st century

New challenges & new tasks

World Economic Forum



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

System Initiative

Shaping the Future of Health and Healthcare

The World Economic Forum has developed System Initiatives to serve as platforms to bring together leaders and experts to tackle global issues that require public-private collaboration to find viable solutions. Each initiative is comprised of bodies of work with results-oriented projects and activities that mobilize leadership, expertise and resources from business, government, civil society and international organizations.

How the world can deliver healthy lives and healthcare for 9.7 billion people by 2050

By 2050, the world's population is expected to rise to 9.7 billion, with 2 billion over the age of 60. However, the global health care system is still ill-equipped to deal with this demographic transformation. To keep populations healthy and to treat patients more effectively, solutions need to come from outside traditional healthcare.

The World Economic Forum's System Initiative on Shaping the Future of Health and Healthcare provides a unifying framework for health preservation and improved healthcare delivery. The effort brings together stakeholders from the public and private sectors to catalyze opportunities to accelerate these goals. Specifically, the System Initiative aims to:

- Better manage future epidemics
- Promote healthy behaviours
- Improve financial efficiencies and sustainability
- Accelerate access to healthcare in emerging economies.

Core Activities

The System Initiative focuses on two main bodies of work: health and healthcare. The portfolio of projects and activities under these issues includes:

Human-centric Health

This project is designed to deepen understanding of how a human-centred approach to a healthy lifestyle can

transform the health ecosystem, particularly in the prevention of non-communicable diseases (NCDs). Areas of focus include:

- Development and dissemination of critical knowledge and tools that focus on triggers for long-term behavioural change in individuals, policy-makers and business leaders, leading to healthier lifestyles
- Catalyzing concrete public-private cooperation opportunities across sectors by leveraging the Forum as a platform to maximize impact in the NCDs agenda

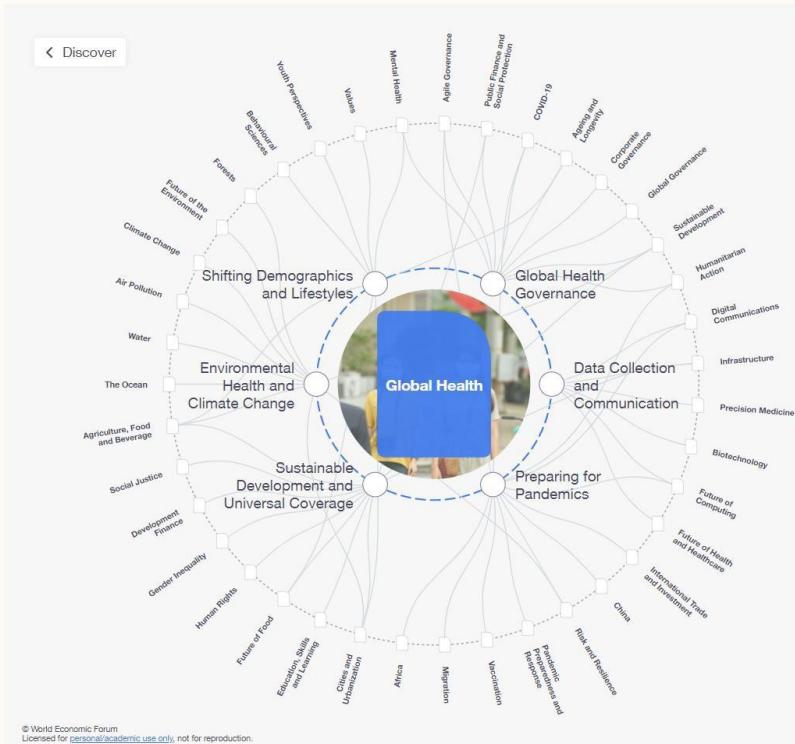
Managing the Risk and Impact of Future Epidemics

This project aims to mitigate and contain the threat of global disease outbreaks to prevent the development of public health emergencies. The areas of focus include:

- Regional: Public-private collaboration models for national and sub-regional preparedness and response schemes in high-risk geographies
- Global: Vaccine innovation where there are opportunities to create alignment between participants in the vaccine innovation ecosystem, with a view to combat ignored pathogens

Value in Healthcare

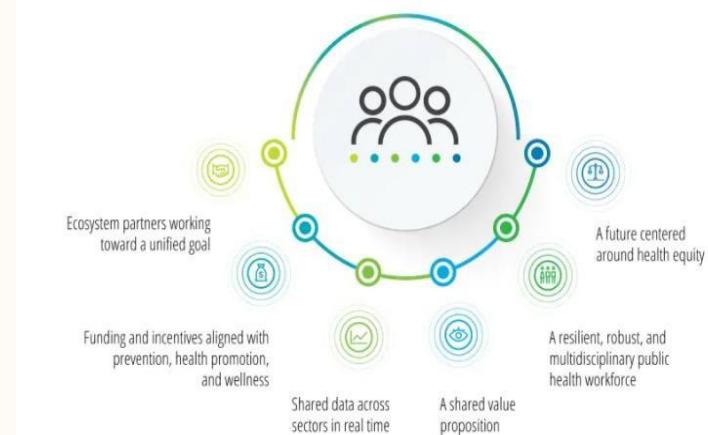
This project aims to improve the efficiency of healthcare delivery, cost and outcome. The areas of focus include:



