

## Effects of Smoking on the Indoor Air Quality and COVID-19

**Authors :** Sonam Sandal, Susan Verghese P.

**Abstract :** The phrase "environmental tobacco smoke" (ETS) refers to exposure to tobacco smoke that isn't from your own smoking but instead is caused by being in close proximity to someone else's cigar, cigarette, or pipe smoke. Environmental cigarette smoke is one of the main contributors to indoor air pollution (IAP), which is exceedingly harmful to human health and results in millions of deaths each year, according to the World Health Organization. Sidestream smoke (SS), which is discharged from a cigarette's burning end in between puffs, is the primary cause of ETS. The bulk of the ETS residue is composed of gases that are produced while smoking through the cigarette paper, mainstream smoke (MS) ingested, and side stream smoke emitted while inhaling a puff from the burning end. Each of these mixtures—SS, ETS, and MS—is an aerosol composed of an IAP-causing vapor phase and a particle phase. Therefore, indoor air-cleaning equipment designed to remove particles will not significantly alter nicotine exposure but will alter the concentrations of other dangerous substances, including particulate matter (PM), PM 2.5, and PM 10. In conclusion, indoor airborne contaminants pose serious risks to human health. ETS degrades the air quality, and when someone breathes this bad air, it weakens their lungs and makes them more susceptible to COVID-19.

**Keywords :** pm 10, covid-19, indoor air pollution, cigarette smoke., pm 2.5

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020