## DEVELOPMENT OF MEDICAL COUNTERMEASURES AGAINST THE MOST DANGEROUS FUTURE VIRAL THREATS

## The USG needs to support MCM development for future health emergencies

Medical countermeasures (MCMs) like diagnostics, vaccines, and therapeutics will be needed for future national health emergencies to counter the greatest biosecurity threats. However, many of the MCMs we will need have no commercial market and take time to develop. Some of this development work should be done ahead of any crisis to avoid the need for a much more costly emergency appropriation during the height of a crisis.

The US government has long-established effective partnerships with small and large companies to develop drugs, vaccines, and diagnostic devices that would be needed during such emergencies.

The Biomedical Advanced Research and Development Authority (BARDA) within HHS has the most important role in this public-private partnership to develop MCMs for national health emergencies, including those needed for chemical, biological, radiological, and nuclear (CBRN) risks, pandemic influenza, and new major infectious disease threats.

National health emergencies and biosecurity threats that could result in the most mortality and economic and societal disruption are those caused by novel, highly contagious and lethal viruses for which we have no existing immune defenses or MCM protections. Such viruses could be introduced intentionally, naturally, or accidentally into the US.

## BARDA needs a program focused on the most dangerous and transmissible viral families

While BARDA has longstanding success developing a range of MCMs against many threats, BARDA does not have a dedicated program focused on developing MCMs designed to target viral families with pandemic potential. A limited number of viral families pose the <u>greatest risk of emerging as the next lethal and contagious threat</u>. These are: *Orthomyxoviridae*, *Coronaviridae*, *Picornaviridae*, *Paramyxoviridae*, *Pneumoviridae*, and *Adenoviridae*. Focusing on these <u>viral families</u> will make focused use of taxpayer dollars.

BARDA should have a dedicated, cost-effective program that leverages versatile platform technologies to develop MCMs effective against these particularly dangerous viral families. Most of this important development work could stop short of the expensive clinical trial and manufacturing phases, which would only be completed if an outbreak occurs. This would ensure careful stewardship of taxpayer dollars. This limited investment today would empower the USG to finalize these products rapidly and at a large scale in an emergency.

## Congress could act to create a dedicated program in BARDA for MCMs against the most dangerous viral families

• Congress can provide clear authority, oversight, and funding to establish a dedicated program at BARDA that would support private sector partners to develop MCMs for the most dangerous viral families the country could face.