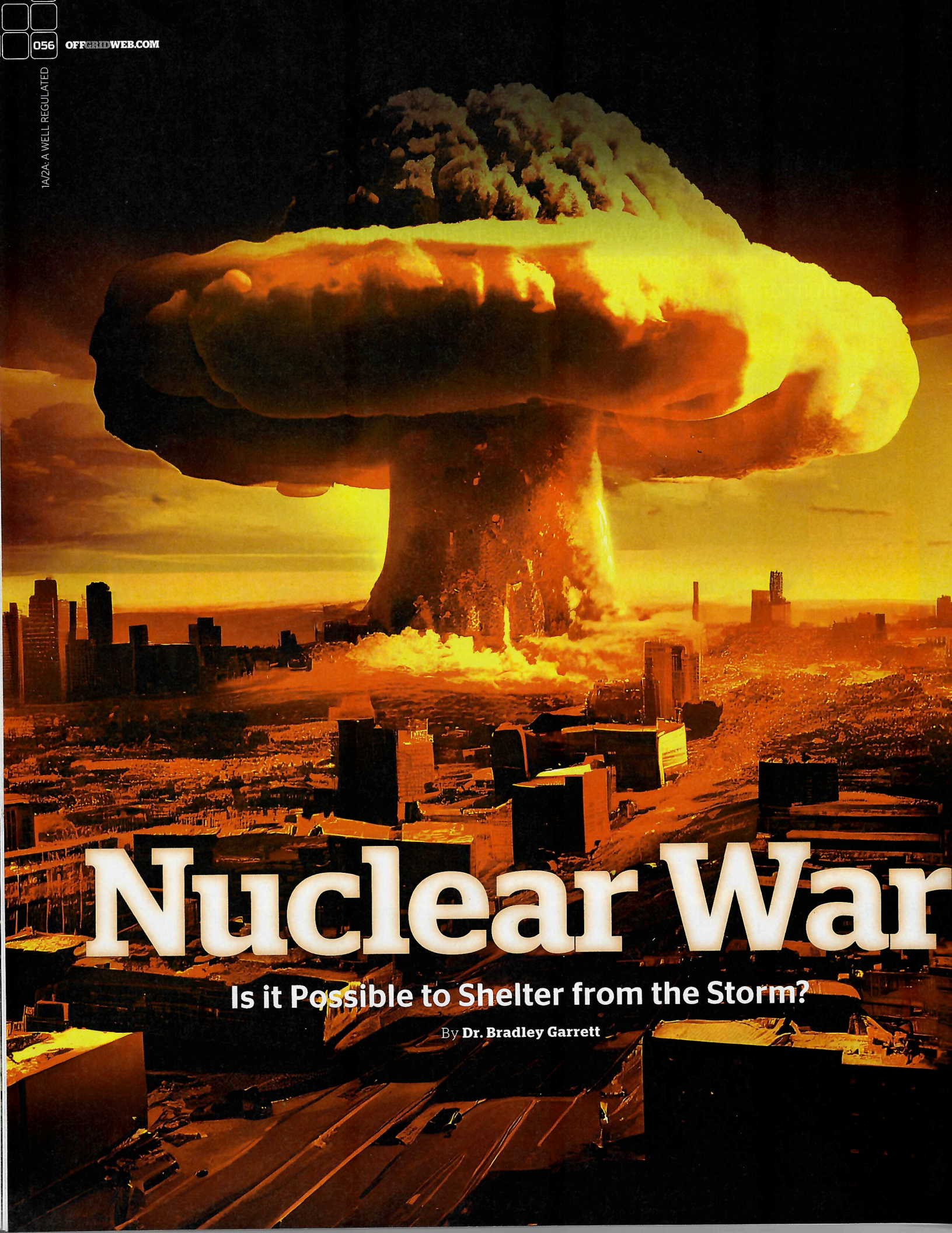




Nuclear War

Is it Possible to Shelter from the Storm?

By Dr. Bradley Garrett

In January 2026, the Bulletin of the Atomic Scientists moved the Doomsday Clock to 85 seconds to midnight, the closest humanity has been to catastrophe in the clock's 79-year history. Nuclear war is not the only danger the Bulletin tracks, but it remains the oldest and most visceral one: a technology designed to end cities, deter enemies through terror, and, if mismanaged, escalate from battlefield use to civilizational catastrophe.

