



Shaping Tomorrow's
Built Environment Today

ENVIRONMENTAL TOBACCO SMOKE

THE ISSUE

For more than three decades, researchers have investigated the health and irritant effects among non-smokers exposed to tobacco smoke in indoor environments. The preponderance of credible evidence links passive smoking to specific diseases and other adverse health effects in people.

ASHRAE's ROLE

Providing healthy and comfortable indoor environments through the control of indoor air quality is a fundamental goal of building and HVAC design and operation. ASHRAE has long been active in providing engineering technology, standards and design guidance in support of this goal. These activities are consistent with ASHRAE's mission to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields, as well as our vision of a healthy and sustainable built environment for all. Therefore, the health effects of indoor exposure to emissions from cigarettes, cigars, pipes and other tobacco products are relevant to ASHRAE.

Although complete separation and isolation of smoking rooms can control ETS exposure in non-smoking spaces in the same building, adverse health effects for the occupants of the smoking room cannot be controlled by ventilation, even when ASHRAE's standards and guidelines are used. No other engineering approaches, including current and advanced dilution ventilation or air cleaning technologies, have been demonstrated or should be relied upon to control health risks from ETS exposure in spaces where smoking occurs.

ASHRAE's VIEW

Exposure to ETS can be reduced through a variety of strategies, but they do not completely eliminate exposure to ETS. However, banning or restricting smoking can result in a complete or nearly complete reduction of exposure to ETS.

There are four general cases of space-use and smoking activity that lead to different engineering approaches to addressing ETS exposure in buildings, from most to least effective in controlling ETS exposure: 1) banning smoking indoors; 2) allowing smoking only in isolated rooms; 3) allowing smoking in separate but not isolated spaces; and 4) totally mixing occupancy of smokers and nonsmokers. These approaches do not necessarily account for all circumstances.

Because of ASHRAE's mission to act for the benefit of the public, it encourages elimination of smoking in the indoor environment as the optimal way to minimize ETS exposure.