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December 15, 2010

U.S. Rethinks Strategy for the Unthinkable

By WILLIAM J. BROAD

Suppose the unthinkable happened, and terrorists struck New York or another big city with an atom bomb. What should people there do? The government has a surprising new message: Do not flee. Get inside any stable building and don't come out till officials say it's safe.

The advice is based on recent scientific analyses showing that a nuclear attack is much more survivable if you immediately shield yourself from the lethal radiation that follows a blast, a simple tactic seen as saving hundreds of thousands of lives. Even staying in a car, the studies show, would reduce casualties by more than 50 percent; hunkering down in a basement would be better by far.

But a problem for the Obama administration is how to spread the word without seeming alarmist about a subject that few politicians care to consider, let alone discuss. So officials are proceeding gingerly in a campaign to educate the public.

"We have to get past the mental block that says it's too terrible to think about," W. Craig Fugate, administrator of the [Federal Emergency Management Agency](#), said in an interview. "We have to be ready to deal with it" and help people learn how to "best protect themselves."

Officials say they are moving aggressively to conduct drills, prepare communication guides and raise awareness among emergency planners of how to educate the public.

Over the years, Washington has sought to prevent nuclear terrorism and limit its harm, mainly by governmental means. It has spent tens of billions of dollars on everything from intelligence and securing nuclear materials to equipping local authorities with radiation detectors.

The new wave is citizen preparedness. For people who survive the initial blast, the main advice is to fight the impulse to run and instead seek shelter from lethal radioactivity. Even a few hours of protection, officials say, can greatly increase survival rates.

Administration officials argue that the cold war created an unrealistic sense of fatalism about a terrorist nuclear attack. "It's more survivable than most people think," said an official deeply involved in the planning, who spoke on the condition of anonymity. "The key is avoiding nuclear fallout."

The administration is making that argument with state and local authorities and has started to do so with the general public as well. Its [Citizen Corps Web site](#) says a nuclear detonation is “potentially survivable for thousands, especially with adequate shelter and education.” A color illustration shows which kinds of buildings and rooms offer the best protection from radiation.

In June, the administration released to emergency officials around the nation an [unclassified planning guide](#) 130 pages long on how to respond to a nuclear attack. It stressed citizen education, before any attack.

Without that knowledge, the guide added, “people will be more likely to follow the natural instinct to run from danger, potentially exposing themselves to fatal doses of radiation.”

Specialists outside of Washington are divided on the initiative. One group says the administration is overreacting to an atomic threat that is all but nonexistent.

[Peter Bergen](#), a fellow at the New America Foundation and [New York University's Center on Law and Security](#), [recently argued](#) that the odds of any terrorist group obtaining a nuclear weapon are “near zero for the foreseeable future.”

But another school says that the potential consequences are so high that the administration is, if anything, being too timid.

“There’s no penetration of the message coming out of the federal government,” said [Irwin Redlener](#), a doctor and director of the [National Center for Disaster Preparedness at Columbia University](#). “It’s deeply frustrating that we seem unable to bridge the gap between the new insights and using them to inform public policy.”

White House officials say they are aware of the issue’s political delicacy but are nonetheless moving ahead briskly.

The administration has sought “to enhance national resilience — to withstand disruption, adapt to change and rapidly recover,” said [Brian Kamoie](#), senior director for preparedness policy at the [National Security Council](#). He added, “We’re working hard to involve individuals in the effort so they become part of the team in terms of emergency management.”

A nuclear blast produces a blinding flash, burning heat and crushing wind. The fireball and mushroom cloud carry radioactive particles upward, and the wind sends them near and far.

The government initially knew little about radioactive fallout. But in the 1950s, as the cold war intensified, scientists monitoring test explosions learned that the tiny particles throbbled with fission products — fragments of split atoms, many highly radioactive and potentially lethal.

But after a burst of interest in fallout shelters, the public and even the government grew

increasingly skeptical about civil defense as nuclear arsenals grew to hold thousands of warheads.

In late 2001, a month after the Sept. 11 attacks, the director of central intelligence told President [George W. Bush](#) of a secret warning that [Al Qaeda](#) had hidden an atom bomb in New York City. The report turned out to be false. But atomic jitters soared.

“History will judge harshly those who saw this coming danger but failed to act,” Mr. Bush said in late 2002.

In dozens of programs, his administration focused on prevention but also dealt with disaster response and the acquisition of items like radiation detectors.

“Public education is key,” [Daniel J. Kaniewski](#), a security expert at [George Washington University](#), said in an interview. “But it’s easier for communities to buy equipment — and look for tech solutions — because there’s Homeland Security money and no shortage of contractors to supply the silver bullet.”

After [Hurricane Katrina](#) in 2005 revealed the poor state of disaster planning, public and private officials began to question national preparedness for atomic strikes. Some noted conflicting federal advice on whether survivors should seek shelter or try to evacuate.

In 2007, Congress appropriated \$5.5 million for studies on atomic disaster planning, noting that “cities have little guidance available to them.”

The [Department of Homeland Security](#) financed a multiagency modeling effort led by the [Lawrence Livermore National Laboratory in California](#). The scientists looked at Washington, New York, Chicago, Los Angeles and other big cities, using computers to simulate details of the urban landscape and terrorist bombs.

The results were revealing. For instance, the scientists found that a bomb’s flash would blind many drivers, causing accidents and complicating evacuation.

The big surprise was how taking shelter for as little as several hours made a huge difference in survival rates.

“This has been a game changer,” Brooke Buddemeier, a Livermore health physicist, [told a Los Angeles conference](#). He showed a slide labeled “How Many Lives Can Sheltering Save?”

If people in Los Angeles a mile or more from ground zero of an attack took no shelter, Mr. Buddemeier said, there would be 285,000 casualties from fallout in that region.

Taking shelter in a place with minimal protection, like a car, would cut that figure to 125,000 deaths or injuries, he said. A shallow basement would further reduce it to 45,000 casualties. And

the core of a big office building or an underground garage would provide the best shelter of all.

“We’d have no significant exposures,” Mr. Buddemeier told the conference, and thus virtually no casualties from fallout.

On Jan. 16, 2009 — four days before Mr. Bush left office — the White House issued a [92-page handbook](#) lauding “pre-event preparedness.” But it was silent on the delicate issue of how to inform the public.

Soon after Mr. Obama arrived at the White House, he embarked a global campaign to fight atomic terrorism and sped up domestic planning for disaster response. A senior official, who spoke on the condition of anonymity, said the new administration began a revision of the Bush administration’s handbook to address the issue of public communication.

“We started working on it immediately,” the official said. “It was recognized as a key part of our response.”

The agenda hit a speed bump. Las Vegas was to star in the nation’s first live exercise meant to simulate a terrorist attack with an atom bomb, the test involving about 10,000 emergency responders. But casinos and businesses protested, as did Senator [Harry Reid](#) of Nevada. He told the federal authorities that it would scare away tourists.

Late last year, the administration backed down.

“Politics overtook preparedness,” said Mr. Kaniewski of George Washington University.

When the administration came out with its revised planning guide in June, it noted that “no significant federal response” after an attack would be likely for one to three days.

The document said that planners had an obligation to help the public “make effective decisions” and that messages for predisaster campaigns might be tailored for schools, businesses and even water bills.

“The most lives,” the handbook said, “will be saved in the first 60 minutes through sheltering in place.”