

EFFECTS OF POLLUTION ON ORAL HEALTH: TYPES OF POLLUTANTS AND IMPACT ON THE ORAL CAVITY

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Abstract. *Air pollution is known as a major problem for public health but also the health of the environment. As it increasingly affects the quality of life, it has become a topic of interest for researchers in recent years. Air pollution refers to the pollution of the environment by liquids, gases, and solids but also wastes that have negative effects on health. The pollutants with the greatest harmful potential are particulate matter (PM), sulfur dioxide (SO₂), tropospheric ozone (O₃), and nitrogen dioxide (NO₂), but also some heavy metals. This review article aims to correlate oral health and air pollution and to analyze the types of air pollutants. We will also investigate their direct and indirect effects on the oral cavity, as these compounds can contribute to oral health problems such as periodontal diseases, oral cancer, and dental caries, through different mechanisms, including oxidative stress (OS), inflammation, and oral microbiome imbalances. By understanding these mechanisms, we want to emphasize the need for multidisciplinary approaches to reduce the negative effects of environmental pollution on oral health.*

Keywords: oral health, environmental pollution, air pollution, oral diseases, periodontitis

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