





Forum: World Health Organisation (WHO)

Issue: Combatting Non-Communicable Diseases in Urban Populations

Student Officer: Emmanuela Tzokas

Position Deputy Chair

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Introduction

Non communicable diseases or NCDs are defined as illnesses that usually affect people for a long period of time and can be caused by numerous factors and they are currently the leading cause of death worldwide. They are caused by a mix of genetic, physiological, environmental and behavioral factors. While there are many NCDs the main six are Cancer, Cardiovascular diseases, Chronic respiratory diseases, Diabetes, Chronic kidney disease and Mental health issues. Air pollution, lack of physical activity, obesogenic environments, tobacco, alcohol and more can cause these chronic illnesses.

The burden of Non Communicable diseases on urban populations is rising rapidly but the issue of NCDs has existed for ages. As the word constantly progresses and urban areas become more frequent, matching and even surpassing the ground covered by rural areas NCDs become more common. Cities become cleaner and less likely to cause outbreaks of infectious diseases that in the past burdened people. At the same time many people get discouraged by the lack of space and convenience when it comes to partaking in physical activity, demotivating people from exercising regularly and pushing them towards a sedimentary lifestyle instead. Air pollution and overcrowding in cities isn't unusual now but it has been an issue for a long time, since the industrial revolution in the 18th century when factory work and air pollution started to cause several health conditions including preventable Non Communicable Diseases.





Many countries face issues with NCDs and yet despite the global efforts by both the United Nations and various nations as well as Non Governmental Organizations (NGOs) this continues to be an issue all over the world. While most Non Communicable diseases are entirely preventable and can be treated; they cannot be cured. As urbanization rapidly excels it becomes clear we must face this problem before it gets out of hand.

Definition of key terms

Non Communicable Diseases (NCDs)/ Chronic Diseases

"Noncommunicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioral factors." 1

Acute illness

"An acute illness is a health condition that develops quickly and lasts only a short amount of time, such as a few days or weeks. While acute illnesses come on quickly, they often improve once short-term or urgent care is provided. Common causes of acute illnesses include viruses, infections, or injuries." ²

Urbanization

"the process of becoming more like a city"3

Obesogenic

"making a person extremely fat in a way that is dangerous for health"⁴

Urban Areas

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"An urban area is the region surrounding a city. Most inhabitants of urban areas have non-agricultural jobs. Urban areas are very developed, meaning there is a density of human structures, such as houses, commercial buildings, roads, bridges, and railways.

¹ ---. "Noncommunicable Diseases." *World Health Organization*, 23 Dec. 2024, www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases.

² "Acute Illness." *Definitive Healthcare*, www.definitivehc.com/resources/glossary/acute-illness.

³ Cambridge Dictionary. "Urbanization." *@CambridgeWords*, 12 June 2024, dictionary.cambridge.org/us/dictionary/english/urbanization#google_vignette.

⁴ Cambridge Dictionary. "Obesogenic." @CambridgeWords, 13 Aug. 2025, dictionary.cambridge.org/us/dictionary/english/obesogenic#google_vignette. Accessed 17 Aug. 2025.





"Urban area" can refer to towns, cities, and suburbs. An urban area includes the city itself, as well as the surrounding areas. Many urban areas are called metropolitan areas, or "greater," as in Greater New York or Greater London."⁵

Microscopist

"a person who specializes in the study, design, and manufacture of microscopes" 6

<u>Insulin</u>

"A hormone that regulates blood sugar"7

Air pollution

"Air pollution is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere."8

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⁵ National Geographic. "Urban Area | National Geographic Society." *Education.nationalgeographic.org*, 2023, education.nationalgeographic.org/resource/urban-area/.

⁶ "Definition of Microscopist." *Collinsdictionary.com*, HarperCollins Publishers Ltd, 13 Feb. 2020, www.collinsdictionary.com/us/dictionary/english/microscopist. Accessed 17 Aug. 2025.

