Viral Hemorrhagic Fevers

- Several groups of RNA viruses that cause fever, fatigue, possible respiratory symptoms, and later bleeding and damage or leakage from blood vessels, shock. High mortality rates (25-70%) when untreated.
- Hantaviruses and Ebolaviruses are in this group
- May be life threatening
- Almost none are found in the USA: only 30 hantavirus cases/year are diagnosed in the US, or 1 case in 10 million people per year
- Worldwide, there may be one hantavirus case per 80,000 people per year
- The **only** hantavirus that can potentially spread between people (that we know of) is the Andes hantavirus in Argentina and Chile, acquired by inhaling or handling rat droppings from one type of rat

What do you need to know about VHF viruses?

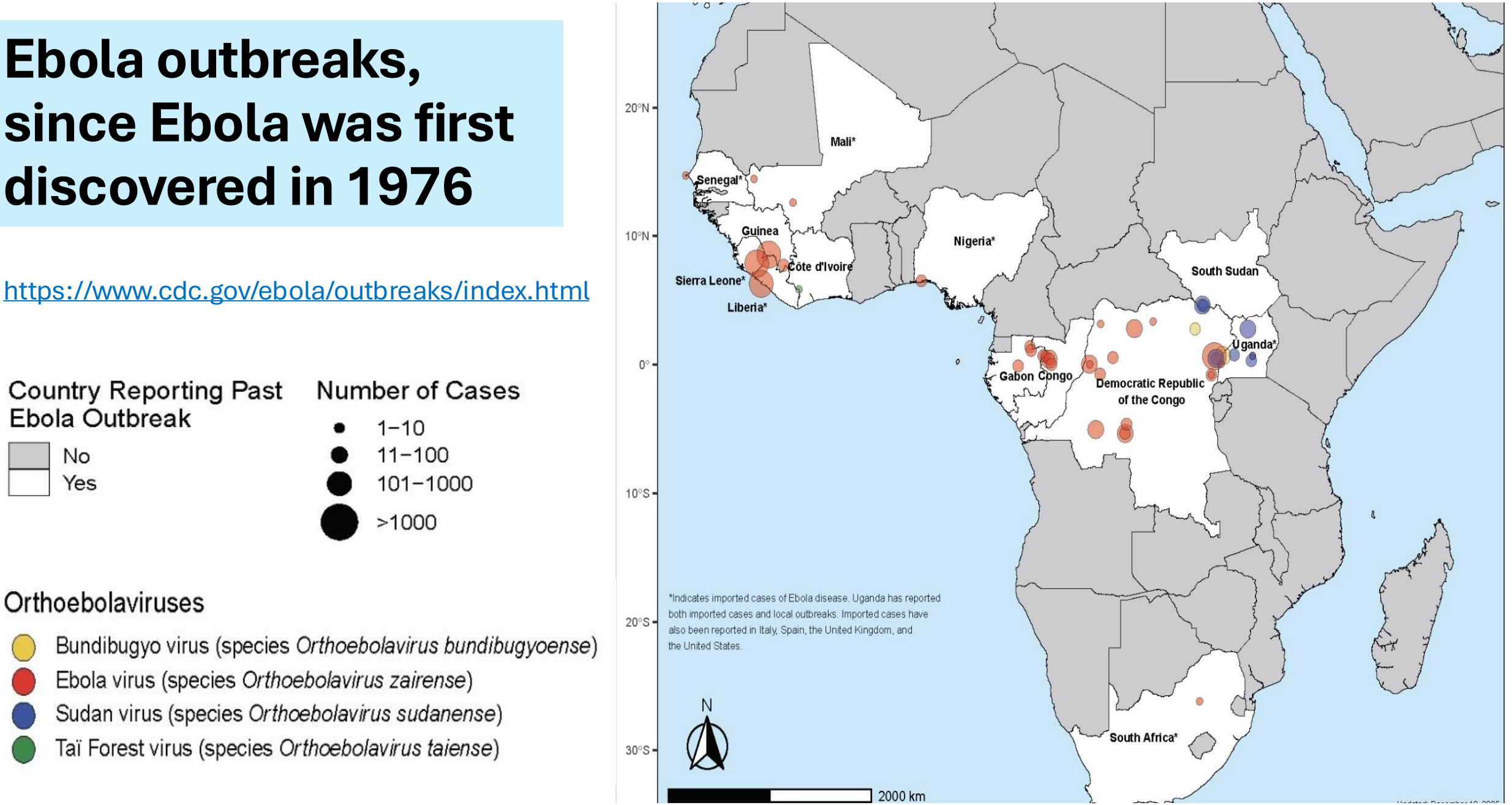
- VHFs include **Ebola, Hanta, Marburg, Lassa, Machupo, Congo-Crimean, Rift Valley, Yellow Fever, Nipah and other viruses**
- You initially get them from contact with animals—the "reservoir" for these diseases is infected animals that are not themselves sickened by the viruses
- Hemorrhagic fever virus **care**—the treatment is basically to **keep the person alive with iv fluids and intensive care until your body fights off the virus**
- And to make sure **sufficient barrier protections are used so it does not spread to health care workers or other patients**

