

# **New paper reveals how lessons learned during COVID-19 could prepare us for nuclear attack**

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The current COVID-19 pandemic, in addition to serving as a reminder of the very personal nature of global catastrophic risk, could also shine a light on the ongoing nuclear challenge that global society faces, a team of UK experts have suggested in a new paper.

The paper, published in the *Bulletin of the Atomic Scientists*, suggests that while many of the lessons to be learned from the pandemic are specific to major global health crisis, they may also provide insight into a broader set of challenges should the world face other major disasters, whether natural or human-made.

Experts from the Universities of Birmingham and Leicester argue that the aftermath of a nuclear incident or attack would far outweigh the impact on health-services, disruption to normal life and the suspension of civil-liberties that we have experienced during COVID-19, severely impacting the basic infrastructure of government, finance, communications and food supply. However, prevention cannot be left to governments alone and by learning lessons from the COVID-19 pandemic and applying them to the nuclear realm, engaged citizens can help to reduce the risks.

The risk of a nuclear event is hard to estimate, however, according to previous models, the risk of a single incident leading to the death of approximately one million people, could be as high as 50 percent over the next 50 years. Despite this, the paper goes on to highlight waning [public concern](#) over nuclear threat which has dramatically reduced since its peak in the 1980's. It is thought that the lack of concern could be down to factors including the limited number of issues afforded public and media attention at any one time, a perceived unlikelihood of a nuclear event, the fact that these threats are largely hidden and therefore less tangible and finally, a sense of powerlessness and inability to prevent such events.

The authors state that as we have seen during this global pandemic, just like viral risks, nuclear risks can be mitigated by international co-operation, but steps such as ensuring that current global arms control architecture—including the Nuclear Nonproliferation Treaty signed in 1968 and the New START agreement between the US and Russia—survive into a new era are vital. Continued international efforts to reduce the risks posed by nuclear terrorism, securing nuclear facilities and ensuring that all nuclear material is accounted for is also key.

Co-author Professor Richard Lilford from the University of Birmingham's Institute of Applied Health Research said: "The first objective when dealing with global catastrophe of any kind is prevention, but if prevention is not possible, attention must turn toward preparation. Arguably, the world was not adequately prepared for the COVID-19, and if governments across the globe were unprepared for a pandemic, they are likely unprepared for other global disasters including nuclear incidents. What the current situation has highlighted is some of the challenges that citizens would face in the event of a nuclear attack including widespread panic, shortages of food, equipment and medication and stockpiling—all of which would be on a much larger scale. An attack would almost certainly mean the curtailing of civil liberties, emphasizing the importance of clear, unequivocal messaging on the part of trustworthy governments—a challenge that has remained at the forefront of the response to COVID-19."

Peter Chilton, co-author and Research Fellow at the University of Birmingham's Institute of Applied Health Research added: "The most important aspect of preparation for global disaster are education and engagement. At present, the public is probably less familiar with the basics of nuclear weapons and nuclear risks than at any point since the Second World War and so, much in the same way as we have seen with issues like climate change, it is essential that more is done to educate people about these risks. In the midst of the challenges faced by the

modern world it is easy to see why people seem to have forgotten the dangers posed by nuclear weapons. It is essential, however unpleasant it may seem, that the public thinks about the unthinkable to prevent, or at least mitigate and manage the threats posed by a nuclear attack."

**More information:** Andrew Futter et al. Nuclear war, public health, the COVID-19 epidemic: Lessons for prevention, preparation, mitigation, and education, *Bulletin of the Atomic Scientists* (2020). [DOI: 10.1080/00963402.2020.1806592](https://doi.org/10.1080/00963402.2020.1806592)

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