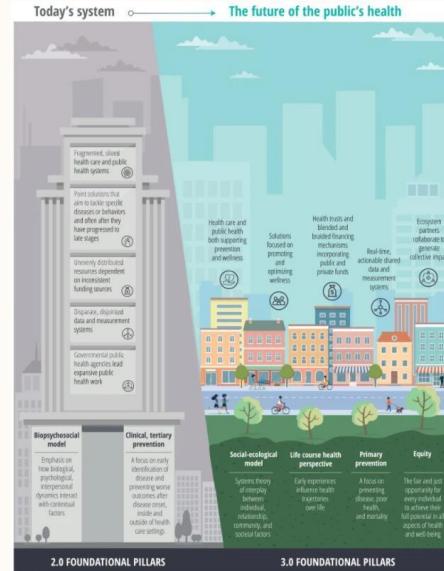
Pic 1. Future of Health & Healthcare

Pic 2. Global Health

Deloitte Insights



Pic 3. Six reinforcing dimensions



Pic 4. The Future of Public Health

World Health Organization



Pic 5. Facing the future

A new vision in the 21st century

WHO

The public health function is an organized, multisectoral, societal function, involving government as well as other dimensions of society (civil society, the media, etc.). Ultimately, because of the government's responsibility for the human right to health, the function rests with government. In practice, leadership may be delegated to the ministry of health or another responsible organization or organizations.

The public health function is far more than simply an expert, professional or service function. It must avoid being, or becoming, overly narrow and, while scientifically sound, it should avoid spurious scientism. The public health function should be an advocate for the paradigm shift towards a focus on health, well-being, health promotion and disease prevention, provide a strong and consistent voice on behalf of vulnerable populations and address health inequities.

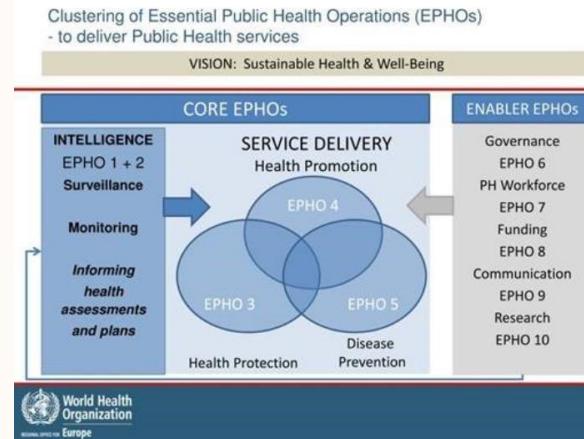
The public health function needs a locus. It will be for Member States to decide where the leadership should lie, and at what level. The public health function will be needed centrally, regionally and locally. The identity of the locus and the organization(s) involved will differ from country to country, depending on the context and other prevailing circumstances. National institutes of public health may play a major role, as centres of knowledge, expertise, research, postgraduate and continuing education and capacity-building. Universities, schools of public health, medical schools and wider academia have similarly important roles to play, as do collaborative professional organizations working internationally.

A new vision in the 21st century

WHO

The broad public health function includes specialist capacity providing many technical public health services. These services provide a range of public, specific, organizational forms for delivering the 10 EPHOs in a given Member State.

The EPHOs are shown in picture 6 below. They deal with the full range of determinants of health: genetic, political, social and economic, environmental, commercial, cultural and health system. This requires interconnected, horizontal and networked governance for health – open, collaborative and consensual.



Pic 6. The EPHOs

The nature of today's challenges

WHO

Modern public health activities must be effective in a world of considerable unpredictability, complexity, ambiguity and uncertainty. Some actions will remain more aspirational, particularly if these require fundamental political and social reorientation; other actions are more tactical and the challenge is to implement them.

The breadth of potential public health aspiration and engagement requires prioritization, and a focus on “what matters most” to the health of populations. This approach acknowledges that single causal risk factors do not act in isolation, and that understanding the nature of diseases requires an understanding of the nature of causal structures. The political challenge here is to accept responsibility and respond positively to the social and economic dimensions of health experience.

While traditional rational, linear approaches to evidence in support of programme development and implementation have often prevailed to date, a “complex adaptive systems” perspective suggests that these are invariably found wanting. While evidence is important, it is inevitably imperfect and incomplete, and action is also needed. Context and relationships also matter; and we learn by doing and through real-time evaluation.

The nature of today's challenges

WHO

A systemic, sustained portfolio of initiatives, delivered at scale, is needed to address this condition and its associated health burden. Importantly, such initiatives are considered cost-effective for society: savings on health-care costs and higher productivity outweigh the direct investment required to deliver the intervention, when assessed over the full lifetime of the target population.

While education and personal responsibility are critical elements of any programme to reduce obesity, these are not sufficient on their own. Additional interventions are needed that rely less on conscious choices by individuals and more on changes to the environment and societal norms. Such changes require engagement from as many sectors as possible, including the private sector at all points along the food chain.