There are currently nine nuclear-armed states: the United States, Russia, the United Kingdom, France, China, Israel, India, Pakistan, and North Korea. But the arithmetic is lopsided. The United States and Russia still possess almost 90 percent of the world's nuclear weapons, and the arms-control architecture built to manage that danger has been steadily eroding. The U.S. withdrew from the Iran nuclear deal in 2018, the Intermediate-Range Nuclear Forces Treaty in 2019, and the Open Skies Treaty in 2020. Then, in February 2026, New START — the last legally binding nuclear arms-control agreement limiting U.S. and Russian strategic arsenals — expired. Meanwhile, North Korea continues to increase its nuclear stockpiles and test Intercontinental Ballistic Missiles (ICBMs) in violation of international law. Unsurprisingly, these events have fed a renewed fear that nuclear weapons may no longer be relics of Cold War nightmares, but live instruments in a worsening geopolitical age.

That anxiety has helped fuel what social scientists have

called a "Second Doom Boom," a revival of disaster preparedness not seen since the Cold War. Recent research suggests that the "doomsday prepping" or disaster preparedness industry has boomed into a lucrative over \$70 billion market in the U.S. The market for nuclear fallout shelters alone is predicted to top \$175 million by 2030. Americans are buying land, food storage, water filters, radios, weapons, medical kits, off-grid power systems, and, at the high end, underground bunkers. All of which begs the question: Can you really prepare for nuclear war?

Shelter from Nuclear Threats

Shelter (not necessarily a bunker) is your key consideration, and the first thing to understand is the difference between a blast shelter and a fallout shelter. A blast shelter is built to survive the pressure wave, heat, debris, and structural violence of a nearby detonation. Government facilities such as Raven Rock, Cheyenne Mountain, and Mount Weather, or private complexes like the Survival Condo in Kansas, are designed around that logic. But no shelter should be imagined as invincible. Close enough to ground zero, especially with a modern high-yield weapon, heat, overpressure, ground shock, and literal melting rock make survival unlikely. A fallout shelter is different. It's not meant to survive the center of the apocalypse. It's meant to protect people farther away from radioactive debris carried downwind after the blast.

A bunker community in South Dakota.





So, when thinking about nuclear shelter — weathering the storm, as it were — geography is everything. NUKE-MAP, Alex Wellerstein's web-based nuclear-weapons effects simulator, allows users to model blast, thermal radiation, prompt radiation, casualties, and fallout. If I use NUKEMAP to model a 5-megaton Chinese Dong Feng-5 ICBM detonating as a surface burst in downtown Los Angeles, the result is almost impossible to comprehend: estimated fatalities approach 1 million before fallout is even factored in. Yet the map also shows the strange geography of nuclear survival. Neighborhoods inside the fireball, heavy-blast, and thermal-radiation rings are effectively gone, while areas only 30 minutes by car may sit outside the worst immediate effects. Add fallout, however, and the danger changes shape. With a 15-mph

Bunker complex in South Dakota.

A government nuclear bunker.



wind, dose-rate contours can extend hundreds of miles downwind, potentially reaching Arizona.

The grim reality is that you are unlikely to survive inside the severe blast or thermal zone. You cannot “prep” your way through ground zero. But if you’re outside the blast and thermal zones and inside the fallout plume, you have options. Survival becomes about getting behind mass, fast. Fallout is radioactive dust and grit, not invisible death gas, so the goal is to put as much dense material as possible between your body and whatever lands on the roof, street, balcony, yard, and vehicles outside. In a single-family home, that means the basement, if you have one, or an interior room with no windows, if you do not. In an apartment building, it may mean the center of the structure, an underground parking level, a stairwell core, or a lower-floor interior hallway away from the roof and exterior walls. Standing at a window watching the cloud and thinking horrible thoughts is not going to help you. You need to get inside, bring pets in, remove contaminated outer clothing if you were outdoors, bag it, wash exposed skin and hair with soap and water (but not conditioner, which binds!), seal your location, and stay put.

The first 24 hours are the critical window, and the first 48 hours are better if you can manage it. Fallout radiation decays rapidly: a useful civil-defense rule of thumb is that after about seven hours, the dose rate has fallen by roughly 90 percent, after about 49 hours by about 99 percent, and after two weeks by about 99.9 percent. This is why two weeks became a kind of civil-defense magic number. It does not mean the outside world is safe. It means time is your shield. Waiting out the first two days to two weeks can be the difference between a lethal dose and a survivable one.



A house in Thailand
built for fallout.

