

## EPA'S FINAL AIR QUALITY STANDARDS FOR GROUND-LEVEL OZONE

# BY THE NUMBERS

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- On Oct. 1, 2015, the U.S. Environmental Protection Agency (EPA) strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone to 70 parts per billion (ppb), based on extensive scientific evidence about ozone's effects on public health and welfare. The updated standards will improve public health protection, particularly for at-risk groups including children, older adults, people of all ages who have lung diseases such as asthma, and people who are active outdoors, especially outdoor workers. They also will improve protection for trees, plants and ecosystems. EPA will work closely with states and tribes as they implement the updated standards. Agency analyses show the vast majority of U.S. counties will meet the standards by 2025 just with federal and state rules and programs now in place or underway.

### Science-based Air Standards Have a Proven Record of Success

- Setting and implementing national standards for pollution has made the air cleaner for all Americans.
- Since 1970, we have cut harmful air pollution by about **70%** while the US economy has **more than tripled**.
- National average ozone levels have gone **down 33%** since 1980.
- **More than 90%** of areas originally designated nonattainment for the 1997 ozone standards now meet those standards.

### Reducing Air Pollution Delivers Health Benefits for Children and Adults

- An ozone standard of 70 parts per billion has public health benefits worth an estimated **\$2.9 to 5.9 billion**. These benefits outweigh the costs, estimated at **\$1.4 billion**.
- Reducing ozone and particle pollution nationwide (excluding California) in 2025 will avoid:
  - **320 to 660** premature deaths
  - **230,000** asthma attacks among children
  - **160,000** days when kids miss school
  - **28,000** missed work days
  - **630** asthma-related emergency room visits
  - **340** cases of acute bronchitis among children

## California Benefits and Costs Estimated Separately

- Because several areas in California are not required to meet the existing standard by 2025 and may not be required to meet the revised standard until sometime between 2032 and 2037, we estimated benefits and costs for California separately.
- Meeting a 70 ppb standard after 2025 in California will yield annual health benefits of **\$1.2 to 2.1 billion**. These benefits outweigh the costs after 2025 in California, estimated at **\$0.8 billion**.
- Reducing ozone and particle pollution in California will avoid:
  - **120 to 220** premature deaths
  - **160,000** asthma attacks among children
  - **120,000** days when kids miss school
  - **5,300** missed work days
  - **380** asthma-related emergency room visits
  - **64** cases of acute bronchitis among children

## Federal Rules Will Help Reduce Ozone Pollution

- Rules intended to reduce ozone precursors such as NO<sub>x</sub> and VOCs, along with rules that will reduce these pollutants as a co-benefit of reducing toxic emissions and carbon pollution, will help most parts of the country meet an ozone standard of 70 ppb.
- This includes federal air rules for power plants like the Clean Power Plan, CSAPR and MATS, emissions standards for stationary sources, and Tier 3 vehicle emissions and fuels standards.
- A total of **14 counties** with monitors (excluding California) are projected to measure ozone pollution above 70 ppb in 2025 -- down from **213 counties** with monitors (excluding California) that measure ozone above a level of 70 ppb based on 2012-2014 air quality data.