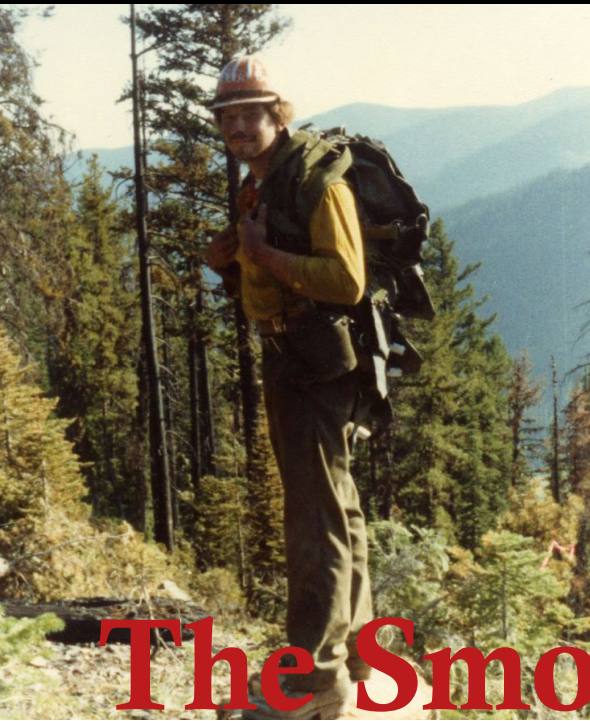


Safety means knowing and accepting your limitations as a firefighter, including your tolerance of smoke.



The author on a wildfire near Whitefish, MT, in 1981. Photo: Randall Thomas, USDA Forest Service.

The Smoke That You Shouldn't Have

Randall C. Thomas

In 2018, *Fire Management Today* carried an article on smoke exposure (6 Minutes for Safety 2018). The article describes actions you can take to mitigate smoke exposure and techniques for reducing the exposure of firefighters to heavy smoke. The article is very informative, with a lot of good points to consider.

I would suggest another consideration. I believe that some people, including me, are more susceptible to the effects of smoke than others—and that if you are highly sensitive to the effects of smoke, then you should seriously consider not fighting fires.

Randall Thomas is a retired forestry technician for the Forest Service, Idaho Panhandle National Forests, Coeur d'Alene, ID.

I made my decision after eight seasons as a wildland firefighter. I came to realize that smoke exposure made me irritable, affecting my ability to make good decisions on the fireline. I have to admit that I had other shortcomings as well, such as a lack of leadership skills and a low tolerance for stress and anxiety. These factors contributed to my decision to leave the fireline.

It was a difficult decision because I enjoyed the rigors of the fireline. When

I came to realize that smoke exposure made me irritable, affecting my ability to make good decisions on the fireline.

I was a teenager, I would help my father after school and on weekends with farming and logging, and I would work with him in my grandfather's sawmill. I was exposed to a life of hard work in the mountains of northwestern Montana, and it helped to instill in me a strong work ethic.

I was 30 years old when I decided to stop fighting fire, a decision I had been gradually working toward for about 4 years. But one event in particular finally made me quit.

I was a dispatcher at the time, but I wanted to help with a prescribed burn. Although I was working in an office, I was riding my mountain bike and was in good shape.

Everything started out fine, but in the afternoon, the prescribed burn escaped its lines and became a wildfire. We ended up fighting that fire all night long and into the next morning.

I was pretty sick from my exposure to the smoke. That was when I told myself that enough was enough: I simply lacked the physical tolerance of smoke that a firefighter needs.

I guess I could have gone to a doctor and gotten some good medical advice, but if the smoke was making me sick anyway, it wouldn't have mattered. When I first started fighting fire, folks would sometimes wear a face mask or bandana to help filter out the smoke, but for me this was very uncomfortable and did not fully protect me from the smoke. My body had been telling me for years that I was not suited for a smoke-filled environment, even though I enjoyed digging line and mopping up. Also, I remembered my parents and brother complaining about sinus problems for years, so perhaps the physical ailment ran in my family.

I recently read about Ed Pulaski, who was famous for saving the lives of his crew members during the 1910 fires by making them stay in a mine tunnel to escape the fire outside. Afterwards, Pulaski was plagued by health issues due to smoke exposure, including lung damage and light sensitivity. In view of what happened to Pulaski, perhaps for me it was years of exposure to smoke combined with my low physical tolerance of smoke.

I am thankful that we have firefighters with higher smoke tolerance who are continuing to fight wildfires, but continuing to expose myself to smoke meant risking my health. My strong work ethic made me try to overcome the smoke problem for years until I realized that I was only human, with certain limitations. Safety means knowing and accepting your limitations as a firefighter, including your tolerance of smoke.

LITERATURE CITED

6 Minutes for Safety. 2018. Smoke exposure. *Fire Management Today*. 76(3): 47. https://www.fs.fed.us/sites/default/files/fire-management-today/fs_firemanagement763_508_v3.pdf (12 December 2019).

SPECIAL NEWSLETTER ON FOREST SERVICE FIRE-RELATED RESEARCH

Last year, Forest Service Research and Development released an *R&D Newsletter* that is a special issue on wildfire. It contains articles on topics related to research by Forest Service scientists, including the following:

- Economic benefits of wildfire prevention education;
- Benefits from American Indian approaches to wildland fire;
- The Interagency Wildland Fire Air Quality Response Program;
- “Era of Megafires” presentation for public education and firefighter training;
- A trail-blazing plan for using prescribed fire on a landscape scale in the Sierra Nevada;
- A three-dimensional tool to help predict fire behavior;
- The expanding wildland–urban interface;
- How the National Aeronautics and Space Administration tracks wildfires from above to aid firefighters below;
- Seeding experiments for postfire restoration;
- Fire/climate interactions;
- Post-hurricane wildfires in Puerto Rico;
- Insights and tools for firefighters from the Missoula Fire Sciences Lab;
- An overview of work by the Missoula Fire Sciences Lab;
- A summary of wildland fire and fuels research;
- An issue of *The Natural Inquirer* about wildfire prevention; and
- The origins of wildland fire research.

To read about any or all of these topics, you can access the special issue at www.fs.fed.us/research/docs/newsletter/201909%20September-Newsletter--Wildfires-Special-Issue.pdf.

BY-THE-NUMBERS

Nationally, nearly **nine** out of



wildfires are human-caused.



Forest Service
Research and Development

Highlights from the World Leader in Forestry Research