In addition to such analyses, the pervasive phenomenon known as “lifestyle drift” suggests a need to move beyond a single-minded approach to modifiable individual behavioural determinants, affecting specific public health topics such as smoking cessation, obesity and alcohol misuse, towards a more balanced, comprehensive, multideterminant, systems-based approach which takes a life-course perspective and acknowledges the co-clustering of behaviours in particular groups and communities that have complex political, economic, social and environmental causes as well as complex consequences.

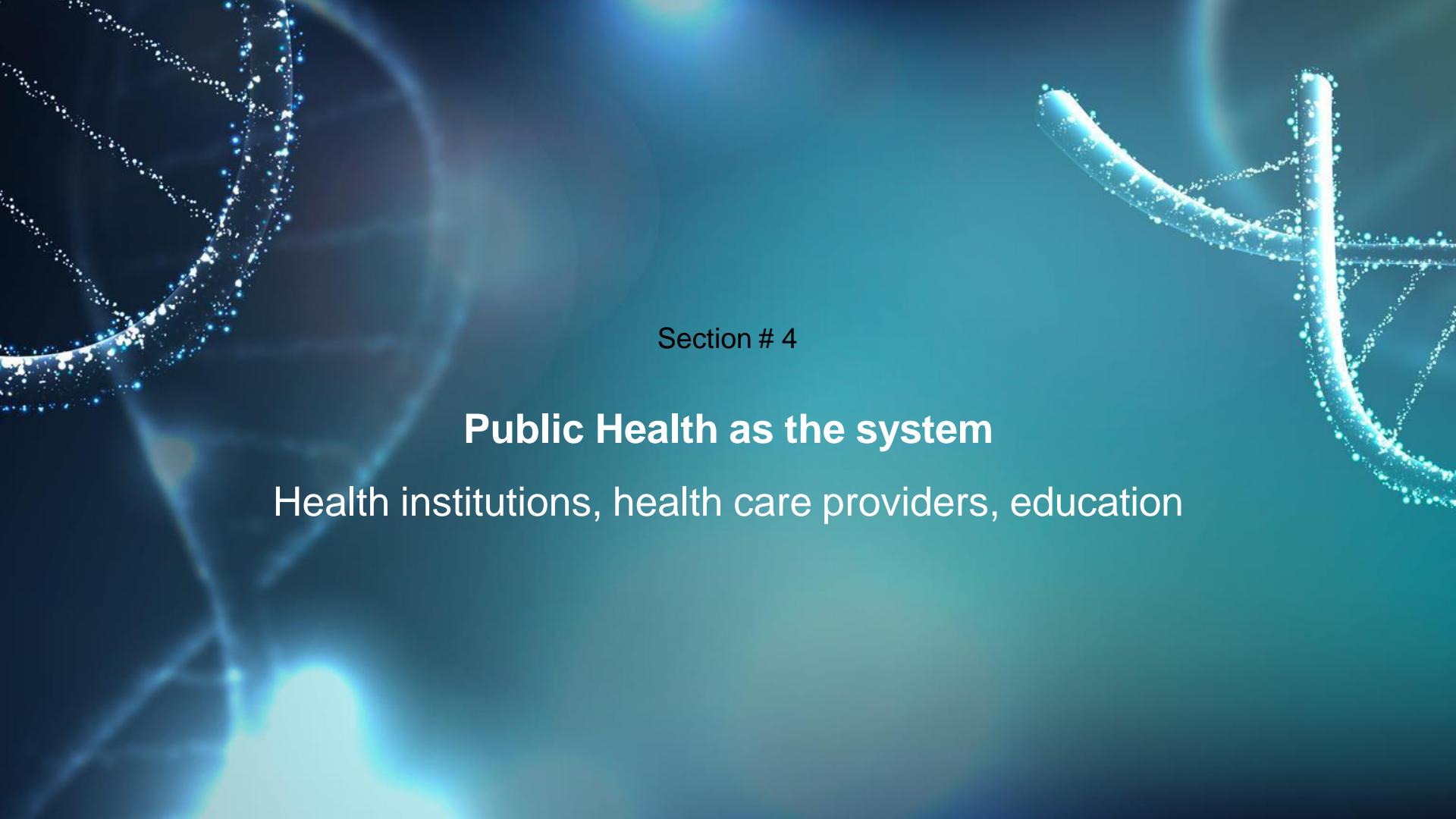
The nature of today's challenges

WHO

In response to such challenges, success can only be achieved through programmes which are systematic and scaled-up, driven by public health intelligence and informed by evidence, with sound infrastructure, business plans and programme management.

Real-time evaluation allows interventions to be tracked and adjusted continuously as required, based on the results of monitoring against clear and measurable process and outcome indicators. To date, evaluative research has often not provided sufficiently rapid feedback to be useful for policy analysis or change. Evaluative research is, however, an issue of which academics are increasingly aware and which they are actively seeking to address by clarifying, and giving greater attention to, pathways for the co-production and co-design of research in tandem with those at whom it is targeted.

The complex political, social, economic and environmental challenges of the 21st century require multifaceted, multilevel policy interventions, involving both vertical and horizontal integration. In the health field, there is growing evidence of the cost-effectiveness of such interventions. Complex systems approaches are required, with real-time evaluation and feedback.

