Record Nr. UNINA9910437612403321 The Toxicant Induction of Irritant Asthma, Rhinitis, and Related **Titolo** Conditions [[electronic resource] /] / edited by William J. Meggs Pubbl/distr/stampa New York, NY:,: Springer US:,: Imprint: Springer,, 2013 **ISBN** 1-4614-9044-8 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (297 p.) Disciplina 610 615 616.200471 616079 Soggetti Pharmacology Medicine **Immunology** Pharmacology/Toxicology Medicine/Public Health, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction: Irritant asthma, irritant rhinitis -- Airway Anatomy, Physiology, and Inflammation -- Reactive Airways Dysfunction Syndrome (RADS) and Irritant-Induced Asthma -- Acute Toxicity of Respiratory Irritant Exposures -- Particulate Exposure and Cardiovascular Inflammation -- Products of Combustion -- Irritant and Airborne Contact Dermatitis -- Exposure Limits -- Occupational Issues Related to Respiratory Irritants -- The Brain as a Target Organ for Allergic and Irritant Sensitivity: A Review and Suggestions for Research -- An Approach to Treating Irritant Airway Inflammation -- Summary and Research Needs -- Index. Sommario/riassunto Untoward reactions to environmental chemicals, particularly when a subject reports difficulties with exposures to chemicals of diverse classes involving more than one organ system, have been poorly understood and an area of great controversy. Studies of airway

inflammation induced by respiratory irritants have established

neurogenic inflammation as the mechanism for irritant asthma and rhinitis. Remodeling of the airway after an acute irritant exposure can lead to a heightened sensitivity to irritants that persists. Recognition that rhinitis, while sometimes regarded as a trivial disease, is associated with extra-airway manifestations such as fatigue and disturbances of sleep, mood, and cognition, further elucidates how chemical exposures can be serious for susceptible individuals. This book reviews current scientific understanding of irritant airway inflammation and related conditions, including cardiovascular effects of particulate exposures, airborne contact dermatitis and irritant dermatitis, and the brain as a target organ for both allergic and irritant reactions. It is essential reading for physicians and other healthcare workers caring for patients with environmental intolerances. Allergists, toxicologists, occupational and environmental physicians, and pulmonologists will find the materials particularly valuable. Patients and advocates for those with chemical intolerances will also find the book of interest.