



[*LINK TO 2011 AIR POLLUTION EXCEEDANCE GRAPH*](#)

AIR QUALITY FORECAST FOR SATURDAY, FEBRUARY 4, 2012

This report is updated by 1:00 p.m. Sunday thru Friday and is valid for areas within and bordering Maricopa County in Arizona

FORECAST DATE	YESTERDAY THU 02/02/2012	TODAY FRI 02/03/2012	TOMORROW SAT 02/04/2012	EXTENDED SUN 02/05/2012
NOTICES (*SEE BELOW FOR DETAILS)				
AIR POLLUTANT	Highest AQI Reading/Site (*Preliminary data only*)			
O3*	36 BLUE POINT & NORTH PHOENIX	33 GOOD	31 GOOD	33 GOOD
CO*	22 WEST PHOENIX	14 GOOD	17 GOOD	19 GOOD
PM-10*	60 BUCKEYE	53 MODERATE	45 GOOD	47 GOOD
PM-2.5*	40 DURANGO	41 GOOD	38 GOOD	37 GOOD

* O3 = Ozone CO = Carbon Monoxide PM-10 = Particles 10 microns & smaller PM-2.5 = Particles smaller than 2.5 microns
 **"Ozone Health Watch" means that the highest concentration of OZONE may approach the federal health standard.
 "PM-10 or PM-2.5 Health Watch" means that the highest concentration of PM-10 or PM-2.5 may approach the federal health standard.
 "High Pollution Advisory" means that the highest concentration of OZONE, PM-10, or PM-2.5 may exceed the federal health standard.
 "DUST" means that short periods of high PM-10 concentrations caused by outflow from thunderstorms are possible.

[Health message for Friday, February 3:](#) Unusually sensitive people should consider limiting prolonged exertion outdoors.

[Health message for Saturday, February 4:](#) No health impacts are expected.

Daytime temperatures will be at or slightly above normal through the weekend under partly cloudy skies. Winds in the Phoenix forecast area will be fairly light during this period with decent upper-level mixing. High pressure will be battling a series of troughs that will develop and move toward the forecast area early next week. It's possible we could see some light showers late Tuesday into early Wednesday.

Air quality levels remain fairly good with only a couple PM10 monitors reporting lower Moderate concentrations. With the good mixing this weekend, those levels should drop off a bit.

Check back on Sunday for the latest. Until then, have a great weekend! -J.Paul

MONITORING SITE MAPS	
STATIC MAP	http://www.azdeg.gov/enviro/air/monitoring/images/map.jpg
INTERACTIVE MAPS	http://aqwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx http://156.42.96.39/alert/Google/air.html http://www.airnow.gov/

POLLUTION MONITOR READINGS FOR THURSDAY, FEBRUARY 2, 2012

O3 (OZONE)

Info on current 8-hour ozone standard: http://www.epa.gov/air/ozonepollution/pdfs/2008_03_aqi_changes.pdf

For archived AQI maps go to: <http://www.airnow.gov/index.cfm?action=airnow.maps>

SITE NAME	MAX 8-HR VALUE (PPB)	MAX AQI	AQI COLOR CODE
Apache Junction	38	32	
Blue Point	43	36	
Central Phoenix	37	31	
Fountain Hills	37	31	
North Phoenix	42	36	
Phoenix Supersite	38	32	
South Phoenix	41	35	
South Scottsdale	37	31	
West Phoenix	41	35	

CO (CARBON MONOXIDE)

SITE NAME	MAX 8-HR VALUE (PPM)	MAX AQI	AQI COLOR CODE
Buckeye	0.4	5	
Central Phoenix	1.4	16	
Dysart	0.3	3	
Glendale	0.7	8	
Greenwood	1.6	18	
North Phoenix	0.6	7	
South Phoenix	0.9	10	
South Scottsdale	0.9	10	
Tempe	0.8	9	
West Chandler	0.4	5	
West Phoenix	1.9	22	

PM-10 (PARTICLES)

SITE NAME	MAX 24-HR VALUE ($\mu\text{g}/\text{m}^3$)	MAX AQI	AQI COLOR CODE
Buckeye	74.1	60	
Central Phoenix	34.2	31	
Combs School (Pinal County)	46.4	43	
Durango	53.8	49	
Dysart	26.6	24	
Glendale	26.8	24	
Greenwood	45.9	42	
Higley	33.3	30	
Maricopa (Pinal County)	63.8	56	
North Phoenix	29.7	27	
Phoenix Supersite	27.1	25	
South Phoenix	50.4	46	
West Chandler	30.8	28	
West Forty Third	69.9	58	
West Phoenix	49.9	45	
Zuni Hills	16.2	15	

PM-2.5 (PARTICLES)

(Some data derived from light-scattering equipment)

For maps go to: <http://www.airnow.gov/>

SITE NAME	MAX 24-HR VALUE ($\mu\text{g}/\text{m}^3$)	MAX AQI	AQI COLOR CODE
Durango	12.3	40	
Dysart	4.1	13	
Estrella Mountain Park	6.9	22	
Glendale	7.6	25	
Phoenix Supersite	7.3	24	
North Phoenix	6.4	21	
South Phoenix	8.3	27	
Vehicle Emissions Lab	4.8	16	
West Phoenix	8.9	29	

LOCAL AIR POLLUTANTS IN DETAIL



O3 (OZONE):

Description –

This is a secondary pollutant that is formed by the reaction of other primary pollutants (precursors) such as VOCs (volatile organic compounds) and NO_x (Nitrogen Oxides) in the presence of heat and sunlight.

Sources – VOCs are emitted from motor vehicles, chemical plants, refineries, factories, and other industrial sources. NO_x is emitted from motor vehicles, power plants, and other sources of combustion.

Potential health impacts – Exposure to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate pre-existing respiratory diseases such as asthma. Other effects include decrease in lung function, chest pain, and cough.

Unit of measurement – Parts per billion (ppb).

[Averaging interval](#) – Highest eight-hour period within a 24-hour period (midnight to midnight)
[Reduction tips](#) – Curtail daytime driving, refuel cars and use gasoline-powered equipment as late in the day as possible.

CO (CARBON MONOXIDE):

[Description](#) – A colorless, odorless, poisonous gas formed when carbon in fuels is not burned completely.

[Sources](#) – In cities, as much as 95 percent of all CO emissions emanate from automobile exhaust. Other sources include industrial processes, non-transportation fuel combustion, and natural sources such as wildfires. Peak concentrations occur in colder winter months.

[Potential health impacts](#) – Reduces oxygen delivery to the body's organs and tissues. The health threat is most serious for those who suffer from cardiovascular disease.

[Unit of measurement](#) – Parts per million (ppm).

[Averaging interval](#) – Highest eight-hour period within a 24-hour period (midnight to midnight)

[Reduction tips](#) – Keep motor vehicle tuned properly and minimize nighttime driving.

PM-10 & PM-2.5 (PARTICLES):

[Description](#) – The term “particulate matter” (PM) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are referred to as “fine” particles and are responsible for many visibility degradations such as the “Valley Brown Cloud” (see <http://www.phoenixvis.net/>). Particles with diameters between 2.5 and 10 micrometers are referred to as “coarse”.

[Sources](#) – Fine = All types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Coarse = crushing or grinding operations and dust from paved or unpaved roads.

[Potential health impacts](#) – PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis.

[Units of measurement](#) – Micrograms per cubic meter (ug/m³)

[Averaging interval](#) – 24 hours (midnight to midnight).

[Reduction tips](#) – Stabilize loose soils, slow down on dirt roads, carpool, and use public transit.

{Updated 12/19/2011}