less of pollutants than present standards permit.

Many other factors contribute to air pollution, Mr. Speaker, but during my study of this problem I have learned that the main pollutants come in two major forms, namely, a reducing form which consists largely of soot and sulphur dioxide and an oxidizing form which consists of carbon monoxide, hydrocarbons, and the photo chemical decomposition products such as oxides of nitrogen, ozone, and many others. Air pollution is also influenced by the topography of the area and by weather conditions such as humidity, brilliant sunshine, air stagnation, and atmospheric inversion.

Many reports have also appeared stating that asthmatic attack rates triple on days of significant air pollution and quadruple in periods of high barometric pressure. Also, some medical researchers have reported asbestos in lungs of city dwellers. Apparently asbestos from such things as automobile brake linings, air filters, and floor tile has lodged in the lungs of between one-third and one-half of all city-dwelling adults in the United States. This effect of asbestos-containing products was reported by a Canadian-born scientist, Dr. W. A. D. Anderson. He also stated that asbestos, mined heavily in Quebec, is known to be a cancer-causing agent if present in a large quantity over long periods. Asbestos workers and miners traditionally have a much higher incidence of lung cancer than the general population.

We have also read a lot recently about the $95,729 compensation that Ontario farmers in the Port Maitland area received for cattle which had to be destroyed because of an air pollutant called fluoride. Compounds of fluoride of varying levels of solubility have affected vegetation in the vicinity of metallurgical plants and artificial fertilizer plants. Some air pollution experts have stated that aircraft, especially commercial jets, are a source of significant air pollution in our cities. Apparently a commercial jet airliner under full load emits pollutants, especially hydrocarbons and carbon monoxide, at a rate equivalent to about 10,000 passenger vehicles. This, therefore, can be a major problem to the people living in the vicinities of airports.

On January 24, 1967, Ontario Hydro Electric Power Commission researchers stated that air pollution, which is already a contributory factor in respiratory ailments, can also contribute to radio and television interference. An engineer from the electrical research department of the Ontario Hydro research laboratories stated that during rainy or foggy weather a phenomenon known as corona discharge sometimes occurs across insulators that house high voltage hydro wires. He says that the more grime and dust settle on the insulators the worse is the interference across a wide band of radio and television frequencies.

Air pollution is also a hazard contributing to greater vehicular accidents. Any reduction in visibility can represent a serious hazard to land, water and air transportation. It has been reported in several studies that during severe urban pollution mortality from airplane, automobile, and train crashes is increased significantly. Unfortunately, such catastrophies constitute a definite effect of air pollution. Dr. Donald O. Anderson of Vancouver stated in one of his papers that one estimation from civil aeronautics board statistics for 1962 attributed between 15 and 20 airplane crashes that year to obstructions of vision by smoke, haze, sand and dust. He has also stated that the effect of air pollution may be augmented by the simple act of cigarette smoking or inhaling carbon monoxide in congested traffic. Also, radio-isotopes from atomic explosions in the Pacific and in Asia can appear in alarming concentrations in caribou of Alaska and our northern territories.

Both as a physician in a dense urban and highly industrialized centre and as member of parliament for Parkdale, an area with many manufacturing plants, I am very concerned about the hazards and ill effects of air pollution. It has been reported that there is an increase in the number of cases of emphysema, bronchitis, and lung cancer occurring in our urban centres. Health authorities have stated that the intensity of urbanization and industrialization producing air pollution may have a residual influence on lung cancer mortality as well as on the morbidity and mortality of people with a chronic lung disease. Some medical specialists are of the opinion that lung cancer deaths among cigarette smokers are more frequent in large industrialized cities than in rural areas.

All of the air pollution facts available today are alarming. They have made known to us the increasing hazards of air pollution to humans, animals, vegetation, and physical property. These facts also illustrate the inadequate research as well as the ineffective measures that have been taken to date to control air pollution in Canada. There is a lack of