⁷ Cirino, Erica. "Most Common Noncommunicable Diseases." *Healthline*, Healthline Media, 13 June 2018, www.healthline.com/health/non-communicable-diseases-list#most-common.

⁸ World Health Organization. "Air Pollution." *World Health Organization*, World Health Organization, 2024, www.who.int/health-topics/air-pollution#tab=tab 1.





Timeline of events

Date	Description of event
1760	The start of the industrial revolution which accelerated urbanization and increased some NCD risk factors such as air pollution, overcrowding and factory work.
7 April 1948	The creation of the World Health Organization(WHO) by the United Nations.
1964	Report ("Smoking and Health") of the Surgeon General on the impact of tobacco on people's health as tobacco continued to gain popularity.
1971	Abel Omran theorizes that as urbanization continues rapidly and cities become cleaner infectious diseases become less common making Non Communicable diseases more frequent instead.
2008	In 2008 over 50% of the world's population lived in urban areas.
20 September 2011	High-level United Nations meeting in New York on NCD prevention and control.
2013	WHO Global Action Plan for the Prevention and Control of NCDs
2015	Inclusion of NCDs in the United Nations Sustainable Development Goals(SDGs)
25 September 2025	In 2025 Heads of State and Government met for another High level meeting in New York concerning NCD's.





Background Information

History of Non Communicable Disease

Non communicable diseases have existed for ages yet were not officially categorized as chronic illnesses until the 17th century where Thomas Sydenham categorized illnesses into "Acute" (those of which God is the Author) and "Chronic" (those that originate in ourselves). Starting in 3000 BC when the first case of an NCD was described on paper on an Egyptian papyrus specifically on the Edwin Smith Papyrus. It described 8 cases of Tumors that the Egyptians thought to be untreatable. After the 17th century when medicine started to progress the distinction between NCDs and Infectious illnesses became clear. Later during the industrial revolution as urbanization continued rapidly risk factors for NCDs increased with pollution and overcrowding becoming some of the main causes of NCDs. Factory work was also one of the risk factors that led to the increase in NCD cases. Now it seems that as urbanization continues to excel rapidly and cities become cleaner infectious diseases are less common making Non Communicable diseases more frequent instead.

Disease burden from non-communicable diseases, World, 1990 to 2021



Total disease burden from non-communicable diseases (NCDs), measured in DALYs (Disability-Adjusted Life Years) per year. DALYs are used to measure total burden of disease - both from years of life lost and years lived with a disability. One DALY equals one lost year of healthy life.

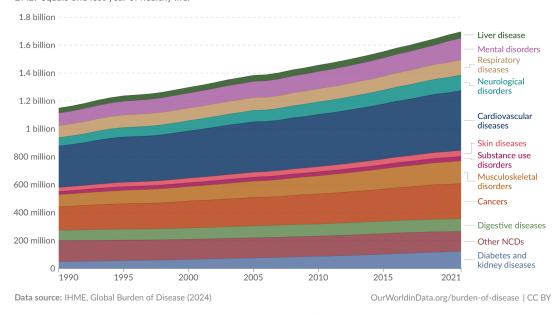


Figure 1: NCD disease burden worldwide from 1990-2021.⁹

Types of Non Communicable Diseases and their causes

While there are many Types of NCDs there are four that are more common than others

⁹ "Disease Burden from Non-Communicable Diseases." *Our World in Data*, 2025, ourworldindata.org/grapher/disease-burden-from-ncds?overlay=download-vis. Accessed 28 Aug. 2025.





These are Cancer, Diabetes, Chronic Respiratory Disease and Cardiovascular disease.

Cancer is one of the main chronic illnesses. It can affect people of all ages, ethnicities, and gender. Right now cancer is the second most common cause of NCD death worldwide. Cancer can be a result of certain genetic factors but according to the World Health Organization about 30-50 percent of cancers worldwide can be prevented if the individual adopts a healthy lifestyle. ¹⁰Avoiding alcohol and tobacco can play a part in preventing cancer. Obesity can be a risk factor as well. Artificial air pollution such as smoke from vehicles and factories as well as pollutants with natural sources such as ozone can increase the risk for cancer.

