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**Public Education and Communication**

**PREVENTING AND CORRECTING SPREAD OF MISINFORMATION ABOUT  
NEOS, IMPACTS, AIRBURSTS, AND PLANETARY DEFENSE**

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One implicit assumption in our planetary defense tabletop exercises is that, in the real world, the participants will be competent and acting in good faith. Recent history demonstrates that this may not be the case. In most of our hypothetical impact scenarios, there will likely be winners and losers. The stakes could be enormous in terms of casualties, economic loss, and geopolitics, and the consequences will not likely be distributed evenly. The black comedy film “Don’t Look Up” was ostensibly about the discovery of a doomsday comet on a collision course with Earth but was clearly an allegory for the current slow-motion climate crisis, collapsed into a much shorter timeframe to provide a better framework for storytelling. One premise of the movie that creates irony is the contrast to an imagined real world, in which leaders and citizens would obviously take the spectre of a catastrophic impact seriously. The capacity for conspiracy thinking, misinformation, and denial calls this assumption into question.

Attacks on mainstream scientists in the context of NEOs, impacts, airbursts, and planetary defense are already underway, but the stakes are still low because no imminent threats have been discovered yet. Our planetary defense community exists because we believe that we should be prepared for when that day happens. It is logical that part of our preparation should anticipate bad actors, propaganda campaigns, denial, and disinformation. We have introduced some of these elements into our recent exercises, such as TTX4 and TTX5, and suggest that more such elements be inserted into our hypothetical scenarios.

Misinformation associated with our field is already rampant. In many cases, it is driven by clickbait media that are indifferent to the facts but motivated instead by a business model that depends primarily on the revenue stream. Other examples are researchers

on the fringes of science who are focused less on facts and more on Altmetric scores (a measure of engagement) and citation counts (e.g. h-index). In the event of a real-world impact emergency, we should anticipate that this noise will get louder, with the potential to drown out factual information provided by experts. We should not assume that members of our community will be immune from personal attacks and defamation campaigns, as professionals in other disciplines have experienced in recent years.

One proactive means of addressing and possibly reducing the spread of dangerous misinformation in real time is to participate in the Near Earth Object Rapid Response Team (NEORRT) mailing list, an informal group of professionals who can quickly answer questions and provide one another with facts in their own areas of expertise so that they will be prepared for calls from journalists or decision makers when a newsworthy event takes place (e.g. unexpected airburst, discovery of an imminent impactor, or high probability future impact). These events will undoubtedly become more frequent with the upcoming expansion of our survey capacity.

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