



VERY UNHEALTHY (201-300)
UNHEALTHY (151-200)
UNHEALTHY FOR SENSITIVE GROUPS (101-150)
MODERATE (51-100)
GOOD (0-50)

For more information visit:
<http://www.epa.gov/airnow/aqibroch>

LINK TO EXCEEDANCE & HEALTH STATEMENT INFO FOR THE 2009-10 & 2008-09 FORECAST SEASONS

AIR QUALITY FORECAST FOR TUESDAY, FEBRUARY 09, 2010

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 SUN 02/07/2010	TODAY MON 02/08/2010	TOMORROW TUE 02/09/2010	EXTENDED WED 02/10/2010
NOTICES (*SEE BELOW FOR DETAILS)	NONE	NONE	NONE	NONE
AIR POLLUTANT	Highest AQI Reading/Site (Preliminary data only)			
O3*	37 WEST PHOENIX	36 GOOD	38 GOOD	34 GOOD
CO*	07 WEST CHANDLER	21 GOOD	20 GOOD	11 GOOD
PM-10*	09 HIGLEY	19 GOOD	24 GOOD	41 GOOD
PM-2.5*	16 PHOENIX SUPERSITE	46 GOOD	37 GOOD	24 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 Monday February 08: No health impacts are expected.

Health message for Tuesday February 09: No health impacts are expected.

Synopsis and Discussion

The next in a series of upper level trough and frontal passages will occur in the Phoenix metro area during the Wednesday-Thursday time frame. This system now appears to be stronger than the last one, and moderate gradient winds on Wednesday may be enhanced at times by outflow from thunderstorms. Even so, soil stabilization due to recent rainfall episodes should help keep any local areas of blowing dust (PM-10) isolated and short-lived. As a result, all local air pollutant levels are still forecast to remain in the good range of the Air Quality Index for the foreseeable future. -Reith

MONITORING SITE MAPS: STATIC MAP – <http://www.azdeq.gov/enviro/air/monitoring/images/map.jpg>
 INTERACTIVE MAPS – <http://aqwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx>
<http://www.airnow.gov/>



POLLUTION MONITOR READINGS FOR SUNDAY, FEBRUARY 07, 2010



O3 (OZONE)

SITE NAME	MAX 8-HR VALUE (PPB)	MAX AQI	AQI COLOR CODE
Apache Junction	42	36	
Blue Point	43	36	
Central Phoenix	42	36	
Fountain Hills	42	36	
North Phoenix	41	35	
Phoenix Supersite	43	36	
Pinnacle Peak	38	32	
South Phoenix	43	36	
South Scottsdale	42	36	
West Phoenix	44	37	

CO (CARBON MONOXIDE)

SITE NAME	MAX 8-HR VALUE (PPM)	MAX AQI	AQI COLOR CODE
Buckeye	0.1	01	
Central Phoenix	0.2	03	
Dysart	0.1	01	
Glendale	0.1	01	
Greenwood	0.4	05	
Mesa	NOT AVBL	NOT AVBL	NOT AVBL
North Phoenix	0.1	01	
Phoenix Supersite	0.2	03	
South Phoenix	0.3	04	
South Scottsdale	0.2	03	
Tempe	0.3	04	
West Chandler	0.6	07	
West Indian School	0.4	04	
West Phoenix	0.3	04	

PM-10 (PARTICLES)

SITE NAME	MAX 24-HR VALUE (ug/m3)	MAX AQI	AQI COLOR CODE
Buckeye	05	05	
Central Phoenix	07	06	
Combs School(Pinal County)	16	15	
Durango	07	06	
Dysart	04	04	
Glendale	05	05	
Greenwood	08	07	
Higley	10	19	
Maricopa	37	34	
Phoenix Supersite	05	05	
South Phoenix	08	07	
West Chandler	06	06	
West Forty Third	08	07	
West Phoenix	06	06	
Zuni Hills	NOT AVBL	NOT AVBL	NOT AVBL

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 (ug/m3)	MAX AQI	AQI COLOR CODE
Durango	3.6	12	
Dysart	NOT AVBL	NOT AVBL	NOT AVBL
Estrella Mountain Park	2.6	08	
Phoenix Supersite	4.8	16	
Queen Valley	3.5	11	
South Phoenix	NOT AVBL	NOT AVBL	NOT AVBL
Vehicle Emissions Lab	3.1	10	
West Phoenix	4.0	13	

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 NOx (Nitrogen Oxides) in the presence of heat and sunlight.

Sources – VOCs are emitted from motor vehicles, chemical plants, refineries, factories, and other industrial sources. NOx 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 09/24/2007 }