

INTRODUCTION

In this session we will review health effects associated with commonly encountered outdoor (ambient) pollutants as well as indoor (residential) contaminants (e.g., irritants, allergens, and even toxins). Several ambient air pollutants readily permeate indoor spaces too. Because we spend most of our lives indoors, as do most of our small animal companions, we will also discuss how related home conditions (e.g., excessive dampness, poor ventilation) can further worsen indoor air quality. Exposures may be acute, with one or more pets (and owners) experiencing signs within a relatively short period. More often, however, exposures are episodic or chronic, occurring over prolonged periods, making it difficult to establish connections between respiratory signs and poor indoor air quality. This is in part because of the non-specificity of associated signs, and, in part, because multiple toxicants may be involved. Furthermore, one's perception of air quality is quite subjective, making inferences to pets even more problematic. Underlying respiratory conditions further complicate the clinical picture, as such individuals are often more sensitive to (and affected by) lower concentrations than are seemingly problematic for healthy housemates. In the sections that follow, agents will be broken down by class and discussed briefly. In all, we will focus on every day insults and their potential to cause and/or exacerbate airway disease. Further information may be obtained in a recent review (Dye 2013) and other references and websites listed below.