

# WHEN WILL THE NEXT PANDEMIC OCCUR?

Any Time.

Infectious disease outbreaks now occur 3 times more often than 40 years ago.

# WHAT IS MOST LIKELY TO CAUSE THE NEXT PANDEMIC THREAT?

We don't know. But, of about 2 dozen viral families capable of infecting humans, 6 families (Adenoviridae, Coronaviridae, Orthomyxoviridae, Paramyxoviridae, Picornaviridae, and Poxviridae) have these traits that will likely cause the next pandemic.



No immunity –  
No preexisting immunity in the world's population

Airborne –  
Spread via respiratory transmission

Silent –  
Transmissible by infected people who have no symptoms

Harmful –  
No existing, effective therapeutics or vaccines

# ARE WE PREPARED TO MAKE VACCINES, ANTIVIRALS, AND TESTS EVEN FASTER DURING THE NEXT PANDEMIC?

No. Currently there is \$0 sustained federal funding dedicated to developing medical countermeasures for unknown viral threats.

**15** YEARS + **\$12** BILLION

Developing the COVID-19 vaccines in 1 year was only possible because of 15 years of prior coronavirus research + a \$12 billion federal investment.

# HOW CAN WE MAKE MEDICAL COUNTERMEASURES WITHOUT KNOWING WHICH DISEASE (“DISEASE X”) WILL STRIKE NEXT?

By focusing medical countermeasure development efforts on the viral families most likely to cause pandemics, rather than on a specific virus that may or may not present a future threat.



The United States should fund a new dedicated Disease X Medical Countermeasure Program that leverages technologies and vaccine platforms most suitable to the viral families that are likely to cause future catastrophic disease outbreaks.

Medical countermeasures against 1 member of a viral family could easily be adapted to another member quickly when the next threat emerges.

With this flexible approach, private-public partnerships could develop vaccines, antivirals, and tests for a range of unknown potential pandemic pathogens in months, not years.

Stopping the next COVID-19-type pandemic a month earlier in the United States would save approximately \$500 billion.



**1** MONTH EARLIER = **\$500** BILLION SAVED