



The Fires: Air Quality, Public Health and What to Do Next Q & A

Hosted by the [Coalition for Clean Air](#)

Wednesday, January 15, 2025

Should we mask up even when AQI is in the green?

Dr. Gina Solomon: Mask when the AQI jumps up, but ok not to if it's green.

Dr. Jenny Lentz: AQI is a great starting place, if the AQI is green go outside and use your senses to determine if you still need to mask. If you see smoke, feel a scratchy throat, put a mask on even if the AQI is green.

Is KN95 sufficient? Any guidance for an indoor air filter? And for how long is it recommended to wear a mask? 🧐

Dr. Gina Solomon: A NIOSH certified N95 (with straps around the back of the head) is better than a KN95. Wear the mask anytime the AQI gets bad (orange or red), and OK to take it off when the AQI is good.

How can children be protected at schools and in the classroom? Especially if the school doesn't have HVAC?

Dr. Gina Solomon: Air cleaners work well in classrooms!

What PPE should we wear out as we do errands? Do air purifiers work — Wirecutter recommends the Coway; is that a good one?

Dr. Gina Solomon: Air 'purifiers' do work, if they are HEPA technology. Avoid ones that use ions. Wear PPE if the air quality gets worse.

Are there public API endpoints for all these data sources?

Story Schwantes: All of the government data (so not the air sensor data) is available here: https://aqs.epa.gov/aqsweb/documents/data_api.html

I read that N95 masks with vents are best for smoke when we get to go back in our homes. Your recommendations?

Dr. Gina Solomon: An exhalation 'vent' just makes it easier to exhale and makes the mask less uncomfortable. they are fine to wear.

My question is which type of home air purifiers should we use?

Dr. Gina Solomon: Anything with HEPA filtration is good. Avoid ionizers and 'plasma wave'. Make sure it's big enough for the room you'll have it in.

Aside from the wind blowing, do people have to be mindful of their proximity to cleanup efforts where ash and particles could be released into the air?

Dr. Gina Solomon: Ash consists of big particles, so those don't blow very far (maybe 100 yards or less, in most cases). You can also usually see blowing ash. Good to avoid it if you see ash blowing around!

fire.airnow.gov is showing basically the entire city as 'good' AQI. In this call we have been told the AQI is not measuring a lot of the current toxins. In some of the answers to above questions, we have been advised to follow the AQI when deciding if it's safe to be outside. Can further clarification be provided on whether we should be trusting the AQI to make decisions?

Dr. Gina Solomon: Both are correct. The AQI doesn't measure toxics, but the smoke particles are a good surrogate for everything else, since the toxic chemicals tend to absorb onto the particles, especially over time.

Is there a practical checklist of thing to do upon re-entry to our home? And is there anything we can do now to get ahead of re-entry?

Story Schwantes: Cal Fire has put together some really helpful resources for returning home safely: <https://readyforwildfire.org/post-wildfire/after-a-wildfire/>

What standards should we look for to ensure a filter is a True HEPA and not just a HEPA-type filter? How effective are air purifiers that combine HEPA and carbon filters versus using them separately? Do carbon filters completely remove harmful chemicals, or are there limitations to their effectiveness?

Dr. Gina Solomon: Carbon filters in air cleaners do help absorb toxic chemicals, but they don't last as long as the HEPA filter, and it's hard to know when they are saturated. Basically a 'good to have' addition to an air cleaner, but probably only a modest additional protection.

What is PM2.5 and PM10?

Dr. Gina Solomon: Different size particles in the air. PM2.5 are tiny and PM10 are larger. Smaller=worse because they go deeper in the lungs.

I would love your thoughts on safety for babies and toddlers to be outside in this air, for how long, and guidelines. And how to evaluate day by day. Thank you!

Dr. Gina Solomon: Follow the AQI. When the air quality is green (or even yellow), it's safe for even vulnerable populations to be outdoors, at least for a little while. Smoke moves, so keep an eye on the AQI for your area!

does this apply for people not entering a burned house? or everyone in la

Dr. Gina Solomon: For most people in LA, just keep an eye on the AQI and mask up anytime you see ash or the AQI bumps up.