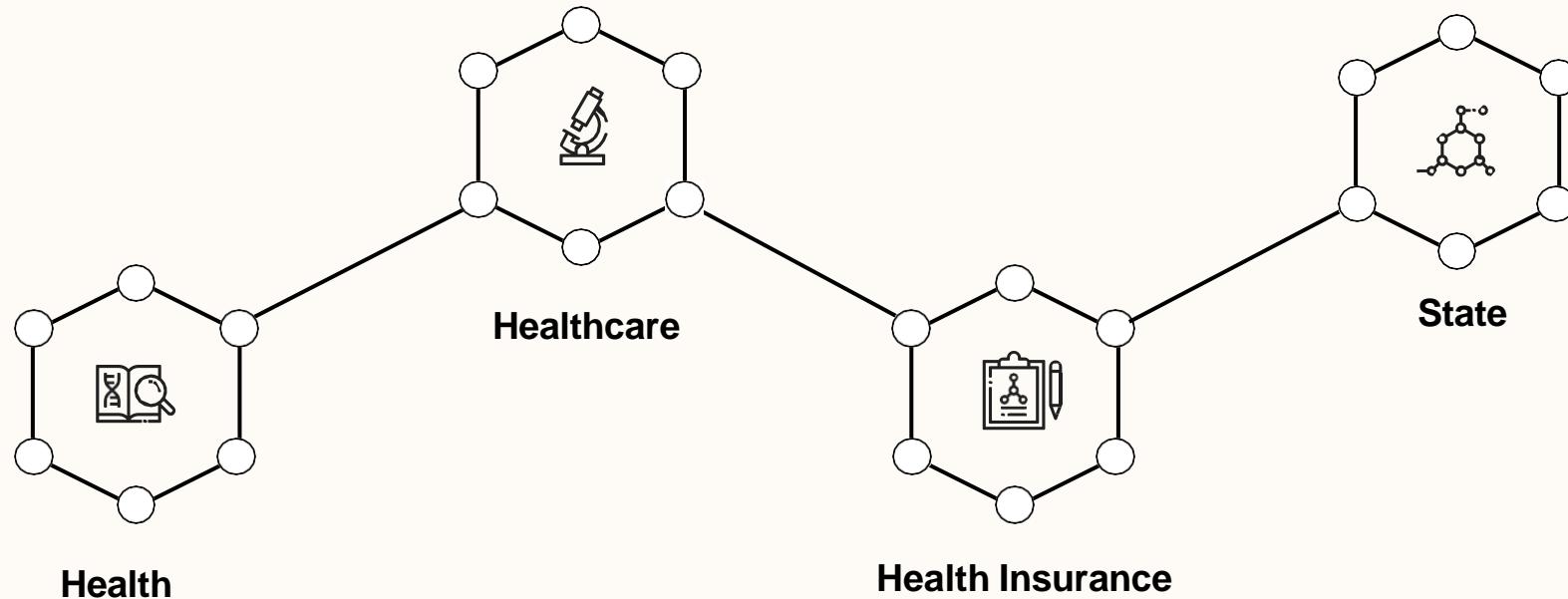
The background of the slide features a complex, abstract design in shades of blue and teal. It consists of several glowing, particle-filled lines that curve and twist across the frame, creating a sense of motion and depth. One prominent line on the left forms a partial circle, while another on the right is more linear and vertical. The overall effect is reminiscent of a microscopic view of a DNA molecule or a complex neural network.

Section # 4

Public Health as the system

Health institutions, health care providers, education

Health & Healthcare



Basic models of healthcare financing

Depending on the maturity of individual economies, different models of health care financing are used in the world. Some developed countries provide health care for their citizens free of charge and on an equal basis for all; with the exception of special services paid for by the patient.

Currently, 3 basic models of health care financing can be distinguished:

- From taxes
- From health insurance
- Market model

Model of healthcare financing from taxes

Health care is provided for all residents, regardless of their ability to pay, free of charge. It is provided by the state; medical facilities are state-owned, doctors are state employees. Health care is paid for from the state budget (taxes).

[This model predominates](#), for example, in GB, Denmark, Sweden, Italy, Greece.

Basic models of healthcare financing

Model of healthcare financing from health insurance

The origins of this model date back to the 19th century, when German Chancellor Otto von Bismarck introduced a new social security system that covered all sections of the population. The model is based on the principle of required health insurance, which is based on society-wide solidarity and health risk sharing. Depending on the amount of their income, each person pays required health insurance and receives health care for them as needed. Provider health services are separate economic entities. Health care is not state, but the state provides health care for all residents. The emphasis is on preventive care in an effort to reduce treatment costs.

[The model is used](#), for example, in the Czech Republic, Austria, Germany, France.

Private insurance financing model (market model)

The essence of the model lies in the idea of individual care for each citizen about their health. Health services then represent standard goods in the market system. Only citizens living below the subsistence level and the elderly are paid for from public funds.

[This model predominates](#) in the USA, partly also in Switzerland.