An unusual Ebola strain is causing an outbreak in eastern Congo

- It is unclear how widespread it is or how many people are affected, but estimates are at least 118 are dead, 400 affected
- **All Ebola viruses spread via body fluids—so touching your mouth, nose or eye if it is on your hand can cause infection.**
- It does NOT spread through indoor air like COVID.
- Cleanliness and disinfection of boots, gloves, masks, gowns keeps healthcare workers safe.
- There have been about 25 prior Ebola outbreaks, all originating in Africa
- **Prior Ebola epidemics have often died out on their own**, while only a few affected several thousand people.
- Ebola was first identified in 1976

Ebola outbreaks, since Ebola was first discovered in 1976

https://www.cdc.gov/ebola/outbreaks/index.html



A physician missionary, his doctor wife, their 4 children and another US doctor caring for Ebola patients have been evacuated to Germany from the DRC

- One doctor has symptoms, but it is assumed all were exposed
- Receiving early diagnosis and tertiary care usually guarantees survival
- The public has not been informed if they are being cared for at Landstuhl hospital, on a US base in Germany that can provide tertiary care, or at a German hospital.
- Apart from the 2 nurses caring for an Ebola patient in Texas before he was properly diagnosed and they were given proper PPE, there has been NO transmission of Ebola within the US.

The Andes strain of Hantavirus historically *has not been very contagious*

- Only 10% of 3,000 identified cases were caused by person-to-person spread
- The other 90% were due to direct contact with rats or rat droppings
- Even people in the same family, living together, only caught the infection 10%-30% of the time.
- **There may be effective treatments if caught early, especially during the incubation period.**

Belgian scientists showed that **chloroquine** prevented Andes Hanta infection in 2021.

Fort Detrick scientists edited, reviewed and approved the study for publication.

https://pmc.ncbi.nlm.nih.gov/articles/PMC8006394/

frontiers in Cellular and Infection Microbiology

Front Cell Infect Microbiol. 2021 Mar 15;11:580532. doi: 10.3389/fcimb.2021.580532

Chloroquine, an Anti-Malaria Drug as Effective Prevention for Hantavirus Infections

Valentijn Vergote [1], Lies Laenen [1], Raf Mols [2], Patrick Augustijns [2], Marc Van Ranst [1], Piet Maes [1,*]

Author information ▸ Article notes ▸ Copyright and License information

[1] Laboratory of Clinical Virology, Zoonotic Infectious Diseases Unit, Department of Microbiology, Immunology and Transplantation, Rega Institute, KU Leuven, Leuven, Belgium

[2] Department of Pharmaceutical and Pharmacological Sciences, Drug Delivery and Disposition, KU Leuven, Leuven, Belgium

Edited by: Connie S. Schmaljohn, Integrated Research Facility (NIAID), United States

Reviewed by: Tomohiko Sadaoka, Kobe University, Japan; Rebecca L. Brocato, United States Army Medical Research Institute of Infectious Diseases (USAMRIID), United States

✉*Correspondence: Piet Maes, piet.maes@kuleuven.be

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PMCID: PMC8006394 PMID: 33791230

WHO MIA in the 2014 West African Ebola Epidemic: Reuters

Global health experts accuse WHO of 'egregious failure' on Ebola

By Kate Kelland

3 MIN READ

LONDON, (Reuters) - The World Health Organization's failure to sound the alarm until months into West Africa's Ebola outbreak was an "egregious failure" which added to the enormous suffering and death toll, global health experts said on Monday.

