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Occupational and Environmental Cancers of the Respiratory System

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With 48 Figures

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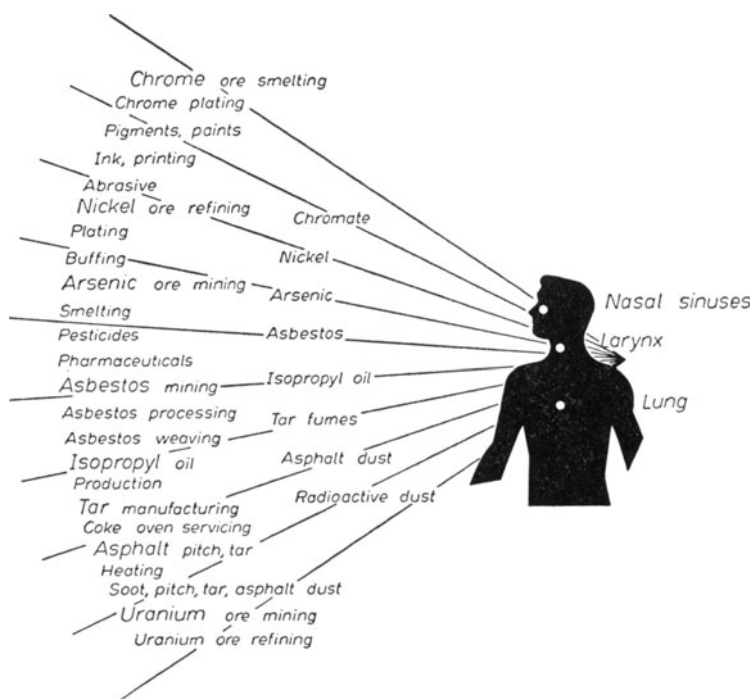
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Introduction

Since the advent of the modern industrial era some 150 years ago, a large and growing number of diverse man-made chemicals have been introduced in increasing amounts into the occupational and general environmental air. This development of industrial atmospheric pollution, while first rather mild and locally restricted, has assumed during recent decades with the growing industrialization of the human economy, regional proportions which encompass in some cases large portions of entire States and countries covering them especially in their metropolitan areas, with an almost permanent cloud of chemical effluents. Many of these chemical wastes contaminating the environmental air of industrial establishments and communities and composed of constantly changing mixtures of identified and non-identified chemicals are to varying degrees, irritants to the respiratory mucosa in which they elicit by chemical action or by mechanical trauma, a variety of functional and anatomic disease manifestations (chronic laryngitis, tracheitis and bronchitis, emphysema, chemical pneumonitis, bronchiectases, pneumoconiosis).



With the rapid rise in the frequency of lung cancers in all industrialized countries observed since the turn of the century, this progressive industry-related contamination of the atmosphere with a great variety of dusts, fumes, mists, vapors, and gases has become the subject of increasing interest as one of the causes underlying the recent developments in the respiratory cancer panorama. Diverse chemical atmospheric pollutants of industrial origin have been incriminated as specific and non-specific respiratory carcinogenic irritants.

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