

North Bay Wildfires: Protect Your Family's Health

By Megan Kaun and Nichole Warwick, 10/17/2017

The North Bay Fires have dramatically increased the toxicity of our local environment. Children are particularly vulnerable. This document summarizes expert recommendations for reducing exposure & supporting health. Please consult your health care provider for customized recommendations.

REDUCE EXPOSURE (See Page 2 for more detail)

Avoid Contaminated Areas

- Monitor air quality at www.airnow.gov
- Keep children and pets indoors, keep windows closed when air quality poor

Protect Body from Exposure

- Protect Your Lungs with a properly fitted mask (N95 or N100)
- Cover your body fully and change clothes often

Clean Home and Indoor Areas

- An expert in emergency restoration services can help with smoke damage
- Vacuum EVERYTHING with a functioning HEPA vacuum
- Wipe all hard surfaces (floors, walls, ceilings) with damp microfiber wipes
- Pause and repeat cleaning as needed
- Never use harsh chemicals or deodorizers, which make air quality worse

Maintain Indoor Air Quality

- Run multiple HEPA air purifiers or move single unit from room to room, change filters often
- Replace filter in HVAC system

- Remove shoes and contaminated clothing outside
- Bathe and wash hair before bed

SUPPORT HEALTH (See Page 3 for more detail)

Relieve Exposure Symptoms

- Soothe throat with herbal tea, throat spray, lozenges, honey
- Open breathing passages and calm nerves with diffused essential oils, and herbal teas, tinctures, and syrups

Build Natural Immunity

- Eat healthy, fresh foods
- Take probiotic supplements and fermented foods
- AVOID inflammatory foods like sugar, fried/processed foods, and alcohol
- Boost immunity with Vitamin C, Zinc, B vitamins, and herbal preparations

Detoxify Gently

- Drink lots of water, take electrolytes
- Pooping helps! Use magnesium, flax seed, and acacia fiber
- Choose high fiber, fresh foods
- Take warm baths with epsom salts

- Take safe herbal supplements like activated charcoal, chlorella, etc.

Increase Self Care Practices

- Seek support from family, friends, and mental health care providers

- Allow yourself to have your grief experience
- Gentle massage, yoga, and qigong promote good circulation and endorphins for healing
- Take time to rest & love yourself!

MANAGE INDOOR AIR QUALITY WITH CLEANING PROTOCOLS¹

These house cleaning techniques will help minimize toxic dust particles resulting from wildfire smoke and ash. If your house has indoor smoke damage, consider hiring a professional trained in emergency restoration services. Smoke remediation may be covered by your insurance company, a professional can help you through the process. Steam cleaning fibrous surfaces like couches and carpets is recommended for smoke damage. Professional ozone treatment or re-painting the walls (after cleaning and sealing) may also be needed.

PHASE 1: CLEAN-UP (2 DAYS OR MORE)

Step 1: Vacuum EVERYTHING with a well-functioning HEPA vacuum

NEVER use a broom or non-HEPA vacuum cleaner. These stir particles back into the air, worsening air quality. Some HEPA vacuums do not function properly due to incomplete internal seals. See the [Shark Rotator Professional](http://tinyurl.com/y939fbez) and Consumer Reports guide (<http://tinyurl.com/y939fbez>). Vacuum all surfaces (walls, ceilings, floors, etc) that came in contact with the smoke. For fibrous surfaces (carpets, couches, etc), vacuum a surface multiple times in multiple directions. **Empty your vacuum outside.**

Step 2: Wipe down all hard surfaces with damp microfiber wipes

Use a dilute solution of water and a little dish soap, Citrasolv, or Benefect's Atomic Cleaner, a small squirt per gallon. Benefect's is particularly well suited for cleaning up smoke damaged surfaces. Reusable microfiber wipes should be washed in **hot water** with laundry detergent. Attach microfiber wipes to a Swiffer-like mop to clean floors, walls, and ceilings. Avoid TSP or other harsh cleaning solutions as they may add toxicity to your home.

Step 3: Pause and Repeat Step 1 and 2 as Necessary

Cleaning will stir up dust. Pause one day for airborne dust to resettle. Heavily smoked spaces may require multiple cycles of Step 1/2. A test is to leave, run the heater for 8 hours, and return. If smell persists clean again or consider professional help. A test for clothes is to put them in a garbage bag, bring to a smoke free area, and open bag to smell for smoke. Household items (furniture, rugs, etc.) may need to be removed from the home and cleaned separately.

PHASE 2: MAINTAIN HEALTHY INDOOR AIR QUALITY (1 YEAR OR MORE)

Outdoor contamination may continue for a long time due to construction activities.

¹Special thanks to Dave Osborne, specialist in Emergency Restoration Services, (707-337-7878, daveoz50@yahoo.com) and John Banta (jbanta@restcon.com), CIH (Certified Industrial Hygienist), co-author of [Prescriptions for a Healthy Home](#). Full text on cleaning recommendations: <http://www.neilnathanmd.com/how-to-clean-effectively-by-john-banta-ci/>