If you have ash on your sill, etc. how do we clean this or have this cleaned? I thought we weren't supposed to disturb the ash? Thank you!

Dr. Gina Solomon: Good advice on cleaning here: <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/fire/cleaning-up-after-fire.html>

Given that we know there is ash all over Los Angeles and air can't be healthy, how do we square that with AQI reading "good" when we know that doesn't make sense given that has happened?

Story Schwantes: Great Q - this data is only particles that are in the air at that exact moment. So there may still be particles covering surfaces, or that get blown back into the air at a later time. I use Airnow to help inform my health decisions but will also consider other factors like wind and what I can see and smell when I step outside.

What would you suggest for people who have to work outside? Asking for someone who teaches tennis <10 miles from the Eaton fire. Is it not safe to teach right now? If not, for how long?

Ed Avol: hard to give a specific timeline, but if the air doesn't smell of smoke and isn't brown, and the AQI seems green or yellow in the general area, it might be ok to play...if you feel chest tightness, cough, or irritation, it would obviously be time to stop...

What are the essential details to look for when purchasing an air purifier to tackle those airborne particles like the lead and asbestos that aren't measured by AQI?

Tim Dye: Here's a great resource. <https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices>

What type of clean up is needed inside a home that is still standing? For references everything has burned down just one block away.

Dr. Gina Solomon: Here's a resource: <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/fire/cleaning-up-after-fire.html>

is there a link to the air filters that you recommend? the ones you mentioned that "aren't" good?

Story Schwantes: <https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices> some great resources from CARB about air filters!

I know that there are suggestions to wear masks when you are "near" the fire zone. Can you define what "near" means? If you're 10 miles away should you/your kids wear a mask?

Dr. Gina Solomon: I suggest relying on the AQI in the area where you are located. Smoke moves in strange ways, and changes over time and distance.

Can you please discuss what kind of cleanup is necessary to remove toxic pollutants related to the fires, specifically on outdoor playgrounds and school premises?

Ed Avol: I would begin by wiping down the outdoor tables, sweeping the playground after wetting it to keep the dust from re-suspending...and have the personnel wear masks while doing so and washing their hands, arms, etc. after.

Will the clean-up of the houses that have burned down kick up a significant amount of lead, arsenic, asbestos and the other toxic pollutants you have mentioned? Will the air nearby this cleanup be significantly contaminated throughout the cleanup process?

Dr. Gina Solomon: If the cleanup is done well (they wet down the ash), it should be OK, but if they let it blow around, that's not good.

Are all of these issues a concern if you do not live close to the fire zone?

Dr. Gina Solomon: If the smoke is blowing toward you (or starts blowing toward you in the coming days), then these issues are a concern.

Ed Avol: If the wind is blowing in your area, then yes, run your AC in the home and your air purifiers and keep the windows closed.

I hope to hear a bit more about smoke "scent" in households and if this has any short or longer term impacts - I know folks whose homes, clothes, etc., smell like smoke still. Should they just wash everything?

Ed Avol: if you can smell the smoke, it likely is still present. Wash what you can; run the HEPA room filter, work to reduce the exposures as possible...

"Is it safe to home garden Veggie garden planters in a backyard that is more than 1m from the fires?"

Dr. Gina Solomon: If you had a lot of ash falling out of the air in your area, you might want to remove the top 2-4 inches of soil from your planters and replace that soil. If not much ash fell in your area, then it's probably ok.

What about distance from burned area regarding water safety?

Dr. Gina Solomon: Gina Solomon If you're outside the burn zone, the water in your area should be OK.

does PM 10 dust include asbestos, plastics, etc.?

Story Schwantes: It definitely can, since those pollutants can be suspended in the air as PM10 or PM2.5.

Is it safe to run/exercise outdoors? If not, when might be ok to resume?

Dr. John Balmes: It depends on the air quality. The AQI is a reasonable indicator to use. If it is in the healthy zone, it should be safe to exercise outdoors

I'm sorry this is very confusing she is saying "good time to go outside" on areas right by the fire....what is going on???

Story Schwantes: It's important to know that those maps can only show certain air pollutants from the wildfires - there may be other pollutants in the air that other presenters have mentioned that might also make the air unhealthy but are not being measured widely.