WHO failed again during its response to the 2018 Congo's Ebola Epidemic. Despite vaccines, the epidemic had a 66% mortality rate (more than 2014) and the WHO was so hated that there were 300 attacks on health workers

https://www.msf.org/how-ebola-response-failed-people-drc

What the Failures of the Last Ebola Outbreak Can Teach Us About the Future

- **The World Health Organization needs to rethink emergency strategies**
- It took 9 months before the WHO declared an international public health emergency of international concern (PHEIC) for the 2014 Ebola outbreak in West Africa. The agency was widely criticized for not making the declaration sooner, especially after early warnings from international aid groups like Doctors Without Borders.
- It took the WHO 11 months to declare a PHEIC for the 2018 Congo Ebola epidemic

https://www.pbs.org/wgbh/frontline/article/what-the-failures-ebola-outbreak-teach-future/

COMMENT | VOLUME 394, ISSUE 10208, P1494, OCTOBER 26, 2019

THE LANCET

Offline: The mistakes we made over Ebola yet again

Richard Horton

- Where did global health go wrong? The failures the global health community made collectively over Ebola… were errors that failed people. The actions in west Africa in 2014–16 and more recently in the Democratic Republic of the Congo (DRC) certainly evolved in their complexity and understanding. But the fundamental mistakes were the same… There was a surprising lack of urgency to deploy vaccines and treatments.
- Money was invested in global surveillance and response systems, but little attention was given to standards of care and the effects of the outbreak on families, communities, and health workers. The Ebola outbreak response was securitised and politicised. A security-based approach emphasized deterrence, compliance, and punishment, principles contrary to public health.

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)32634-0/fulltext

Should the WHO be trusted to provide advice and manage either outbreak?

- The WHO is having its yearly meeting of nations this week and wants to push them to agree with a pandemic treaty and a Pathogen Access and Benefit Sharing system—in which nations share their deadly pathogens with the WHO, which will share them widely.
- Nations will collect royalties if the pathogens they provide lead to drugs or vaccines
- And no one will be accountable for lab accidents or transfers to unreliable labs or individuals
- Does this week's meeting have anything to do with the Hanta and Ebola outbreaks that have consumed the news feed all week?

World Health Organization

Tuesday, 19 May 2026

MEDIA ADVISORY

First meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the epidemic of Ebola disease caused by Bundibugyo virus in the Democratic Republic of the Congo and Uganda