Another common NCD is Chronic respiratory diseases. This NCD can appear due to genetic factors or other causes such as lifestyle choices and environmental conditions. These diseases are incurable but may be treated with medication. Some Chronic Respiratory Diseases include: chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases, such as black lung, pulmonary hypertension and cystic fibrosis.

Diabetes is a Non Communicable Disease that affects people when their body cannot produce enough insulin or can not effectively use the Insulin that it produces. Diabetes can cause heart disease, vision loss and damage to an individual's kidney. Over time if not treated well diabetes can cause health issues in other organs or systems in one's body. There are two main types of diabetes. Type 1 which is usually diagnosed in childhood and adolescence and is the result of a dysfunction in the immune system. On the other hand Type 2 usually occurs in late adulthood due to an unhealthy lifestyle including insufficient or poor diet, obesity, inactivity. But Type 2 diabetes can also be caused by environmental factors. Other types are gestational diabetes and prediabetes.

Cardiovascular diseases are one of the main NCDs and the leading cause of deaths worldwide killing over 17.9 million people yearly. Increased blood pressure, lipids, glucose and obesity can be caused by a poor diet and a lack of physical activity can lead to an individual developing cardiovascular disease. While it is usually caused by environmental factors and unhealthy lifestyle choices some people are born with cardiovascular conditions. A few common cardiovascular diseases and conditions are: stroke, heart attack, coronary artery disease, cerebrovascular disease, peripheral artery disease, congenital heart disease and deep vein thrombosis and pulmonary embolism.

¹⁰ Cirino, Erica. "Most Common Noncommunicable Diseases." *Healthline*, Healthline Media, 13 June 2018, www.healthline.com/health/non-communicable-diseases-list#most-common. news.un.org/en/story/2008/02/250402.

¹¹ --- "Cardiovascular Diseases." World Health Organisation, 2025, www.who.int/healthtopics/cardiovascular-diseases#tab=tab_1.



Chronic kidney disease(CKD) is also a severe Non Communicable Disease and the 9th leading cause of deaths worldwide. By 2040 it is expected that it will be the 5th leading cause of death worldwide. 12 1/10 people have CKD and are not aware of their condition until they reach a certain age. 13 This condition is caused by mostly preventable factors such as smoking, unhealthy diet, lack of physical activity and alcohol. The only methods of treatment are dialysis or a transplant. For many people these are not feasible solutions due to unavailability and unaffordability.

The last of the main NCD types are mental health conditions. Mental health has always been neglected in health systems and has not been focused on enough. Many people often choose to live with their mental conditions, rather than risk facing discrimination for choosing to get treatment and professional help for their issues. Oftentimes there are not enough resources to help everyone with mental conditions. Some common mental health conditions are Anxiety, Depression, Bipolar disorder, Schizophrenia, and substance abuse.

The Impact of Urbanization on public health

Urban areas are responsible for about 60% of greenhouse gas emissions and use about ½ of the world's energy. Heaning that they are also a source of pollution. Air pollution can severely affect people's health and a lack of greenery can result in less physical activity, which can lead to increased levels of obesity. Chemicals that are harmful for people's health exist in many urban areas. Lack of space for movement and physical exercise also takes a toll on people's health.

There are also many health risks in urban areas. Infectious Diseases and viruses such as COVID-19, tuberculosis, and dengue thrive in cities where it's overcrowded and there is minimal space. Injuries such as road accidents due to traffic, lack of safe transport and infrastructure are also a serious issue. Although these are all important problems, a more severe and long-term health risk is Non Communicable Diseases.

Non communicable diseases(NCDs) in Urban Areas

Non communicable diseases are one of the two severe health challenges urban areas are facing along with injuries. Inefficient and poorly planned urbanization can greatly affect the

¹² "Chronic Kidney Disease." *NCD Alliance*, 2020, ncdalliance.org/explore-ncds/ncds/chronic-kidney-disease.

