## Fireworks, Veterans, and PTSD: The Ironies of the Fourth of July



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*Fed Pract.* 2023;40(7). Published online July 12. doi:10.12788/fp.0394 and daughters of this World employed in more pleasing & innocent amusements than in preparing implements, & exercising them for the destruction of the human race. General George Washington<sup>1</sup>

My first wish is to see this plague to Mankind, war, banished from the Earth; & the Sons

hen I was a child, every Fourth of July holiday my father would take me to the military fireworks display at Fort Sam Houston in Texas. We would take our place in the long cascade of cars parked at the huge parade ground in front of Brooke Army Medical Center. It was the most spectacular display of the year not to be found anywhere else in the city. Army fire engines and medics were always on site in case anything went wrong, which rarely occurred thanks to the pyrotechnic experts who ran the display.

Later, when I began my psychiatric residency at the US Department of Veterans Affairs (VA) New Mexico Healthcare System, I quickly learned a darker truth about fireworks. What seemed to me and many other civilians in General Washington's words, a "pleasing and innocent amusement," instead was a distressing and terrifying revisiting of trauma for many service members and veterans, likely including my father, who was a World War II combat veteran.

Fireworks are so closely linked to the birth of our young nation that we often forget they were invented in China a millennia ago. Fireworks were first associated with the fledgling nation in the middle of the War of Independence. On July 4, 1776, representatives of the 13 colonies signed the Declaration of Independence. In one of several ironies of history, what was used at the initial commemorations was not fireworks but the very "implements of destruction," to use Washington's phraseguns and cannons. The demonstrations of firepower were meant to be morale boosters. After the war, the dangers of the detonations were recognized, and firearms were replaced with the fireworks we still launch today.<sup>2</sup>

The country celebrates the holiday with cookouts, parades, brass band concerts, and of course fireworks. Added to the organized shows are the millions of citizens who demonstrate private patriotism by shooting off fireworks in their neighborhoods. In 2021, Americans spent \$1.5 billion on fireworks, and 33% said they planned to attend a public display.<sup>3</sup>

However, people are increasingly recognizing the negative side of fireworks for wild and companion animals and the environment. Most of us who have dogs and I am sure cats, horses, and other animals dread the impending darkness of the Fourth as it signals the coming loud noise and the cringing, pacing animals who want to run yet have nowhere to go to be safe from the sound.<sup>4</sup>

Sitting in the clinic with veterans, I realized it was not only pets and wildlife that feared the ultimate American holiday but also the very individuals who fought to preserve the freedom those fireworks celebrate. The VA's National Center for Posttraumatic Stress Disorder (PTSD) estimates that about 7% of veterans will meet the diagnostic criteria for PTSD in their lifetimes. The prevalence of PTSD differs, depending on the methodology used, era and type of services, and demographics. Some studies have found higher rates of PTSD in women, young veterans, and those who served in Vietnam. Among the veterans who receive health care at the VA, like those I saw in the clinic, 23 in 1000 may have PTSD.5

We, after all, are remarkably similar in physiology to other mammals, and not surprisingly, veterans with PTSD exhibit many of the same reactions to fireworks. The sights, sounds, and odor of fireworks, as well as the vocal responses of the crowd at large displays evoke memories that trigger fear and anxiety. Many veterans experience flashbacks in which they relive combat and training accidents and have nightmares of those events, interrupting sleep. The instinct of many veterans is to avoid the holiday altogether: Many patients I knew sought refuge in remote mountain campsites often to find that even there they were not safe from revelers.

Avoidance being a cardinal symptom and coping mechanism of PTSD, therapists advise other methods of managing the Fourth of July, such as distractions that are calming and people who are reassuring. Therapists often rehearse self-talk scripts and teach breathing exercises targeted to break the behavioral conditioning that links present innocuous sensory overstimulation with a past life-threatening danger. The heat of summer worsens the stress, cooling down literally and figuratively can help.<sup>6</sup>

Many VA medical centers send announcements to the media or have their experts do interviews to educate the public about the potentially traumatizing effects of fireworks. They also encourage veterans who are apprehensive about the holiday to seek additional mental health help, including the Veterans Crisis Line. With my patients, we started early and developed a preventive plan to manage the anticipatory apprehension and arrange a means of enduring the ordeal. I do not have data to prove it, but anecdotally I know from my years on-call that visits to VA emergency departments and admissions to our inpatient psychiatry unit always increased around Independence Day in part because some veterans used drugs and/or alcohol to dampen their stress response.

VA experts also have advice for the families and friends of veterans who want to reduce the impact of fireworks and other holiday activities on them. Many veterans will feel at once intensely present to the disturbing aspects like fireworks and crowds and at the same time, distant and separated from the more positive parts of celebrations like being with loved ones in the outdoors. We can simply ask the veterans in our lives and neighborhoods how the festivities affect them and how we can help them get through the long hot night.<sup>7</sup> Yet it would not be America without some controversy, and opinions are divided even among veterans about whether yard signs that say, "Combat Veteran Lives Here Please Be Courteous With Fireworks" enhance or impede the effort to increase awareness of the connection between fireworks, veterans, and PTSD.<sup>8</sup>

This editorial began with my own story of enjoying fireworks to emphasize that my aim is not to ruin the fun but to ask us to think before we shoot and consider the veterans near us for whom our recreation may cause unnecessary distress. Fourth of July would not have been possible without the soldiers who fought and died in the American Revolution and all the conflicts since. We owe it to all who have worn the uniform for the United States of America to remember the extraordinary toll it has taken on their ability to live ordinary lives. Like General Washington, we should vow to end the wars that wounded them so future generations will be able to join in celebrating Independence Day.

## Disclaimer

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## References

- From George Washington to David Humphreys, 25 July 1785. Accessed June 19, 2023. https://founders.archives.gov /documents/Washington/04-03-02-0142
- Waxman OB. How fireworks became a Fourth of July tradition. TIME. Accessed June 19, 2023. https://time.com/4828701 /first-fireworks-history-july-4th
- Velasquez F. Here's how much Americans are spending on food, alcohol, and fireworks this Fourth of July. Accessed June 19, 2023. https://www.cnbc.com/2021/07/04/how-much -americans-are-spending-on-fourth-of-july.html
- Fireworks: growing evidence they distress animals builds case to restrict use. *The Conversation*. Accessed June 19, 2023. https://theconversation.com/fireworks-growing-evidence-they -distress-animals-builds-case-to-restrict-use-191472
- US Department of Veterans Affairs. Epidemiology and impact of PTSD. Accessed June 17, 2023. https://www.ptsd.va.gov /professional/treat/essentials/epidemiology.asp#two,
- US Department of Veterans Affairs. Independence Day celebrations can trigger PTSD in veterans. Press release. Accessed June 19, 2023. https://www.va.gov/new-jersey-health-care /news-releases/independence-day-celebrations-can-trigger -ptsd-in-veterans
- Tips for veterans celebrating Independence Day. VA News. https://news.va.gov/62393/some-helpful-tips-to-remember-for -this-4th-of-july
- Faith S. Veterans, July 4, and fireworks: don't be courteous, just be American. Military.com. Accessed June 19, 2023. https:// www.military.com/july-4th/veterans-july-4-and-fireworks-dont -be-courteous-just-be-american.html