



Grand Fire, Frazier Park, May 17, 2013

Update on Smoke Messaging

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toxins emergency room
What's in the smoke
Communities go back home
is it safe need to know
breathe media school

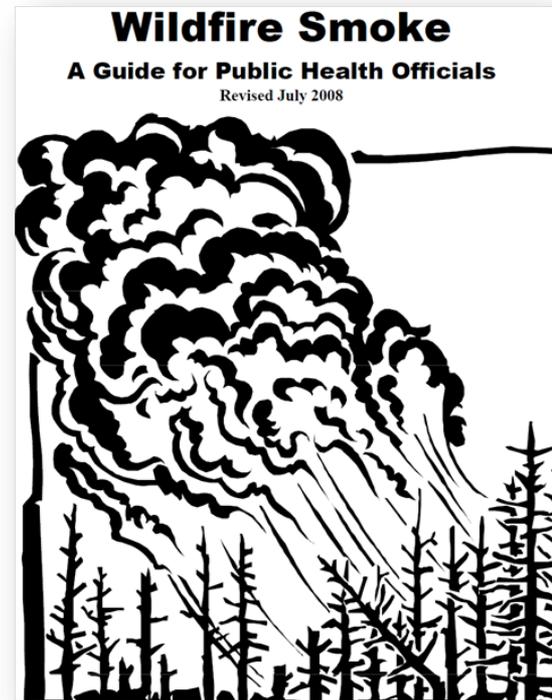


Data-based coordinated messaging
provides the best answers

Wildfire Smoke Guide

- Go-To Guidance for interagency coordination on reducing community impacts of smoke
- Data-based Interventions:
 - Clean air shelters
 - Masks
 - Canceling school & activities
 - Sheltering and evacuation
- Templates for messaging

www.arb.ca.gov/carpa/toolkit/data-to-mes/wildfire-smoke-guide.pdf



Changes to Guidance: AQI

- US EPA revised 24-hr averages for particulate matter
- Published in Federal Register Dec 2012
- Revised breakpoints for the Air Quality Index
- More conservative

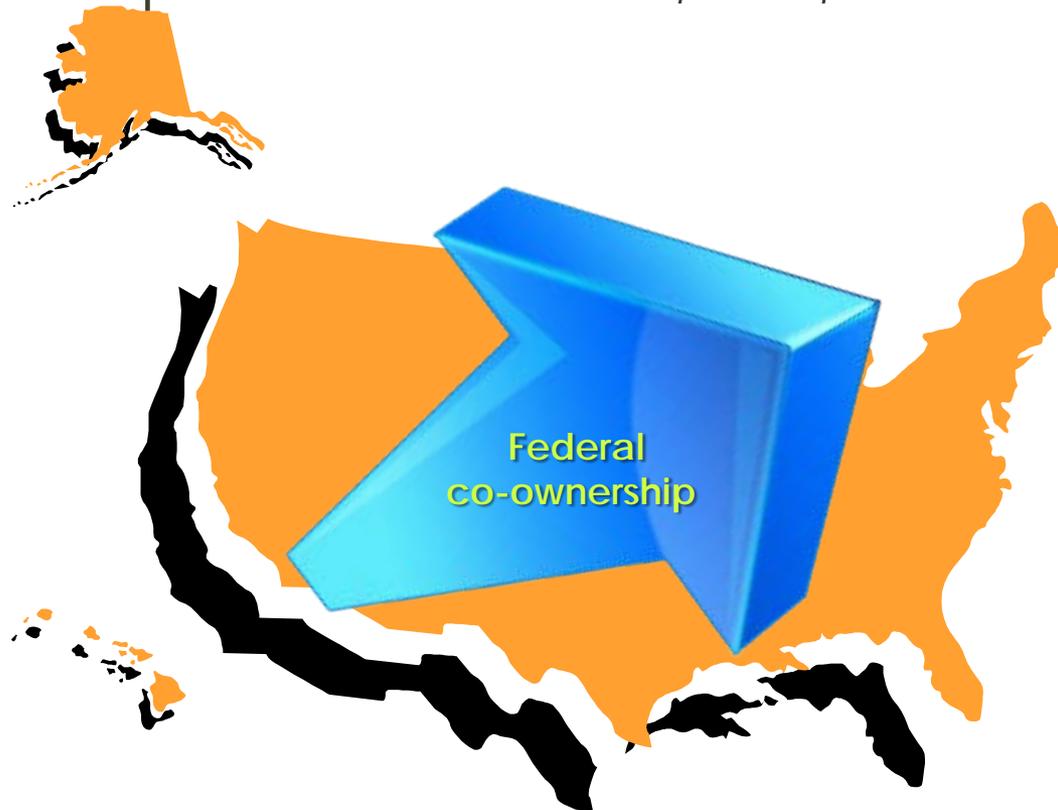
AQI Category	Index Values	Previous Breakpoints (1999 AQI) ($\mu\text{g}/\text{m}^3$, 24-hour average)	Revised Breakpoints (2013 AQI) ($\mu\text{g}/\text{m}^3$, 24-hour average)
Good	0 - 50	0.0 - 15.0	0.0 - 12.0
Moderate	51 - 100	> 15.0 - 40	12.1 - 35.4
Unhealthy for Sensitive Groups	101 - 150	> 40 - 65	35.5 - 55.4
Unhealthy	151 - 200	> 65 - 150	55.5 - 150.4
Very Unhealthy	201 - 300	> 150 - 250	150.5 - 250.4
Hazardous	301 - 400	> 250 - 350	250.5 - 350.4
	401 - 500	> 350 - 500	350.5 - 500