The Healthcare system in the Czech Republic

consists of

Insured (recipient of healthcare)

- Employees
- Self-employed persons
- State insured
- Persons without taxable income

Payers

- Insured persons
- Employers (pays insurance for employees)
- State (pays insurance for state insured)

Healthcare providers (healthcare intermediaries)

Health insurance companies

- Všeobecná zdravotní pojišťovna ČR (111)
- Vojenská zdravotní pojišťovna ČR (201)
- Česká průmyslová zdravotní pojišťovna (205)
- Oborová Zdravotní Pojišťovna Zaměstnanců Bank, Pojišťoven A Stavebnictví (207)
- Zaměstnanecká pojišťovna Škoda (209)
- Zdravotní pojišťovna ministerstva vnitra ČR (211)
- Revírní bratrská pokladna, zdravotní pojišťovna (213)

Healthcare in the Czech Republic

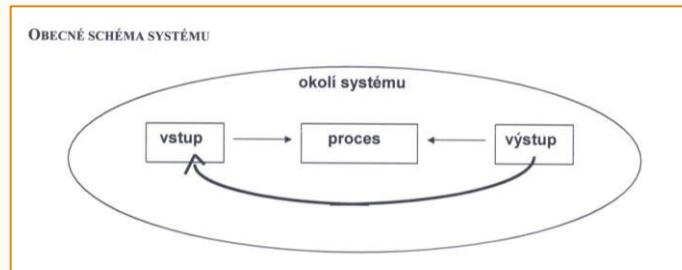
According to the type of health care facility and specialization, health care can be categorized as follows:

- Primary or general healthcare, which is available at the municipal level and includes: general practitioner services for children and adults, as well as basic gynaecological and dental care.
- Specialized, secondary healthcare includes a wide range of fields: urology, surgery or traumatology, etc. These services are provided in hospitals, dispensaries and clinics.
- Tertiary healthcare provided by highly specialized professionals, especially in large hospital facilities.

Note: Law No. 372/2011. *The Act on Health Services and the Conditions for Their Provision (the Law on Health Services) Part Two, Health Services and Health Care further divides health care into types and forms of health care.*

Healthcare systems in general

General systems theory: all objects, phenomena and processes of the real world can be imagined as systems



Pic. 7: General systems theory

The system is a complex of interdependent elements, elements that interact with each other.

According to the relationship to the system environment, we distinguish:

- Closed systems
- Open systems
- Autopoietic systems

Healthcare systems in general

The healthcare system is the part of the social system that consists of measures, institutions, organizations and activities that seek to treat diseases, prevent them and strengthen health.

Organizational unit of organized relations between:

- Public
- Healthcare providers
- Financial subjects
- Political representation

In whose interest health care is provided.

Influence on the health status of the population:

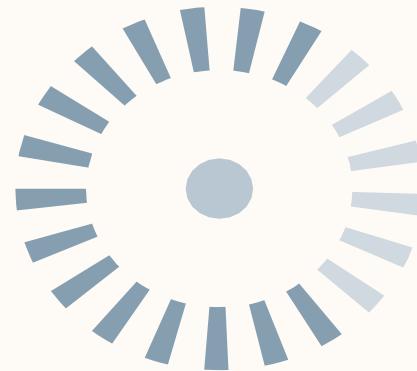
- Long term and complex development in individual countries
- Different social, economical, cultural and political conditions



Healthcare systems in general

Some indicators of healthcare systems

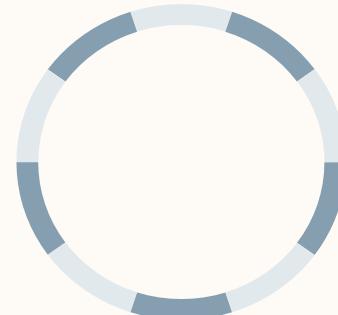
- Number of doctors per capita
- Structure of primary, secondary and tertiary care
- Bed fund – number, structure, usage, length of stay
- Structure of care provided
- Structure of expenditures on provision of care
 - prevention
 - outpatient services
 - sickness
 - rehabilitation
 - post acute care



Healthcare systems in general

Some criteria:

- The availability of care takes into account the barriers to accessing health care
- The quality of care determines the level of health services according to the latest scientific and research findings
- Economic costs
- Performance
- Equality
- Access to care
- Social acceptability



The background of the slide features a dark blue gradient. Superimposed on this are two glowing, translucent DNA helix structures. One helix is located in the upper left quadrant, oriented diagonally from top-left to bottom-right. The other is in the lower right quadrant, oriented vertically. Both helices are composed of numerous small, white and light blue glowing particles that follow the characteristic double-helix pattern.