How do you wash off stagnant water? With soap?

Dr. Gina Solomon: Just rinse with safe water.

Can you speak about the different between KN95, K95, and P100 masks? Which should we prioritize (and which is a reliable brand/source/access)?

Dr. Gina Solomon: KN95s are the least effective. P100 are the most effective, but the most important is to get a good fit on your face.

Thank you for doing this. Yes, any clarification on purifiers when it comes to Merv vs HEPA vs carbon to address these 'invisible' particles that aren't measured by AQI.

Dr. John Balmes: MERV13 is the right level of central ventilation filtration. Portable HEPA air cleaners can also filter rooms but have to have sufficient air flow for the room size. In my Berkeley home, we use both during wildfire smoke episodes.

I am an elementary school principal, and we are currently keeping our students indoors. While the AQI is good in our area, my understanding is that this is just one metric. Between the ash and particles in the air not measured in AQI, is it indeed okay for the kids to have recess?

Dr. Gina Solomon: My advice (partly for mental health reasons) is to allow recess when the AQI is green or even yellow in your area.

Can we reasonably conclude that PM2.5 as reflected in AQI levels are likewise indicative of ultrafine particle levels?

Ed Avol: no because the ultrafine particles are typically 0.1 microns in diameter compared to the 2.5 micron size.

I'm curious how far away from the palisades fire you think is safe for children to be in school. E.g. 5 miles from Palisades how many months until you feel the air is safe?

Ed Avol: no prediction possible because it will depend on wind direction, fire duration, etc... again, check the wind apps (Windy, WatchDuty) as well as airnow.gov to see what air quality is like in your area

Is there a rule of thumb for mileage away from a fire site that is safer

Dr. Gina Solomon: No rule of thumb! Depends on the wind direction at the time of the fire. Smoke can travel very far, but if it's not blowing toward you, you're ok!

How far from toxic ash clean up is a safe distance for our homes? If we do smoke restoration now, when the toxic ash cleanup starts will our homes be recontaminated and importantly what will happen to the air quality. What's a safe distance?

Dr. Gina Solomon: No specific distance. It matters more on which way the wind blows!

So we should assume all of LA has bad air at this point?

Dr. Gina Solomon: No, only if/when the AQI is high, which could happen tomorrow when the wind direction changes.

Are they testing all the water in LA? Should I be concerned if I am outside of the burn zones?

Dr. Gina Solomon: No, only the burn zone should be affected.

Are CPAP air filters adequate?

Dr. John Balmes: No, you need to use portable HEPA air filtration devices

For those of us with rain barrels...how do we dispose of this contaminated water appropriately?

Dr. Gina Solomon: On the soil, but not on a garden where you want to eat the food.

it sounds like children who cannot wear masks should not be outside at all then, is that right?

Dr. Gina Solomon: Only on days when the air quality is bad (smoke, ash).

Is it safe to go about regular life in Los Angeles?

CCA: Yes, but keep an eye on the air quality. If it's poor, put on a mask to reduce your risk.

Can the experts please advise their recommendation for schools within a 10 mile radius to have indoor versus outdoor lunch/recess and if indoors for how long?

Ed Avol: Sorry but cannot give a specific time; check wind directions, fire status, AQI, and try to make a combined choice based on multiple sources of info...When in doubt, keep the kids indoors for a few days until you see that the air looks and smells "clean", that there is no obvious smoke in the area, that there is no longer the Santa Ana winds blowing...

What lifestyle / behavioral changes have each of you been taking to limit exposure to these pollutants during this time?

Ed Avol: spending more time indoors, less outdoor exercise (increased ventilation), using a mask, using the recirculate option in your car if you have to travel

When the winds pick up again, will they winds cause the ash that is currently on trees and the ground to kick up and spread the toxic chemicals back in the air?

Dr. Gina Solomon: That could happen. Definitely avoid being in an area where there is ash blowing around!

what does it mean "by dispersed"

Dr. Gina Solomon: That means the stuff is moving around from one place to another.

Are the presence of bad AQI indicative of higher levels of the untracked toxins? Or are the toxins present in dangerous levels even is AQI is good?