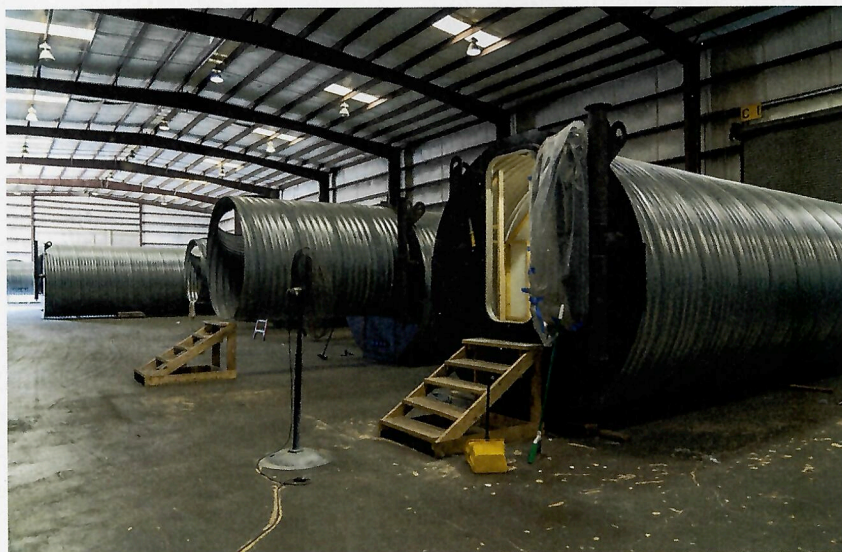


Steps You Can Actually Take

Your home shelter — not your detached garage, which you might not be able to get to — should be stocked for lockdown: several weeks of bottled water, ready-to-eat food, medications, first aid, sanitation supplies, trash bags, gloves, respirators, flashlights, batteries, power banks, a battery or hand-crank AM/FM/NOAA radio, and a way to receive official instructions without relying on the internet are crucial. Printed manuals still matter. So does offline information: first-aid guides, repair books, water-treatment instructions, sanitation references, and even an offline AI doomsday laptop or reference library that can run without the internet may be crucial when cell service, power, and search engines have become a literal rather than metaphorical cloud.

Plastic sheeting and duct tape can reduce drafts around windows, doors, vents, and fireplace dampers while the fallout plume is passing. However, creating negative pressure (by pumping air into the house to “expel” bad air is the wrong instinct, because it can pull contaminated air inward. Turn off HVAC systems, fans, swamp coolers, fresh-air intakes, bathroom exhaust fans, and anything else that draws outside air into the shelter. Later, if authorities say the plume has passed, recirculating indoor air with fans may be safer than overheating. A portable gas generator is a bad option for sheltering because of carbon monoxide and exposure risks, so battery banks, solar generators charged in advance, and low-power radios are gold. Cell service may work in some places and fail completely in others. Treat phones as a bonus, not a plan — they very well may be bricked.

Potassium iodide is also not the magic pill many imagine. It only protects the thyroid from radioactive iodine. It does nothing for burns, gamma radiation, or most fallout

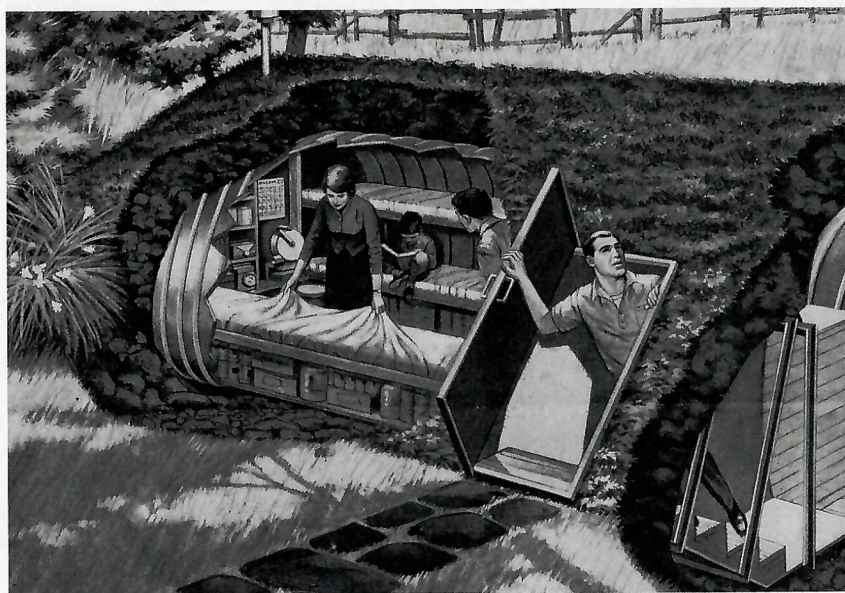


Backyard nuclear shelters under construction.