Section # 5

Health and its social value

Health as a value

- Individual value of health
- Social value of health



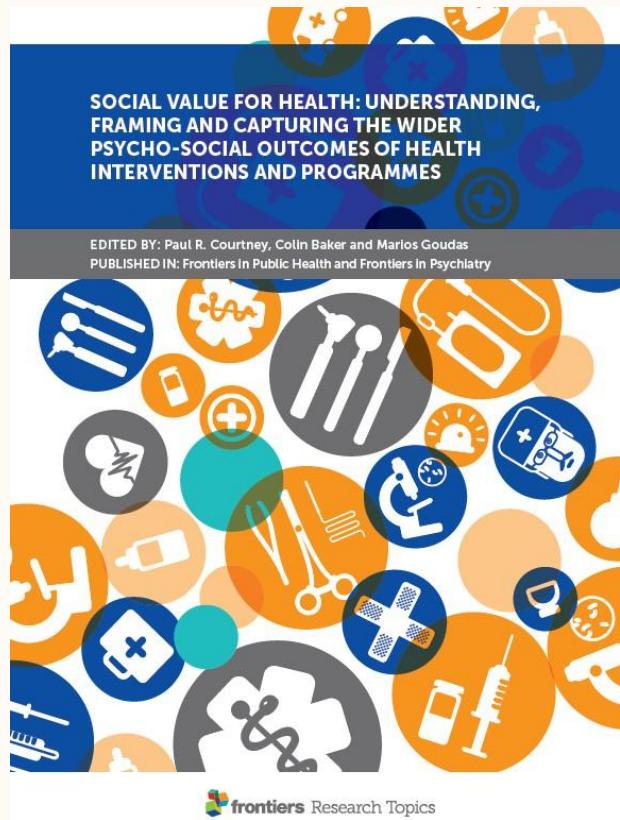
Individual value of health

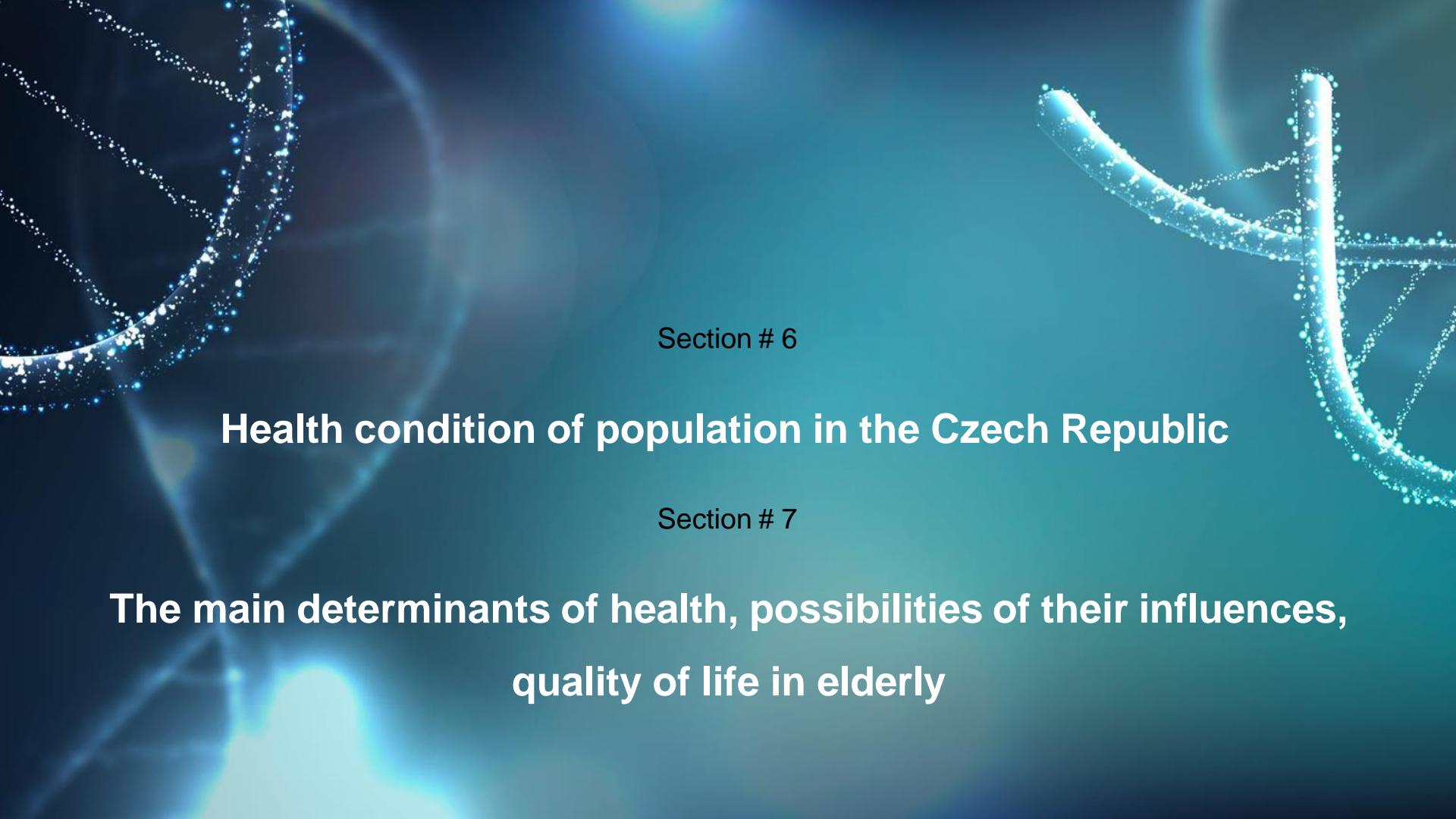
- It's connected with the instinct of self-preservation. Unfortunately, many people only realize the value of health when they get sick.
- The way to a better understanding of the value of health should be education that strengthens people's dignity and individuality.
- The activity of individuals is desirable and important. However, the isolated efforts of individuals are not enough to solve some serious problems.

