1. **What is the probability that one or more incidents involving nuclear weapons will be the cause of death within a 5-year period for more than 10% of humans alive at the beginning of that period...**
    a. ...by 2030?
    b. ...by 2050?
    c. ...by 2100?

Question and resolution details

- We use the term "be the cause of death of" to cover cases where nuclear weapons are the direct or proximate cause of the deaths. For example, if a country launches nuclear weapons that directly cause the death of 10% of all humans alive at the time within a 5-year period, that will count for this question. And if that same incident does not cause the death of 10% of all humans, but the subsequent nuclear winter does, that will also count for the purposes of this question.
    - We consider nuclear weapons a "proximate cause of death" based on the "but-for" test. This means we are considering events that would not have occurred or would have counterfactually been extremely unlikely to occur "but for" the substantial involvement of nuclear weapons within one year prior to the event. One way to think of this rule is if the nuclear weapons involved in an event could have failed unexpectedly without dramatically reducing the probability of the event, then the nuclear weapons were not a proximate cause.
- In order to resolve positively, the relevant 5-year period must end before the resolution date, and begin on or after June 15th, 2022.
- If reasonable people disagree about whether this event has occurred, this question will be resolved via a panel of experts.

Prior Forecasts
- Toby Ord estimates that there is a **1 in 1000 chance** of existential catastrophe from "nuclear war" by 2120 (*Precipice*, 167).
    - While we are estimating globally catastrophic events, Ord focuses on existential risk.
    - 2120 is slightly further out than any of our resolution dates.
- The 2008 Global Catastrophic Risks Survey found that experts estimated a **30% chance** that "all nuclear wars" would kill 1 million people by 2100; they estimated a **10% chance** that "all nuclear wars" would kill 1 billion people by 2100; and a **1% chance** that "all nuclear wars" would lead to humanity's extinction by 2100. They also found that experts estimated a **15% chance** that "nuclear terrorism" would kill 1 million people by 2100; they estimated a **1% chance** that "nuclear terrorism" would kill 1 billion people by 2100; and a **0.03% chance** that "nuclear terrorism" would lead to humanity's extinction by 2100.
    - 2100 matches our furthest-out resolution date.
- Benjamin Todd suggested in an article for 80,000 Hours that there was a **10% chance** that nuclear war would lead to 1 billion deaths and a **1% chance** that nuclear war would

lead to the end of human civilization by 2117. He also estimated that there was a **1% chance** that nuclear terrorism would lead to 1 billion deaths and a **0.03% chance** that nuclear terrorism would lead to the end of human civilization by 2117.
- 2117 is slightly further out than any of our resolution dates.
- [Pamlin and Armstrong (2015)](#) estimate a **0.005% risk** of infinite impact associated with nuclear war by 2115.
    - Infinite impact is defined as a scenario in which "civilisation collapses to a state of great suffering and does not recover, or a situation where all human life ends." This seems to generally align with our definition of existential risk rather than global catastrophe.
    - 2115 is slightly further out than any of our resolution dates.