Dr. Gina Solomon: The AQI and toxins generally track in parallel, so the AQI is a pretty good indicator.

The air quality appears to be clean near my house, sites like AQI, watch duty and the weater app all report a healthy rating, yet I find new ash every morning on my car every morning. How can the air quality be “good” while that is happening?

Dr. Gina Solomon: The ash is heavier stuff that is too big to be measured by the air quality monitors. It has different hazards.

I have questions about safely cleaning my home that was not burnt but may have some ash in it. How to sanitize carpets, any fabrics, etc. How do I know what has come into my home through the cracks?

Dr. Gina Solomon: The Red Cross has lots of info: <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/fire/cleaning-up-after-fire.html>

What is the expected duration of time needed to ensure that the toxic chemicals released by the urban fires is now at a low enough level that we are back to the baseline before the fires?

Dr. Gina Solomon: The smoke ages over a few days. However there are some chemicals that linger in the ash.

The water in Palisades is not safe, but Santa Monica is right on the boarder. Do they have separate pipelines, how come Santa Monica water is safe right now?

Dr. Gina Solomon: The smoke doesn't travel far from the burn area inside the water system. So if you are more than about one block from the burn zone, the drinking water should be ok.

Why is the whole LA green/clean when there's still ongoing fire

Dr. Gina Solomon: The wind has been blowing the smoke out over the ocean.

A couple of times now, people have said that N95 or homemade box fan filter doesn't filter out the VOCs. But it has also been said that those adsorb to the particulates, which are filtered by N95/Merv 13. So are they or are they not effective at filtering out the VOCs?

Dr. Gina Solomon: Those filters aren't perfect, but they are pretty good.

What types of masks would be sufficient for the young kids? It seems like many of the masks that are being recommended don't come in smaller sizes for kids.

Dr. Gina Solomon: Unfortunately that's a real problem. No great solutions....yet.

"What about indoors when AQI is poor? Old homes are not airtight."

Story Schwantes: Using an indoor air filter and creating a “clean room” can help alleviate indoor air quality levels. Here's an EPA resource on them: <https://www.epa.gov/emergencies-iaq/create-clean-room-protect-indoor-air-quality-during-wildfire>

How do we address the ongoing use of leaf blowers despite the warning (and unenforced ban of gas-powered leaf blowers)?

Dr. Gina Solomon: There seem to be issues related to messaging in multiple languages as well as incentivizing employers (since the workers are just trying to make a living). Using leaf blowers in

areas where there is ash on the ground is a very bad idea. That will throw the ash into the air and contaminate a larger area.

CCA: You can make a report to the South Coast AQMD here: <https://www.aqmd.gov/home/air-quality/complaints>

So many schools on here still waiting for practical guidance.

Dr. Gina Solomon: Watch the AQI and use judgement (i.e. no ash blowing around). If air looks good and AQI is green, then let the kids outside. If you see ash or the AQI is orange/red, then don't let them out. Good to get air cleaners for the classrooms if you can.

Could you also please highlight the similarities/equivalencies between wildfire smoke and the smoke from wood stoves/campfires/boilers/etc.?

Dr. Gina Solomon: We don't usually burn tires, plastics, and other toxic materials in campfires! That said, campfire smoke isn't totally benign.

I'm a full-time bike commuter and am wondering about the increased risk/damage to my lungs when I'm active outside. Any suggestions specifically for cyclists?

Ed Avol: wear a N95 while riding

Are HEPA filters better than MERV 13 filters? Do you need an air filter in each room of your home?

Dr. John Balmes: While the AQI doesn't include air toxics, if it is below 50 in your area during fires, it is likely that exposure to air toxics will not be high. It is best to have both MERV13 central ventilation filtration and HEPA portable air cleaners. That's what I have in my home in Berkeley

Can you talk about pregnant women - extra precautions needed?

Dr. Gina Solomon: Wildfire smoke is associated with preterm birth and low birthweight. Definitely extra precautions needed!

Curious what the best thing to do for our pets, as far as walks and practices for keeping them happy and healthy

Dr. Gina Solomon: Wipe their paws when you get home!

Should children stay away from areas where active cleanup will be happening?

Dr. Gina Solomon: Yes, that's not safe for young children!