Social value of health

- Every population unit, if it's to survive, must pay attention to the health of the people.
- The reasons for such attention are historically and socially conditioned.
- An important reason was the effort to build an appropriately strong army.
- Another reason was the economic performance of the population.
- The basic reason is, of course, that it is good to be healthy and to enjoy together with your loved ones everything that a healthy and full human life brings.

Understanding of social value for health





Section # 6

Health condition of population in the Czech Republic

Section # 7

**The main determinants of health, possibilities of their influences,
quality of life in elderly**

Country Health Profile



Section # 8

Prevention, health insurance in the Czech Republic

Health prevention

Updated Strategic Framework Czech Republic 2030 with Outlook to 2050



Public health insurance

If you have access to **public health insurance**, you may utilize health care the same way as Czech nationals. You may receive treatment in any hospital and from most doctors.

1) Who has access to public health insurance?

Apart from Czech nationals, the following categories of foreigners have access to public health insurance:

- Foreigners with permanent residence
- Foreigners without a permanent residence, employed under an employer who is registered or has permanent residence in the Czech Republic. Only applicable if you have primary employment, agreement on performing work (*DPČ "Dohoda o pracovní činnosti"* with monthly income over 3000 CZK), or agreement on completing a job (*DPP "Dohoda o provedení práce"* with monthly income over 10 001 CZK)
- Some foreigners with a temporary residence permit for a family member of an EU citizen, but only if certain conditions are met.
- Foreigners granted international protection
- Other specific categories of foreigners
- If you are unsure whether you're eligible for public health insurance, dial +420 252 543 846 to make an appointment for our free of charge social counselling.

Public health insurance

2) I have access to public health insurance. Which health insurance companies can insure me?

There are 7 public health insurance companies. The biggest and most well-known is the VZP (Všeobecná zdravotní pojišťovna).

3) How to prove that I have valid public health insurance?

Your health insurance company will issue a so-called insuree card, which you must always carry with you. You'll present this card when receiving a medical check-up. Printed on this card you'll find your not only your identification data but also the telephone number for the insurance company's call center, which you can dial in case you've got questions or are experiencing difficulties. Call centers can communicate in Czech or English.

4) Which forms of medical care are covered by public health insurance?

Public health insurance covers various forms of medical care, including preventive medical examination at a general practitioner, gynecologist or dentist, some medicaments, some medical procedures related to pregnancy and birth, some medical supplies, and/or transfer to a hospital in case of serious health complications.

Complex health insurance

Under complex commercial insurance, you're limited to those hospitals and doctors who've signed a contract with your selected commercial insurance company. If you don't find such hospitals and doctors, you may also register as a self-payer with them, i.e. pay for all medical procedures on the spot and then seek the coverage with your insurance company (in that case, it is necessary to agree on this with your insurance company in advance).

1) Who does complex commercial insurance concern?

If you do not fall under any of the categories of foreigners with access to public health insurance (e.g. access based on employment or permanent residency), you will have to purchase commercial insurance.

2) At what insurance companies may I purchase commercial insurance?

Many insurance companies are offering commercial health insurance. Some of the best known are Pojišťovna VZP, a.s., Maxima, ERGO, Axa Assistance, Slavia, Uniqa. However, it was only possible to purchase insurance with these insurance companies until the 1st of August 2021. Since the 2nd of August 2021, complex commercial insurance must be purchased exclusively with Pojišťovna VZP, a.s.

Complex health insurance

3) How to prove that I have purchased commercial health insurance?

Commercial health insurance companies will issue insuree cards, just like public health insurance companies. If you did not receive an insuree card, you'll instead use a health insurance contract and proof of payment. Insuree card or health insurance contract with proof of payment both serve as proof that you have valid health insurance in the territory of the Czech Republic. You should always carry this proof with you in case you need medical assistance or are checked by Foreign Police. On your insuree card or in your contract you'll find your insurance company's call center contact information, which you can dial in case you've got questions or are experiencing difficulties. You can usually communicate with them in multiple languages.

4) What health care is covered by commercial health insurance?

Commercial insurance's health care scope depends on the limit of your insurance fee and the insurance contract. Even a more expensive complex commercial insurance is not equivalent to public health insurance, and the insurance contract usually contains a number of exclusions (i.e. cases not covered by the insurance, usually chronic illnesses or existing medical conditions).

