2014 FORT COLLINS AIR QUALITY REPORT



DAILY AIR QUALITY INDEX

2014 Levels At-A-Glance

CARBON MONOXIDE (CO)

CO levels in Fort Collins are significantly better than the national air quality standard, and have been steadily improving for the last 20 years. CO is emitted mainly by cars and trucks and the



improvement is largely due to the federal emission standards for motor vehicles.

PARTICULATE MATTER PM10

PM10 (particulate matter smaller than 10 micrometers in diameter) measured better than the national health standard throughout 2014. These particles consist mostly of dust and smoke and



originate from roads, fields, construction sites and wood smoke.

PARTICULATE MATTER PM2.5

Fine particles or PM2.5 (particulate matter smaller than 2.5 micrometers in diameter) measured better than the national air quality standard for 2014. Elevated concentrations were measured on 12 different



days throughout the year. PM2.5 originates from the incomplete combustion of fossil fuels and from reactions between certain pollutants in the atmosphere. Fine particles are small enough to penetrate the lungs and enter the bloodstream. PM2.5 is the principal cause in poor visibility or haze.

OZONE

The ozone level at the Fort Collins West monitoring site was slightly better than the national air quality standard on



three days in 2014, with the highest reading of 74 (parts per billion) compared with the 75 ppb standard. The U.S. Environmental Protection Agency has designated Denver and the Front Range, including Fort Collins as a non-attainment area for ozone, meaning the national air quality standard for health is not being met in this region. Ozone can damage lungs and causes smog. Ozone is formed when hydrocarbons and nitrogen oxides react in sunlight. These pollutants are emitted mainly by motor vehicles and industrial sources.

VISIBILITY

Visibility is a measure of how clear the air looks. The Colorado visibility standard is based on observer preference or aesthetics rather than health impact. Visibility is measured using an instrument that measures the ampount of light able to pass through the atmosphere on an hourly basis. The data is compared to the Visibility Standard Index with categories good, fair, poor, extremely poor and missing. Missing data occurs on days when high humidity interferes with these measurements. In 2014, over half the days measured were rated fair or worse for visibility. Poor visibility can be due to smoke, haze and the brown cloud.



DID YOU KNOW?

You can sign up for daily air pollution forecasts emailed directly to you! Sign up for Enviroflash at enviroflash.info or call 800-484-3247.

fcgov.com/airquality 970-221-6600



VISIBILITY

Visibility in Fort Collins remained near 2013 levels, shown as the percentage of good versus bad visibility days by year.



OZONE

For the last several years, ozone levels at the Downtown site have been near the health standard. In 2014, the Downtown site dropped just below the health standard, while the FC West location remained above the standard.

CARBON MONOXIDE

The CO level steadily has decreased due to vehicle emission standards and vehicle emission testing.

For the past decade, PM2.5 levels have consistently

measured below 70% of the current health standard.

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14



PM10

100%

80%

60%

40%

20%

MASON STREET

For the past 15 years, PM10 levels have remained low and less than half of the health standard.

99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14

100% - NATIONAL PM10 STANDARD 100% - NATIONAL PM 2.5 STANDARD 100% 80% 60% 40% **MASON STREET** 20% Annual second highest 24-hour average as a percentage Annual average as a percentage of of National Ambient Air Quality Standard National Ambient Air Quality Standard

99

PM2.5