

# The Hidden Cost of Airport Emissions

Airports, while essential for global connectivity, are also major sources of air pollution. Exposure to the variety of pollutants emitted by aircraft, ground vehicles, and airport operations can lead to a range of serious health problems

## WHO'S AT RISK?



### Airport Workers

High-risk groups include baggage handlers, marshallers, operational engineers, technicians, cabin crew, and crew chiefs



### Nearby Communities

Residents within 5 miles of airports, especially those in low socioeconomic areas or with limited healthcare access

## KEY POLLUTANTS



**Particulate Matter**



**Carbon Monoxide**



**Nitrogen Oxides**



**Sulfur Dioxide**



**Hydrocarbons**



**Ground-level Ozone**



**Volatile Organic Compounds (VOCs)**

## HEALTH RISKS

**Respiratory:** Chronic cough, asthma, bronchitis, long-term risk of lung cancer

**Cardiovascular:** Increased blood pressure, risk of heart attacks, other heart diseases

**Nervous System:** Brain damage, stroke, cognitive issues, mental health disorders

**Reproductive:** Low birth weight, premature births, potential birth defects

**Systemic Effects:** Inflammation, oxidative stress, hormone or metabolic disruption

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### WHEN & WHERE ARE PEOPLE MOST VULNERABLE?



#### HIGH-RISK CONDITIONS

- Aircraft engine start-up, gate pushback, and inbound arrival
- Hot weather, which can intensify pollutant levels
- During construction activities

#### HIGH-RISK AREAS

- Proximity to jet engines near the gate or the “airport apron”
- Near ventilation systems
- Arrival or drop-off areas with high vehicle traffic
- Downwind of the airport

### THE NEED FOR ACTION

To protect airport workers and nearby communities, it’s crucial to:

**SET SAFEGUARDS.** Strengthen limits on aircraft and ground vehicle emissions.

**ADOPT CLEAN TECHNOLOGIES.** Accelerate the use of electric ground equipment and sustainable aviation fuels.

**IMPROVE HEALTHCARE ACCESS.** Ensure affordable, consistent healthcare for airport workers and their families.

**MONITOR AIR QUALITY.** Continuously evaluate air quality in and around the airport, including surrounding communities.

**RAISE WAGES AND JOB STANDARDS.** Provide fair wages and improve working conditions to support airport employees’ well-being.