¹³ "Chronic Kidney Disease." *NCD Alliance*, 2020, ncdalliance.org/explore-ncds/ncds/chronic-kidney-disease.

¹⁴ WHO. "Urban Health." *Www.who.int*, 19 Mar. 2025, www.who.int/news-room/fact-sheets/detail/urban-health.





issue. The impact of an individual's lifestyle living in an urban area including many things that have been around in cities for a long time as previously stated polluted air, inadequate and unsafe roads, an inadequate environment for physical activity or an obesogenic environment can affect the health of people living in urban areas and cause NCDs Lack of greenery and space could be discouraging for people when it comes to engaging in physical activity regularly. Citizens in cities with bike lanes, large parks and recreational spots, sidewalks and walking trails have more motivation and better opportunities to stay active as well as a more encouraging and spacious environment. In urban areas there are also chemicals that are harmful to people's health.

Stakeholders

United Kingdom (UK)

In the United Kingdom several of the most common illnesses are Non Communicable Diseases. Simultaneously air pollution is a serious issue in the UK which causes over 40.000 early deaths per year. ¹⁵ NCD are the main cause of death and it has been estimated 1 in 4 people living in the UK have a cardiovascular disease. ¹⁶NHS(National Health Services) provides free NHS HEALTH CHECKS for individuals aged 40-74 without a pre-existing disease every five years free of cost. The UK government has also created a prevention green paper "Advancing our Health: Prevention in the 2020s" which pointed out that the previously mentioned health checks have been and continue to be very effective. There is also a prevention plan the "NHS Long Term Plan" which strives to prevent 150.000 heart attacks, strokes and cases of dementia as well as other initiatives.

United States (US)

At this moment about 129 million people in the US have at least one chronic disease. Thronic diseases NCDs have also had a large impact on the US health care system. While it was not an area of interest in the past, the United States has started paying more attention to NCDs. The US has played an important part in the international efforts to manage the problem of Non Communicable diseases. Their global involvement usually refers to health diplomacy, research for scientific purposes and technical help.

¹⁵ CLEAN AIR FUND. "United Kingdom." Clean Air Fund, www.cleanairfund.org/geography/united-kingdom/.

Ayre, Rachel. "The Most Common Illnesses in the UK." *Primary Care 24*, 18 Nov. 2024, primarycare24.org.uk/news/2024/11/18/the-most-common-illnesses-in-the-uk/.

¹⁷ Benavidez, Gabriel A., et al. "Chronic Disease Prevalence in the US: Sociodemographic and Geographic Variations by Zip Code Tabulation Area." *Preventing Chronic Disease*, vol. 21, no. 21, 29 Feb. 2024, www.cdc.gov/pcd/issues/2024/23_0267.htm, https://doi.org/10.5888/pcd21.230267.





China

Non Communicable Diseases are the main cause of death in China as well as in many other countries. In China they are also the leading cause of disease burden. As China is one of the largest tobacco producers and consumers it has an effect on their NCD cases. With over 700 million people including 180 million children inhaling second hand smoke. ¹⁸The leading cause of death in China is lung cancer. ¹⁹ China has taken action to prevent NCDs through their action targets for Healthy China 2030 and other policies. ²⁰

India

In India in 2008 NCDs accounted for 5.2 million deaths and as expected the situation worsened.²¹ As the impact of NCDs accelerated India decided to take action to improve the situation. They estimate that about 80% of premature heart diseases, strokes and diabetes can be prevented.²² In 2017 they called for multisectoral action to combat the rising issue of NON Communicable Diseases in India.²³

<u>United Nations Interagency Task Force on the Prevention and Control of NCDs (UNIATF)(https://uniatf.who.int)</u>

UNIATF Brings together United Nations system agencies as well as government organizations to prevent and control the impact of Non Communicable Diseases and support governments. Their mission is to meet the goals of the 2030 UN sustainable

¹⁸ "Non-Communicable Diseases in China: A Rising Tide." *The Lancet*, vol. 402, no. 10417, 1 Dec. 2023, pp. 2045–2045, https://doi.org/10.1016/s0140-6736(23)02691-0.

