



NAVAL SAFETY COMMAND

SAFETY AWARENESS DISPATCH



SA 25-29

Outdoor Fire Fails

“Bonfires and Campfires and Grills, Oh My! – Dorothy

It's officially fall and the cooler weather draws us to enjoy the warmth of bonfires, campfires, and firepits—not to mention some delicious grilling. We want you to spend more quality time around those fires with your family and friends, not more time in the emergency room, so read along and help us, help you.

The authors of this dispatch have been burned before...more than once. It hurts—a lot. So, if you feel we're poking fun at our brothers and sisters in the following narratives, we're not. Burns are excruciating and can be gruesome.

We feel (*and have felt*) their pain. We're just telling their very real stories—which seem to happen again every year—with the hope you'll remember them and won't feel the same pain.



- Do I Use One Can of Fluid or Two? On a cool winter day, a Sailor prepped a charcoal grill at home to cook outdoors. He added lighter fluid to the briquettes and went back inside for 10 minutes or so. When he came back, he fired up a long-barreled lighter and touched it to the charcoal. “Foom!” The grill ignited with significant “blow back,” giving the Sailor second and third degree burns to his right hand and arm and burning his hair and eyelashes on his right side. His wife drove him to the ER where they treated him for his injuries. —*The report says the blowback happened because he used too much lighter fluid, shut the lid on the charcoal grill, and waited ten minutes to ignite the briquettes. Too much fluid actually doesn't help. It only takes about ¼ cup for a pound of charcoal and don't soak it. Light it immediately.*¹
- The Reverse Flamethrower. A Sailor was cooking on a backyard charcoal grill. After about 10 minutes of cooking with the lid closed, the grill's temperature had dropped from 600 or so to around 200 and the food didn't appear to be cooking (man! We hate it when that happens). The Sailor opened the lower grill door to the charcoal tray to see what was up, and she decided to give the coals a boost by...adding lighter fluid (No! Wait!). The report says “immediately, fire came back toward the member” and ignited her arms. She frantically put the fire out and family took her to the ER. According to the docs, she suffered second-degree burns on 9% of her body. —*That is horrifying. We confess we've been tempted to do it too, but Don't Add Lighter Fluid to a Burning Fire! The flames can (and will) follow the fluid stream right back to you, just like this Sailor painfully found out!*
- This is Where That Saying Comes From. It was a dark and cold winter evening around 1700. A Sailor returning home from work rightfully felt a fire in the fire pit would be great to warm things up. He got the fire going, but felt he needed to “strengthen the flames” (*hmm. What's the plan?*). He had no lighter fluid to add (*Whew! Good; that would've been bad to add lighter fluid to a burning fire*). Undaunted, he used a canister of gasoline instead (*Noooooo!!!!*). As he tried to add this worst possible option to the fire, the flames followed the stream back toward the Sailor who then got scared and let go of the canister. The burning gasoline splashed on the Sailor and set him on fire. He tried to put it out himself but couldn't. Thankfully a neighbor rushed to help put out the flames. EMS rushed him to the hospital where he spent more than two weeks getting treated for burns. The Sailor was out of work for two months of recovery with his future TBD. —*NEVER (repeat, NEVER) add gasoline to a fire! Adding lighter fluid to a fire is bad; adding gasoline is much worse. The only thing worse than using gasoline to start a fire is adding gasoline to a burning fire. Please learn from this Sailor's pain and suffering (and many others before him).*

¹ If you don't believe us, read the directions on the back of the lighter fluid bottle (we admit we never read those before) and/or look it up online.

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- **Feeling No Pain.** One evening outside the barracks a Marine (M1) began to consume alcohol while spending time with other Marines (*sounds like a normal Marine thing so far*). The Marines began to burn firewood in an enclosed fire pit nearby (*also normal; but now adding fire to alcohol should make us pay more attention*). Later in the night, M1 was sitting close to the fire as another Marine threw something into the fire, causing flames and embers to flare up and hit M1's face. The report says he "returned to his assigned barracks room intoxicated and fell asleep." His NCO recommended he go to medical, but M1 (*still intoxicated, so not the best one to be making decisions*) "felt fine" and declined. The next morning when he arrived at work, his



supervisors took one look at him and immediately sent him to the ER, who sent him out for further treatment from burn experts. —*The report says the group built a fire too big for the burn pit, M1 was intoxicated so he didn't keep a safe distance from the fire, and supervisors/watch standers didn't intervene. Keep those points in mind next time you start a bonfire. If you do get burned, go see the doctors. And, if it's your drunk buddy who gets burned, don't let him decide whether he needs to seek medical attention.*

- **Ring of Fire** A Marine officer was burning yard debris. While the fire burned, he'd add branches and grass clippings as he cleaned them up. The report narrative says at one point as he added more branches, the burn pile "erupted in flames," burning his face and one hand. His wife helped with first aid and the next day he went to medical, who gave him a day sick in quarters and sent him to a burn clinic for further treatment. —*The mishap report says a causal factor of the mishap was "second and third-degree burns." Quick note for the report writers: The burns weren't the cause; they were the result. In another section of the report we found the hidden nugget that the Marine seemingly used "too much accelerant" and that "igniting accelerant too close may have contributed to his injuries." Translation: He wasn't just adding branches; he seems to have added accelerant (lighter fluid or gasoline) after the fire was already burning. The result was as expected: Big "Foom!" and burns. Please, please don't do that.*

Key Takeaways

Fall and winter are great times for a roaring fire, but if you don't respect the fire, you're going to get hurt. Think through your next outdoor fire or grilling before you light it. It's so much more fun without burns.

1. **DON'T USE GASOLINE FOR A FIRE (yes, we are yelling).** Gasoline's flashpoint is -43 degrees F. So, unless you're in Antarctica at night in winter, gas gives off enough vapors to ignite in air. The lighter doesn't have to touch the liquid, the vapors are going to light off first, making a big fireball. We don't know anyone who wants to be engulfed in a fireball, so stop using gasoline like it's lighter fluid!
2. **Go easy on the lighter fluid.** Just put on enough until the coals look glossy. Per the directions on popular brands of charcoal and lighter fluid, 1.6 oz (about ¼ cup) of fluid per pound of coals is all you need. And light them immediately—don't let it soak in for more than a minute or so. It won't help; as you already read in these stories, it can actually hurt (*literally and figuratively*).
3. **Don't add more.** If the fire is dying down, poke the coals, add some kindling, etc., but don't test out the reverse flamethrower by adding lighter fluid (*and of course never gasoline*).
4. **Don't get drunk and play with fire.** We have to say it: Having an adult beverage around the fire is one thing, but please keep your wits about you when you're near fire. If you get burned, go see the doc. If it's your drunk friend who gets burned, the sober person gets to decide whether they go to medical.

And remember, "Let's be careful (with fire) out there."