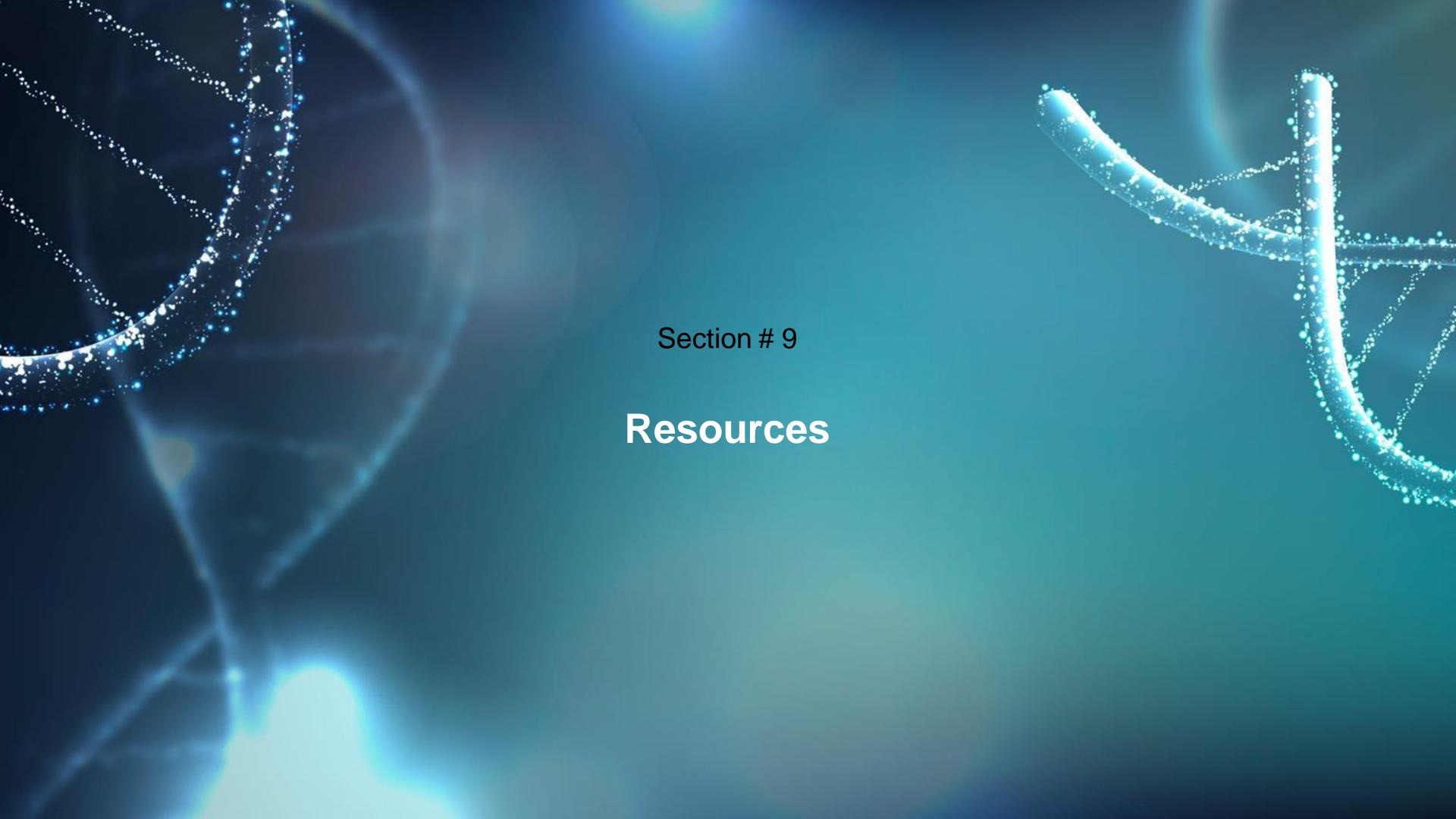
When purchasing commercial health insurance, it is important to carefully read and understand all terms and conditions.

Health insurance covered by government

In some cases, a person's (foreigner's with permanent residence) access to public health insurance is covered by the government.

May be applicable if you:

- Are receiving an old-age pension or disability pension
- Are on maternity leave or parental leave
- Are listed as a job applicant in the Labor Office register (in the case of EU citizens, this only applies if they are eligible to receive unemployment benefits)
- Are a recognized refugee or an applicant for international protection



Section # 9

Resources

Resources

Publications

GOSTIN, Lawrence O a Lindsay F WILEY. *Public health law and ethics: a reader*. Oakland, California: University of California Press, 2018.
ZLÁMAL, J., VOMÁČKA, J., MIKŠOVÁ, Z. *The basics of management for the followers of health sciences*. Olomouc: Univerzita Palackého, 2016.

Websites

The World Health Organization (WHO) <https://www.who.int>

Britannica <https://www.britannica.com/topic/public-health>

The Organization for Economic Co-operation and Development (OECD) <https://data.oecd.org/czech-republic.htm>

World Economic Forum <https://intelligence.weforum.org/topics/a1Gb00000038u3nEAA?tab=publications>

Deloitte <https://www2.deloitte.com/us/en/insights/industry/health-care/the-future-of-public-health.html>

Český Statistický Úřad (ČSÚ) https://www.czso.cz/csu/czso/obyvatelstvo_lide

Ministerstvo Práce a Sociálních Věcí (MPSV) <https://www.mpsv.cz/zprava-o-stavu-populace-a-rozvoje-ceske-republiky>

Ministerstvo Vnitra České republiky (MV) <https://www.mvcr.cz/clanek/informativni-pocty-obyvatel-v-obcich.aspx>

Ústavu zdravotnických informací a statistiky ČR (UZIS) <https://www.uzis.cz/index.php?pg=vystupy--vyznamna-temata--demografie>

Thank You

Does anyone have any questions?

www.mareksturek.com | [@mareksturek](https://twitter.com/mareksturek) | [mareksturek.github.io](https://github.com/mareksturek)