

WebMemo



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Is the United States Prepared for a “Black Swan”?

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With the earthquake and tsunami that devastated Japan and the upcoming 10th anniversary of the September 11 attack, Americans are rightly asking if America could effectively respond to a “Black Swan.” The unfortunate reality is that the uncertainty surrounding the nation’s capabilities is so high that few reasonable minds would have confidence in America’s ability to minimize the loss of life and property. Instead of waiting for America to fail, Congress should authorize an independent commission to analyze and report on the state of the country’s preparedness.

What Is a “Black Swan”? In 2007, Nassim Nicholas Taleb famously defined a “Black Swan” as an event that “is an outlier, as it lies outside the realm of regular expectations.... It carries an extreme impact [and] human nature makes us concoct explanations for its occurrence after the fact.”¹

In Japan, neither the earthquake nor the tsunami was a Black Swan event—Japan has long expected a powerful earthquake and deployed sensor technology in its waters to detect a tsunami—but the two events combined to form a Black Swan.

Contrary to most experts, Hurricane Katrina, unlike the September 11 attack in New York City, was not “outside the realm of regular expectations,” despite its \$120 billion in losses. Given the frequency of hurricane activity in the Gulf Coast, everyone knew it was simply a matter of time before a Category 5 hurricane struck near New Orleans. Even the Federal Emergency Management Agency, in the

July 2004 Hurricane Pam exercise, considered a catastrophic levy breach.²

With 60 years of actuarial data, the U.S. sees few natural disasters that are truly unforeseen. America’s Black Swans are events that someone may have postulated but that no one really expects to occur anytime in the near future, if ever. Here are five potential Black Swans that could wreak havoc in the United States.

1. Electromagnetic Pulse (EMP) or Solar Burst.

As The Heritage Foundation highlighted in the documentary *33 Minutes*,³ an EMP attack could throw America back to the pre-Industrial Revolution era. A powerful solar burst would have the same impact. Should either event occur, people would have little time to react, and the damage would be incalculable.

If the U.S. were to lose power for any prolonged period of time, given the sheer number of people located in the interior of the country, mass starvation and death would become a reality. Most experts consider these events as highly unlikely ones, so little investment or planning is done related to them.

2. Pandemic Virus. Although the U.S. has prepared for a pandemic influenza outbreak, little preparation has gone into other potential viruses.

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More importantly, it is the unknown virus or “super virus” that represents a Black Swan for America. Recall that it was less than 30 years ago that AIDS first began embedding itself in North America. If a far more deadly and communicable virus hits America, the U.S. would quickly expend its existing resources.

3. Nuclear or Radiological Event. The U.S. has extensive knowledge of what would happen if a nuclear or radiological explosion occurred in a major American city. Theory, however, is a poor replacement for the reality of large numbers of deaths, burn victims, and physical debris. As former Vice President Dick Cheney wisely concluded, because of the sheer consequences, even a 1 percent chance of such an event occurring requires the nation to expend the necessary resources to prevent it.

4. Super-Volcanic Eruption. Seismic activity around the Yellowstone caldera is monitored, but tectonic shifts miles below the surface could result in the buildup of pressure and a super-volcanic eruption. The volcano beneath Yellowstone previously erupted, causing destruction as far away as California, Iowa, and Louisiana. An eruption, though unlikely given current readings, could have truly catastrophic consequences.

5. Nor'easter/Hurricane. Hurricanes strike America with a fair degree of frequency. A Black Swan event would be a Nor'easter combined with a powerful hurricane that strikes New York City in the same manner as Hurricane Katrina struck New Orleans. Between the massive flooding and wind damage, New York City could sustain casualties and physical destruction well in excess of Katrina.

How Prepared Is the U.S.?

The honest and unfortunate answer to that question is unknown and, despite attempts to ascertain that answer, will not be known if existing policy remains in place. A Black Swan by definition becomes a Black Swan because it results in cata-

strophic outcomes. This “delicate” balance between preparing for events and not being able to prepare adequately for all events represents the ultimate risk-based decision making.

From 2003 to 2011, the U.S. Department of Homeland Security (DHS) distributed roughly \$40 billion in funding to states and localities across America. Despite years of reporting requirements, DHS is fundamentally unable to state with any degree of certainty which capabilities exist, where those capabilities exist, the level of those capabilities, and the remaining capability needs. DHS knows it has funded the acquisition of many things, but specifics beyond that are unquantifiable.

Specifically, to gain a full accounting, Congress should:

- **Be fiscally responsible.** Rather than continue to spread federal funds using an “inch thick and a mile wide” mentality, Congress should target federal funds at the highest-risk states, cities, and counties where the funds could meaningfully increase the security of Americans, including reducing the number of high-risk cities that are eligible for special funding.
- **Examine cooperative agreements.** The need for equality downplays the need for the grant structure and invites another approach—such as the use of cooperative agreements, where the federal government and the states can sit down as true and equal partners and negotiate outcomes at the beginning and then direct funds to achieve those desired outcomes without the need for yearly applications.
- **Appoint a Black Swan commission.** Rather than wait until after a catastrophic event has occurred, Congress should appoint an independent commission for the express purpose of analyzing the threats of a potential Black Swan, identifying existing capabilities, and making recommendations on how best to correct errors made thus

1. Nassim Nicholas Taleb, “The Black Swan: The Impact of the Highly Improbable,” *The New York Times*, April 22, 2007, at <http://www.nytimes.com/2007/04/22/books/chapters/0422-1st-tale.html?pagewanted=all> (April 8, 2011).
2. Press release, “Hurricane Pam Exercise Concludes,” Federal Emergency Management Agency, July 23, 2004, at <http://www.fema.gov/news/newsrelease.fema?id=13051> (April 8, 2011).
3. The Heritage Foundation, *33 Minutes*, 2009, at <http://33-minutes.com/33-minutes>.

far and accelerate closing the gap between where the nation stands today and where it needs to be tomorrow. The commission must have the independence and resources to quickly do its job after a full review of the status quo.

Expect the Unexpected. If the catastrophe in Japan has taught any lessons, it is that America must prepare for the unexpected with as much vigor as it prepares for the expected. Because a Black Swan can be so catastrophic, in many ways the ideal role

for the federal government is to lead an effort surrounding those events. With the nation's current fiscal challenges, conserving resources for catastrophic events is more vital than ever.

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