Table 3. Recommended Actions for Public Health Officials ^{2,3}

AQI Category (AQI Values)	PM2.5 or PM10 Levels (ug/m ³)			Visibility - Arid Conditions (miles)	Recommended Actions
	1-3hr avg	8 hr avg	24 hr avg ¹		
Good (0 to 50)	0 – 38	0 – 22	0 – 12	≥ 11	<ul style="list-style-type: none"> • If smoke event forecast, implement communication plan
Moderate (51 to 100)	39 – 88	23 – 50	12.1 – 35.4	6 – 10	<ul style="list-style-type: none"> • Issue public service announcements (PSAs) advising public about health effects and symptoms and ways to reduce exposure • Distribute information about exposure avoidance
Unhealthy for Sensitive Groups (101 to 150)	89 – 138	51 – 79	35.5 – 55.4	3 – 5	<ul style="list-style-type: none"> • If smoke event projected to be prolonged, evaluate and notify possible sites for cleaner air shelters • If smoke event projected to be prolonged, prepare evacuation plans
Unhealthy (151 to 200)	139 – 351	80 – 200	55.5 – 150.4	1.5 – 2.75	<ul style="list-style-type: none"> • Consider “Smoke Day” for schools (i.e., no school that day), possibly based on school environment and travel considerations • Consider canceling public events, based on public health and travel considerations
Very Unhealthy (201 to 300)	352 – 526	201 – 300	150.5 – 250.4	1 – 1.25	<ul style="list-style-type: none"> • Consider closing some or all schools (Newer schools with a central air cleaning filter may be more protective than older, leakier homes. See “Closures”, below.) • Cancel outdoor events (e.g., concerts and competitive sports)
Hazardous (> 300)	> 526	> 300	> 250.5-500	< 1	<ul style="list-style-type: none"> • Close schools • Cancel outdoor events (e.g., concerts and competitive sports) • Consider closing workplaces not essential to public health • If PM level is projected to remain high for a prolonged time, consider evacuation of sensitive populations

Guidance Revise: Federal-State Effort

- CDC, USFS, EPA coordinating effort for 2014
- Led by Susan Stone (EPA) and Pete Lahm (USFS) with past partners from CA, WA, OR



International Coordination

British Columbia Center for Disease Control **Forest Fire Smoke Guidelines**

Will focus on **data-driven best practices**:

1. Which wildfire smoke metrics are most useful to inform public health and emergency response? (e.g. ambient air quality measurements, satellite imagery, heat imaging, plume predictions)
2. What measures of health impact are most likely to be useful to inform public health and emergency response?
3. What is the effectiveness of protective measures to reduce smoke exposure?

Continuing Efforts

CCDEH Emergency
Response
Committee

CCLHO
Environmental Health
Committee

California Air Response
Planning Alliance (CARPA)

- Health Officers – Air District coordination
- Sacramento Valley Air Basin meeting for 2013 fire season



EBAM Smoke Monitoring

Coordination of Emergency
Deployments and Data

Objectives of Coordination

- Create a notification system: Requests to deploy; who should be notified; how we communicate
- Protocol for requesting emergency air monitoring assistance
- What do Health Officers and APCOs need for advisories or other public protective actions
- Participation/representation of monitoring activities and public messaging on 1300 call

Objectives of Coordination, *cont*

- Identify information clearing house for data sharing
 - PFIRS/Fire Information Map
 - AirNow/AirNow Tech
 - SatGuard
- What instruments can be fed into system