

1. Record Nr.	UNINA9910911291703321
Autore	Izah Sylvester Chibueze
Titolo	Air Pollutants in the Context of One Health : Fundamentals, Sources, and Impacts // edited by Sylvester Chibueze Izah, Matthew Chidozie Ogwu, Abbas Shahsavani
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031741654 303174165X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (489 pages)
Collana	The Handbook of Environmental Chemistry, , 1616-864X ; ; 134
Altri autori (Persone)	OgwuMatthew Chidozie ShahsavaniAbbas
Disciplina	577.14
Soggetti	Environmental chemistry Pollution Environmental monitoring Public health Chemistry, Organic Environmental education Environmental Chemistry Environmental Monitoring Public Health Organic Chemistry Environmental and Sustainability Education
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Overview of Air Pollutants and their One Health Effects -- Unraveling the Fundamentals of Air Pollutants -- Sources of Air Pollutants: Impacts and Solutions -- Types of Air Pollutants -- Understanding the One Health Implications of Air Pollution -- Emerging Chemical Air Contaminants and their Associated Human Health Effects -- Air Pollution Principles, Research and Innovation -- Short-term health effects of Air Pollution -- Impacts of Artisanal Mining on Air Quality and One Health -- Polycyclic Aromatic Hydrocarbons as Ambient Air Pollutants -- Effects of Air Pollutants on Biodiversity -- Uncontrolled

Bush Burning and Air Quality -- Agricultural Air Pollution: Impacts, Sources, and Mitigation Strategies -- Modeling and Statistical Approaches for Air Pollution Analysis -- Biological Monitoring of Air Pollutants.

---

Sommario/riassunto

This book reviews air pollutants and their effects on human health, biodiversity, and environmental quality in the context of the One Health framework. Written by experts in the field, the book covers topics such as natural and anthropogenic sources of air pollutants, air pollutants classification based on their chemical composition, physical properties, and origins, and consequences of air pollution on ecosystems, wildlife, and human communities. In this book, readers will find a detailed examination of pollutants, such as particulate matter, volatile organic compounds, and greenhouse gases, and will learn about the mechanisms by which pollutants impact, for instance, the respiratory, cardiovascular, and neurological systems. The book highlights the need for understanding the different pollutants and their One Health effects as a foundation for developing effective regulations, emission controls, cleaner technologies, and promoting lifestyle changes. The book also offers a global perspective on air pollution, and discusses the disproportionate impacts of air pollution on vulnerable populations. In alignment with the United Nations Sustainable Development Goals (SDG), specifically SDG 3 (Good Health and Well-being), SDG 7 (Affordable and Clean Energy), and SDG 11 (Sustainable Cities and Communities), this book takes a focused approach to the One Health implications of various air pollutants and is an important contribution to the global effort to mitigate the impact of air pollution on human health, biodiversity security, and environmental quality. Together with its companion work "Sustainable Strategies for Air Pollution Mitigation", this book is a valuable resource for students, researchers, policymakers, and anyone seeking a comprehensive perspective on this critical environmental and public health challenge.

---