

Acrolein is a harmful air pollutant that is produced when materials burn.

The California Air Resources Board (CARB) and the California Office of Environmental Health Hazard Assessment (OEHHA) are committed to providing clear and accessible information about acrolein, where it comes from, its health risks, and the actions California is taking to protect public health.

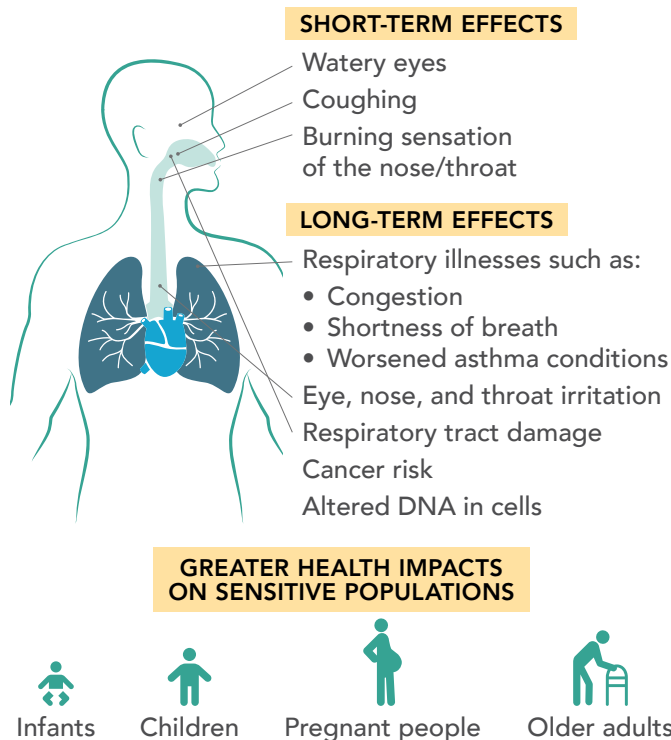
Recently released draft estimates of cancer risk reflect the best available science and indicate a cause for concern. However, this risk is based on limited air monitoring data with known limitations and notable uncertainties. Fully understanding the extent of this risk and sources will require additional study and remain an active area of research.

Current understanding of cancer risk

In May 2026, OEHHA released a *draft report* with new findings about acrolein as a chemical that can cause cancer.

- The report relies on the latest research that would estimate the potential excess cancer risk from long-term exposure.
- Cancer risk can vary widely based on a person's proximity to sources, individual susceptibility, and other factors.
- Based on the research and statewide air monitoring, the average estimated excess cancer risk from acrolein is approximately 1,300 in a million statewide.
- This means that if one million people were exposed to the statewide average levels of acrolein continuously over a lifetime (70 years), it is estimated that approximately 1,300 of them may develop cancer due to this exposure, in addition to the background rates of developing cancer from all other causes.
- This is more than 10 times higher than the cancer risk from benzene and puts it on par with the cancer risk diesel exhaust posed when it was first elevated as a major concern two decades ago — both well-known toxic air contaminants.
- It is important to note this does not represent new risk but rather better quantifies existing health risk based on current science.
- CARB will continue working to advance understanding of acrolein levels in the air and refine the cancer risk estimates as better data become available.
- The draft report will be peer reviewed by a panel of experts and public comments will be considered before adoption.

How acrolein can affect your health



Acrolein Fact Sheet

More research is needed

Recognizing the gaps in our understanding, the May Revision to the Governor’s 2026 Proposed Budget requests \$2.5 million to improve our scientific understanding of two toxic air contaminants, including acrolein, to enable risk reduction strategies.

Reducing acrolein emissions now

Several efforts are already underway to address addressing health risk from acrolein.

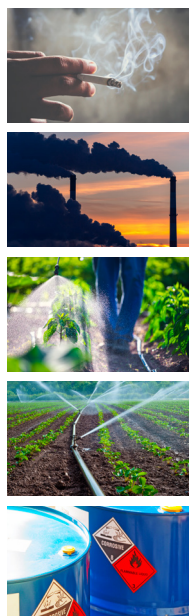
- CARB is implementing the most advanced mobile source emissions control program in the nation to reduce emissions from cars, trucks, off-road equipment and freight sources.
- Local air districts also have programs and regulations to reduce emissions from industrial sources, combustion sources, residential wood smoke and oil and gas facilities.
- CARB will also spearhead a statewide strategic plan to identify appropriate emissions control strategies. The strategy will be informed by the scientific advancements from the planned, targeted research program, along with considerations for technology readiness, regulatory authority, and cost.

Learn more

OEHHA and CARB will host public workshops where community members can learn more about acrolein, ask questions and share input. For workshop information, please visit oehha.ca.gov/air/acrolein-iur.

For more information on acrolein, visit arb.ca.gov/CARB-acrolein-FAQ.

Sources of acrolein



- Mobile Sources
- Smoking
- Fires
- Industrial Processes
- Cooking and Food Processing
- Waste Disposal
- Oil and Gas Facilities
- Agricultural Irrigation
- Pesticides
- Chemical Manufacturing
- Atmospheric Reactions

Protect yourself from acrolein



- Avoid smoking and vaping
- Keep children away from tobacco smoke
- Limit exposure to smoke from fires and vehicle exhaust
- Cook with oils at lower temperatures when possible and use proper ventilation
- Learn how to protect yourself from wildfire smoke and get information on real-time air monitoring at arb.ca.gov/smokereadyca
- Use air cleaners to lower your overall exposure to air pollution