¹⁹ "Non-Communicable Diseases in China: A Rising Tide." *The Lancet*, vol. 402, no. 10417, 1 Dec. 2023, pp. 2045–2045, www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)02691-0/fulltext, https://doi.org/10.1016/s0140-6736(23)02691-0. Accessed 19 Aug. 2025.

²⁰ Li, Xinhua, and Gauden Galea. "Healthy China 2030: An Opportunity for Tobacco Control." *The Lancet*, vol. 394, no. 10204, Sept. 2019, pp. 1123–1125, https://doi.org/10.1016/s0140-6736(19)32048-3. Accessed 8 Apr. 2020.

²¹ "Noncommunicable Diseases." *Www.who.int*, www.who.int/india/health-topics/noncommunicable-diseases.

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²³ World. "India Calls for Multi-Sectoral Actions to Combat Noncommunicable Diseases." *Who.int*, World Health Organization: WHO, 12 July 2017, www.who.int/india/news-room/detail/12-07-2017-india-calls-formulti-sectoral-actions-to-combat-noncommunicable-diseases. Accessed 17 Aug. 2025.





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American Association for Cancer Research (AACR)(https://www.aacr.org/)

The AACR is the first and largest cancer research organization in the US. Their goal as an organization is to cure cancer through research and education, communication and collaboration, science policy and advocacy and funding for cancer research. They have led many successful initiatives and have more than 58.000 members.²⁵

NCD Alliance(https://ncdalliance.org/)

The NCD Alliance is taking action to accelerate action for NCD's, save lives, fight for health and protect rights Their network unites people worldwide with the sole cause to help improve the situation of Non communicable diseases. The NCD alliance also works towards advancing NCD protection, bridging the NCD investment gap, community engagement and providing quality NCD care for everyone.²⁶

United Nations Development Programme(UNDP)(https://www.undp.org/)

UNDP is working with various partners on addressing the issue of NCDs. They have outlined opportunities for UNDP to help strengthen NCD responses to help reach the 2030 sustainable development goals. UNDP is also cooperating with WHO to help governments strengthen their implementation and strengthen their NCD responses.²⁷

The European Chronic Disease Alliance(https://alliancechronicdiseases.org/)

This alliance consists of 13 organizations whose shared goal is to combat Chronic diseases(NCDs) that are preventable, usually through European policies. The European Chronic Disease Alliance or EDCA represents millions of chronic disease patients and thousands of medical and health professionals. This organization even received an award in 2010 for its impact on preventing chronic diseases in Europe. Their main priorities at the moment are successfully promoting the implementation of an EU framework recommending and encouraging policies to be put in place and raising awareness on the

²⁴ "UN Inter-Agency Task Force on NCDs (UNIATF)." Who.int, 2024, uniatf.who.int.

²⁵ "About the AACR." American Association for Cancer Research (AACR), www.aacr.org/about-the-aacr/.

²⁶ "NCD Alliance: Making NCD Prevention and Control a Priority, Everywhere." *Ncdalliance.org*, 2019, ncdalliance.org.

²⁷ "Preventing and Controlling Non-Communicable Diseases." *UNDP*, 13 Jan. 2017, www.undp.org/publications/preventing-and-controlling-non-communicable-diseases.





issue.

Relevant UN resolutions, treaties, and events (Previous attempts)

Resolution A/RES/65/238:

This resolution adopted on the 7th of April 2011 decided that the General Assembly would meet in New York on September 19-20 for a high-level meeting concerning the prevention and control of Non Communicable Diseases. There were other meetings set after this one as the issue has not yet been resolved.