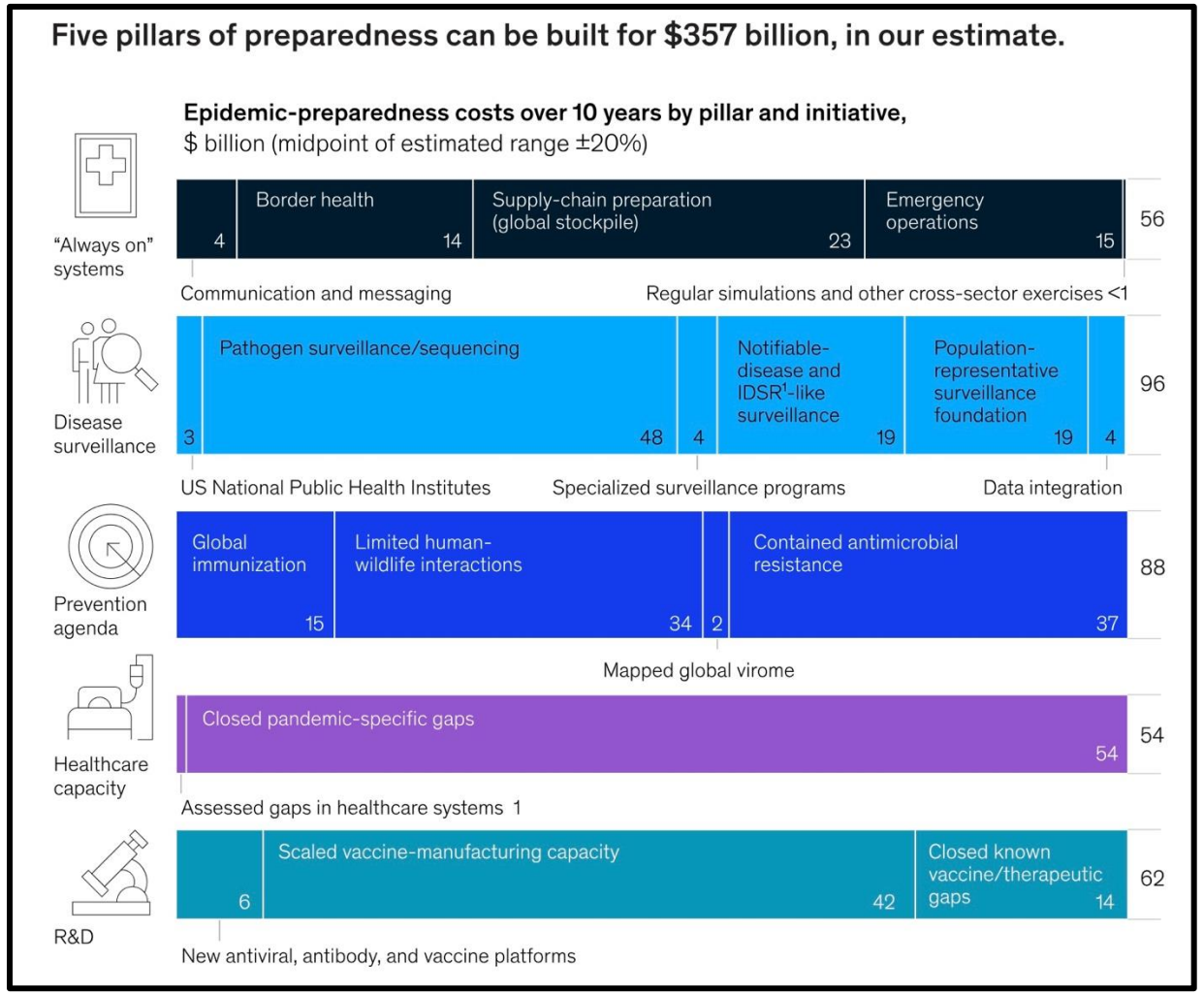
The first meeting of the Emergency Committee, convened by the WHO Director-General under the International Health Regulations (IHR), is being held today, 19 May 2026 at 17:30 CEST