Emergency food buckets.



Backyard shelter during the first “doom boom,” September 15, 1961, *Life Magazine*.



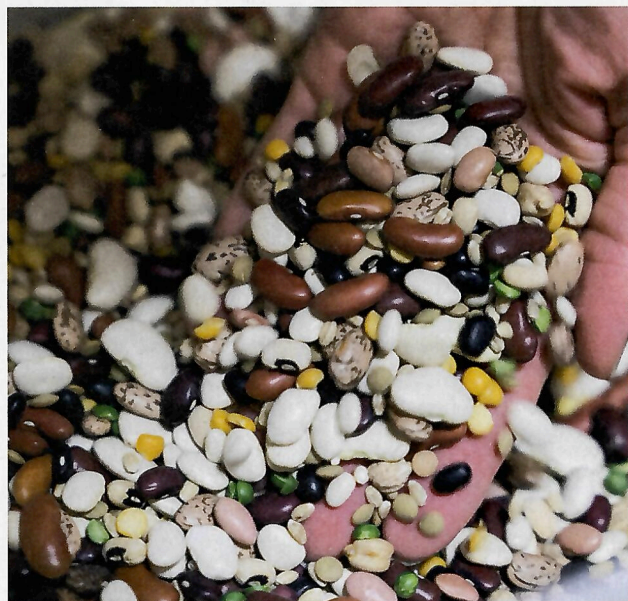
hazards. If you're forced to go outside through fallout, treat it like walking through poisonous dust: cover as much skin as possible, wear a tight-fitting mask or respirator, keep the trip short, avoid touching your face, and do not track dust back into the shelter. When you return, remove outer clothing carefully, bag it, wash exposed skin and hair, and get back behind shielding. Survival still begins with time, distance, shielding, and decontamination. Medicine can help afterward, but it can't reverse a lethal dose. It's literally better to sit inside, starving for a few weeks, than to expose yourself to go collect food.

Put Your Fears in Perspective

If all of this feels terrifying to consider, that is because it is. During the Cold War, nuclear planners and ordinary citizens both took the possibility seriously. If people could not be evacuated from cities, they had to be “invacuated” into shelters, because a state without survivors could



Goods at
Tennessee
Readiness.



Long-term food
supplies at the
Survival Condo.

Stored beans are
excellent preps.

not rebuild. Herman Kahn, the RAND strategist once described as one of the “megadeath intellectuals,” argued that any state able to protect a high percentage of its urban population would be in a stronger position than one that could not. This was a hideous kind of logic, but it shaped American shelter thinking for decades.

The result was the first doom boom. Government pamphlets, civil-defense films, backyard shelter plans, and magazine spreads encouraged Americans to take responsibility for their own survival. Some dug into their yards. Some fled cities. Some built suburban bunkers and imagined resurrection. Others looked at the scale of the problem and gave in to despair. In a 1956 Gallup poll, only 29 percent of Americans thought their families were likely to survive an atomic war.

The nuclear threat has not vanished. The Doomsday Clock is only a symbol, but symbols matter when they remind us of real machines, real arsenals, and real decisions made by a small number of people. There is no consumer product that can make nuclear war safe. There is no bunker, pill, radio, rifle, filter, or food bucket that solves the larger problem. But there are practical steps that can increase your odds at the margins: know whether you live near likely targets, understand the difference between a blast and fallout, identify the best shelter space in your home or building, store basic supplies, keep multiple ways to receive information, and talk through the plan before panic sets in.

And then comes the part preppers often forget: Nobody rebuilds alone. Bugging in is only the beginning. Eventually, you will have to rip down the plastic sheeting, open the door, and step back into a damaged world. The people who survive that world will not just be the ones with supplies. They will be the ones with neighbors, skills, trust, and a motivation to keep going. ☸



About the Author

Bradley Garrett is an American-born social and cultural geographer and expert on exploration, urban

politics, and subterranean space. He holds a PhD from the University of London, serves on the faculty of University College Dublin, and has published more than 50 academic journal articles and book chapters. His work has been featured on the *History Channel* and in the *Atlantic* and *GQ*. Dr. Garrett is the author of *Bunker: What it Takes to Survive the Apocalypse* and a fellow of the Collapse Survival Institute. You can find out more about his work at www.bradleygarrett.com.