Target 3.4 in the 2030 Sustainable Development Goals(SDG)

The following target was added to the UN Sustainable Development Goals that the United Nations created as a "universal call for action" to ensure peace and prosperity worldwide. Target 3.4 states that the UN will "By 2030, reduce by one third premature mortality from NCDs through prevention and treatment and promote mental health and well-being." 29

Resolution A/RES/64/265

One of the first UN resolutions on NCDs that recognized the importance and called for a high-level meeting by the UN as well as other important measures. This resolution recognized the pain and suffering NCDs cause and the possibility of NCDs posing a threat to countries economies. The resolution also recognized that a large part of NCD cases are due to peoples lifestyle which influences their health and therefore their quality of life. While the resolution itself did not take much action it officially recognized NCDs as a severe issue and sparked discussions between member states on what to do to solve the problem.

Global action plan for the prevention and control of Non Communicable Diseases (2013-2030)

The Global action plan is based on commitments made by Heads of State and Government in the UN Political Declaration on the Prevention and Control of NCDs(A/RES/66/2). Which recognized the important role governments play and their responsibility when it comes to solving this issue as well as the importance of international cooperation. It contains the United Nations Objectives and goals and explains the situation as well as the actions that can be taken to implement solutions and resolve the issue.

²⁸ "Sustainable Development Indicators: The Last Missing Piece of the 2030 Agenda." *PRB*, 2024, www.prb.org/resources/sustainable-development-indicators-the-last-missing-piece-of-the-2030-agenda/. Accessed 17 Aug. 2025.

²⁹ "Sustainable Development Indicators: The Last Missing Piece of the 2030 Agenda." *PRB*, 2024, www.prb.org/resources/sustainable-development-indicators-the-last-missing-piece-of-the-2030-agenda/. Accessed 17 Aug. 2025.





Possible solutions

Providing a means for people to stay healthy

By providing fitness trackers, bikes, mobile apps and more to citizens in urban areas governments can promote healthy lifestyles and reduce some of the risk factors of NCDs, including obesity and lack of physical activity. Fitness centers and healthy eating initiatives can also be implemented in cities to benefit people in low income areas who cannot afford to prioritize healthy lifestyles. These solutions would encourage people to adapt their routines to include new habits to ensure they stay healthy and decrease their chances of attaining an NCD.

Laws against marketing

Laws could be placed to prohibit marketing of tobacco, alcohol on billboards, bus stops and other areas. Or perhaps instead of banning marketing entirely for tobacco and alcohol governments can choose to add a visibly clear warning about excessive or even minimal consumption and its effects considering NCDs but also health in general.

Advertising the dangers of NCD risk factors on people's health

Advertising the danger of unhealthy diets, alcohol and tobacco as well as a sedimentary urban lifestyle may help people understand the effect these factors can have on their health and push them towards different lifestyles. Advertisements on bus stops and metro stations as well as posters or billboards(in countries or states where they have not been banned) may help spread the message. As well as advertising in areas where tobacco products and alcohol are sold.

<u>Improving urban layout</u>

Governments can add bike paths throughout cities as well as electric bikes for people to utilize as an affordable/ low cost alternative. They can create larger sidewalks for running or walking and incorporate green spots of grass, trees, flowers, gardens etc into the city. Even make space for more parks to encourage physical activity. Creating more space would motivate people to engage in physical activity as well as provide a means to take a breath and spend some time outside of the fast paced stress inducing urban lifestyle.

Health Checkups

Governments can provide annual optional yet recommended or even mandatory medical checkups for people of all ages. These tests would check for all types of Non Communicable Diseases. Patients already diagnosed with NCDs may go more often if needed and all checks would be free of charge or very affordable. Governments could also provide free or low cost medical advice and tips for preventing NCDs and treating them correctly to ensure that a patient can prevent an NCD in time or ensure their condition does not worsen.





Further reading

A/RES/65/238 General Assembly

A/RES/65/238 is a UN resolution very similar to the topic. Reading through it can help with understanding the situation and seeing previous solutions.

https://ncdalliance.org/explore-ncds/ncds

The official webpage of the NCD alliance which provides many statistics and plenty of information on each specific NCD, their risk factors and the work they do as an organisation.

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