


# Chapter 3

## Cities Under Pressure: Addressing Urban Health Threats in the Era of Industrialisation and Sustainable Development Goals

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### ABSTRACT

*Rapid urbanisation, fueled by population growth and industrialisation, poses significant threats to public health, particularly in densely populated areas. This chapter explores the interplay of pollution, overcrowding, and industrial activities in exacerbating health disparities in urban settings. Drawing from evidence-based research and case studies, the chapter highlights innovative approaches to mitigating urban health risks, including green infrastructure, integrative health interventions, and policy reform. The chapter also examines how sustainable urban planning and community-driven initiatives can align with SDG 3 (Good Health and Well-Being) and SDG 11 (Sustainable Cities and Communities), emphasising the need for equitable, resilient urban health systems.*

### 1. INTRODUCTION

Urbanisation is a multifaceted phenomenon that significantly impacts public health, particularly in the context of pollution, population growth, and industrialisation. As urban areas expand, they often experience increased levels of air and water pollution, which are directly linked to various health threats. The rapid influx of populations into cities exacerbates these issues, leading to overcrowded living conditions and

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increased exposure to environmental hazards. This chapter aims to explore these interconnected themes, highlighting the health implications of urbanisation and the urgent need for effective public health strategies.

The relationship between urbanisation and health threats is well-documented. Urban environments are often characterised by elevated levels of pollutants, including particulate matter, nitrogen dioxide, and sulphur dioxide, which are primarily emitted from vehicles and industrial activities. These pollutants have been linked to a range of health issues, including respiratory diseases, cardiovascular problems, and even premature mortality (Li & Zuo, 2022; Çiftçi et al., 2021). Furthermore, the industrialisation that accompanies urban growth contributes to environmental degradation, with waste disposal and industrial emissions posing significant risks to public health (Mucchielli, 2023). The cumulative effect of these pollutants creates a public health crisis, particularly in low-income urban areas where regulatory oversight may be lacking.

Population growth in urban areas further complicates health outcomes. As cities expand, the demand for housing, transportation, and services increases, often outpacing the infrastructure needed to support such growth. This can lead to inadequate sanitation, poor air quality, and limited access to healthcare services, which disproportionately affect vulnerable populations (Bahri et al., 2022). For instance, studies have shown that migrant workers in urban settings face heightened health risks due to their precarious living conditions and exposure to hazardous environments (Guan et al., 2022). The intersection of urbanisation and population growth thus creates a perfect storm for public health challenges, necessitating comprehensive planning and intervention strategies.

Industrialisation, a key driver of urbanisation, also plays a critical role in shaping health outcomes. The establishment of industries in urban areas often leads to increased job opportunities; however, it also introduces a range of health risks associated with occupational hazards. Workers in industrial settings may be exposed to toxic substances, ergonomic challenges, and unsafe working conditions, which can lead to both acute and chronic health issues (Bijekar et al., 2022; Ameen & Abdulsahib, 2022). For example, research has indicated that long working hours and exposure to hazardous materials significantly increase the likelihood of mental health disorders among industrial workers (Tran et al., 2019). The need for robust occupational health and safety regulations becomes paramount in mitigating these risks and ensuring the well-being of the workforce.

Moreover, the food industry, which is often a significant component of urban economies, has been implicated in the rising prevalence of non-communicable diseases (NCDs) due to the marketing of unhealthy food products (Kim et al., 2016). The corporate political activities of food industry actors can undermine public health initiatives aimed at promoting healthier dietary choices, thereby exacerbating health

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