

# COVID-19 & Tobacco

Adults of any age that smoke are at increased risk of severe illness\* from **COVID-19**.



## Being a current or former cigarette smoker increases the risk for severe illness from COVID-19.<sup>1</sup>

- Cigarette smoking compromises the immune system, is linked to lung inflammation and puts people at greater risk for pulmonary infection.<sup>2</sup>
- Smoking harms the airway lining cells that contain cilia<sup>3</sup>, which are our essential defenders against viruses like SARS-CoV-2.
- People who smoke have more ACE2 receptors in their lungs. The virus that causes COVID-19 uses these receptors as a 'doorway' to get into lung cells, thus allowing for more severe illness from the virus.<sup>4</sup>



## Both smoking and COVID-19 disproportionately impact racial, ethnic, and sexual minority groups.<sup>5,6</sup>

- Communities that bear a disproportionate burden of COVID-19 hospitalizations and deaths include:<sup>7</sup>
  - American Indians and Alaska Natives
  - Black Americans
  - Hispanics or Latinx Americans
- Current cigarette smoking is highest among:<sup>8</sup>
  - Non-Hispanic American Indians and Alaska Natives
  - People of multiple races
  - LGB Americans

This pandemic is exacerbating the consequences of racial and socioeconomic disparities in health and healthcare in America – creating a crisis within a crisis.

There are persistent inequities in resource allocation, access to healthcare and other health stressors that communities of color experience.<sup>9</sup>

\*Severe illness from COVID-19 is defined as hospitalization, admission to the ICU, intubation or mechanical ventilation, or death

**At the present time, no firm link has been established between e-cigarette use and more severe risk due to COVID-19, but other harms remain.**



Most e-cigarettes contain **nicotine**, which has several known health effects, including causing inflammation in lung tissue.<sup>10</sup>



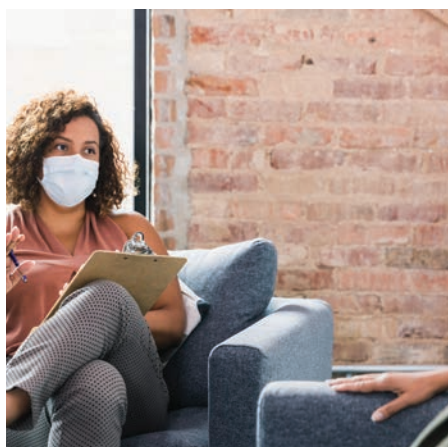
E-cigarette aerosol can contain **heavy metals** like lead, volatile organic compounds and cancer-causing chemicals that are harmful to the lungs.<sup>11</sup>



E-cigarettes contain **acrolein, a pesticide**. Acrolein can cause acute lung injury and COPD and may cause asthma and lung cancer<sup>12</sup> – all four are potential risk factors for developing more severe COVID-19 symptoms.<sup>13</sup>

### **Secondhand smoke has not been established as a separate, known risk factor in developing more severe COVID-19 symptoms.**

- Secondhand smoke is a serious health hazard which causes over 41,000 deaths in the U.S. each year.<sup>14</sup>
- Many of the underlying conditions caused or made worse by secondhand smoke are potential risk factors for developing more severe COVID-19 symptoms.<sup>15</sup>
- 100% smoke-free environments are the only effective way to fully protect people from secondhand smoke exposure.<sup>16</sup>
  - Smoking indoors can increase the transmission risk of COVID-19 because people would need to take their mask off to smoke and respiratory droplets could be transferred when a smoker exhales.



### **With smoking being firmly linked to more severe disease from COVID-19, there has never been a better time to quit.**

- Smoking cessation improves health status and enhances quality of life.<sup>17</sup>
- Smoking cessation medications approved by the FDA and behavioral counseling can double the chances of quitting smoking.<sup>18</sup>
- When people quit smoking, the number of ACE2 receptors in a person's lungs decreases.<sup>19</sup>

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