# A day of devastation: imagining a nuclear blast over New York City



On a morning like any other in New York City, the routine of daily life is shattered in seconds by the unthinkable: a nuclear bomb detonates without warning. Cars begin to leave suburban garages, children wait for school buses, and parents prepare lunches, unaware that their lives will be irrevocably changed. Ten-year-old schoolgirls crossing an inner-city street find their lives cut tragically short as the explosion occurs.

According to a scenario detailed in Mark Lynas’s forthcoming book, Six Minutes To Winter, the nuclear blast instantly generates temperatures of around 100 million degrees Celsius, far exceeding the core temperature of the sun. This fireball, approximately the width of Manhattan Island and located 1.5 kilometres above ground, incinerates nearly everything within a 10 square kilometre radius, leaving only concrete and steel largely intact. The explosion produces a brilliant white light visible from hundreds of kilometres away, penetrating even the Oval Office in the White House.

The initial blast vaporises thousands of individuals, casting shadows onto the streets where they stood moments before, while the shockwave demolishes buildings up to 10 kilometres away. Victims within 25 kilometres in the open suffer severe third-degree burns, with exposed skin extensively damaged, and clothing fused to bodies. Casualties occur through multiple mechanisms, including being thrown against structures, flying debris, and lacerations from shattered glass.

The immediate human toll in New York alone is expected to reach approximately two million, though exact numbers may never be known as global events spiral into chaos. Lynas emphasises, “For every year we refuse to act, nuclear conflict becomes statistically more probable,” a warning underscored by current geopolitical tensions. He further notes the risk of such conflict is now comparable to Cold War peaks, citing Russia’s invasion of Ukraine and growing Sino-American rivalry, particularly over Taiwan. China currently holds around 500 nuclear warheads and continues to rapidly expand its arsenal, often outside arms control agreements.

Compounding these risks is the breakdown of the global arms control regime, with both the United States and Russia maintaining thousands of nuclear weapons on ‘hair-trigger’ alert, ready to be launched within minutes under a strategy known as ‘launch-on-warning’. This doctrine requires near-immediate retaliation after detection of an incoming missile to prevent a first-strike advantage, dramatically reducing decision time during a crisis.

Lynas describes the harrowing moment inside the White House bunker as the president debates retaliatory action following the initial strike. The president faces the prosecution of “the deaths of 200 million people” and agonises over uncertainty regarding the attack's origin, with options narrowed to Russia and China. He tells his advisers, “I cannot order the deaths of 200 million people alone, or I will be rightly condemned as the worst criminal in history, worse than Hitler, Stalin or Genghis Khan.”

Despite his hesitations, pressure from the defence secretary—who insists, “If we do not respond, it is tantamount to surrender”—leads to a tacit consensus to launch a devastating counterstrike. Within minutes, Minuteman III missiles armed with W87 warheads, each capable of killing around one million people in target cities, soar from US silos. Similar moments unfold independently in Moscow, Beijing, New Delhi, and Islamabad, as nations respond under the shadow of incomplete communication and rapid escalation.

The totality of the nuclear exchange results in more than 4,000 detonations worldwide, killing an estimated 770 million people by the cessation of active conflict. Yet, the devastation extends beyond immediate casualties. The initial detonations generate widespread fires that evolve into massive firestorms, with hurricane-force winds intensifying the infernos. Structures, vehicles, and living beings are consumed entirely by these conflagrations, and survivors trapped in basements often suffocate or perish from heat.

These firestorms produce towering pyrocumulonimbus clouds injecting soot and radioactive particles high into the atmosphere, far above the stratosphere’s boundary. This atmospheric contamination begins to dim the sun globally, even affecting regions that avoided direct strikes, such as parts of South America, Africa, and Oceania. According to Lynas, the resulting atmospheric changes precipitate a nuclear winter, marked by an extensive drop in temperatures and loss of sunlight.

Radiation sickness afflicts survivors through exposure to intense neutron and gamma radiation from the explosions and radioactive fallout, causing symptoms like severe thirst, diarrhoea, and hair loss, often preceding death. Infrastructures for medical care, communication, and basic necessities are obliterated, leaving millions to endure unimaginable suffering without aid.

The detailed scenario underscores the catastrophic consequences of nuclear conflict, highlighting the intricate interplay of immediate destruction and long-term global environmental impacts. Mark Lynas’s Six Minutes To Winter, published by Bloomsbury Sigma and available from 8 May, offers an in-depth exploration of these themes, emphasising the urgency without prescribing prescribed moral or political conclusions.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.bloomsbury.com/us/six-minutes-to-winter-9781399410519/> - Supports the claim about Mark Lynas's book, Six Minutes to Winter, which details the catastrophic consequences of nuclear conflict and emphasizes the urgency of addressing this threat.
* <https://books.apple.com/us/book/six-minutes-to-winter/id6670216866> - Provides further evidence about the book's focus on nuclear war and how it can be avoided, highlighting the threat's immediacy relative to climate change.
* <https://www.barnesandnoble.com/w/six-minutes-to-winter-mark-lynas/1146167882> - Corroborates the book's themes, including the risk of global nuclear conflict and the potential consequences such as widespread destruction and nuclear winter.
* <https://www.target.com/p/six-minutes-to-winter-by-mark-lynas-hardcover/-/A-93213219> - Echoes the dire warnings about nuclear conflict in Six Minutes to Winter, emphasizing both its immediacy and the lack of global mobilization to address it.
* <https://www.npr.org/2022/02/24/1082337271/russia-ukraine-nuclear-threat> - Supports the claim about the heightened risk of nuclear conflict due to geopolitical tensions, particularly the mention of Russia's actions and the involvement of major powers.
* <https://www.bbc.com/news/world-asia-61833188> - Serves as evidence for the ongoing expansion of nuclear arsenals and growing tensions, specifically highlighting China's nuclear development.
* <https://www.dailymail.co.uk/news/article-14649243/nuclear-armageddon-2045-world-end-MARK-LYNASS.html?ns_mchannel=rss&ns_campaign=1490&ito=1490> - Please view link - unable to able to access data