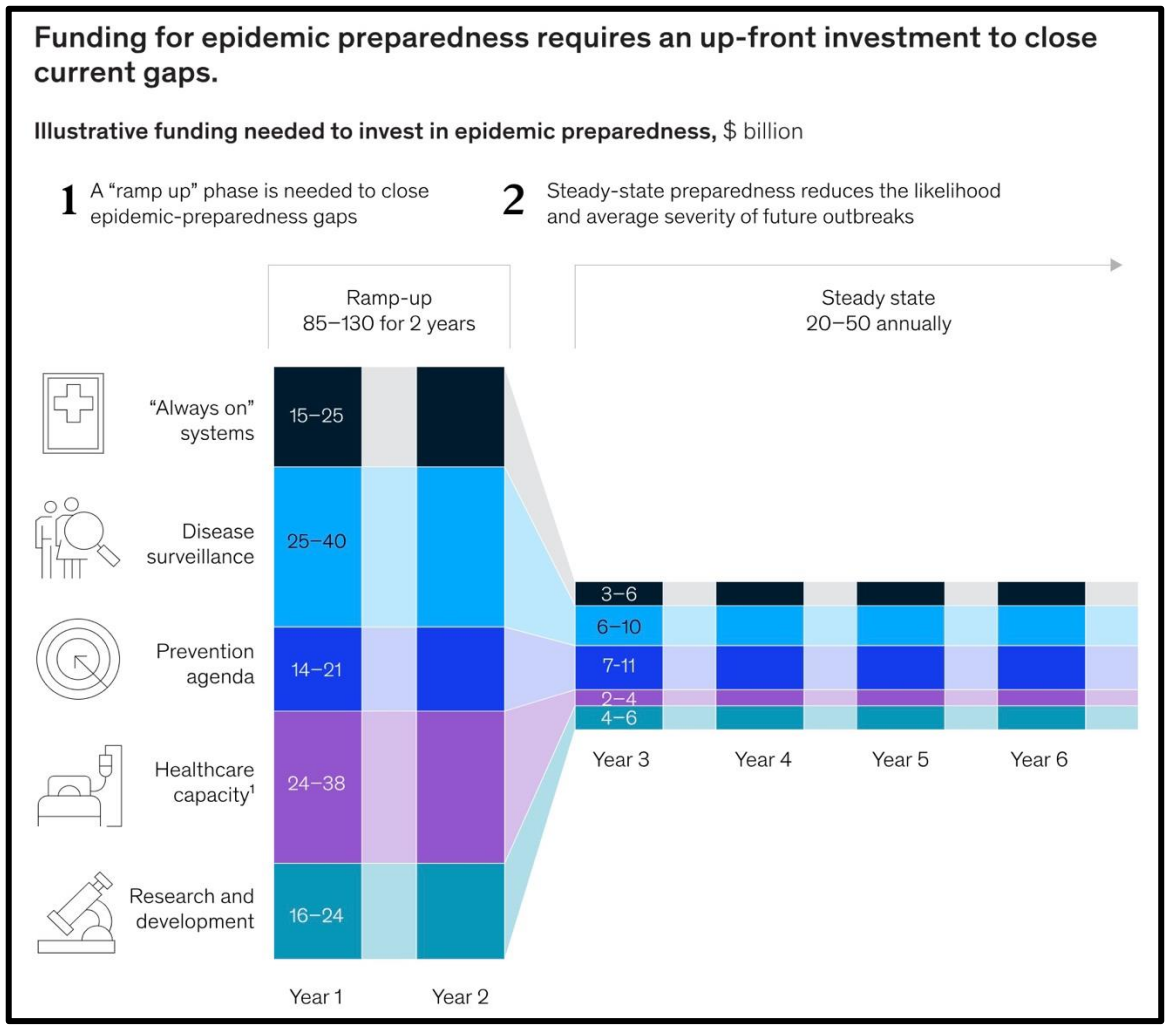
Details about the committee will be available here: https://www.who.int/teams/ihr/ihr-emergency-committees

Following the meeting, the Emergency Committee will advise WHO's Director-General on the temporary recommendations to be issued to WHO and its Member States.

McKinsey estimated a global PPPR program would cost $85-130 Billion for 2 years, then $20-50 Billion yearly, thereafter

https://www.mckinsey.com/industries/public-sector/our-insights/not-the-last-pandemic-investing-now-to-reimagine-public-health-systems





Will the US government encourage trust by freely sharing information with the public, or will it withhold information (and possible treatments) as happened with COVID?

- USAMRIID (fort Detrick) has studied hantaviruses, ebolaviruses and other hemorrhagic fever viruses for many decades.
- Do they have any stored **antisera** for these infections?
- Have they developed any **monoclonal antibodies** for these infections?
- What other studies have been done investigating **repurposed drug** treatments for VHFs?

Viral Hemorrhagic Fever viruses have long been considered potential agents of biological warfare

- The US biodefense system has spent between **$5 and $28 billion** dollars a year on prevention and response to biowarfare agents and potential future pandemics
- There has always been concern that this research might spark a pandemic due to a lab leak
- There has also been concern that a scientist could choose to deploy an agent he is studying or has access to.
- **I consulted for the ODNI 18 years ago to identify ways of preventing this from happening**.

Former White House COVID Czar Warns of an Impending Age of Bioweapons and Pandemics

Ashish Jha claims "lots of people" are creating bioweapons, calls for vaccines against pathogens that don’t exist, and urges a "responsibility" to combat vaccine 'misinformation'.

NICOLAS HULSCHER, MPH

NOV 19, 2024

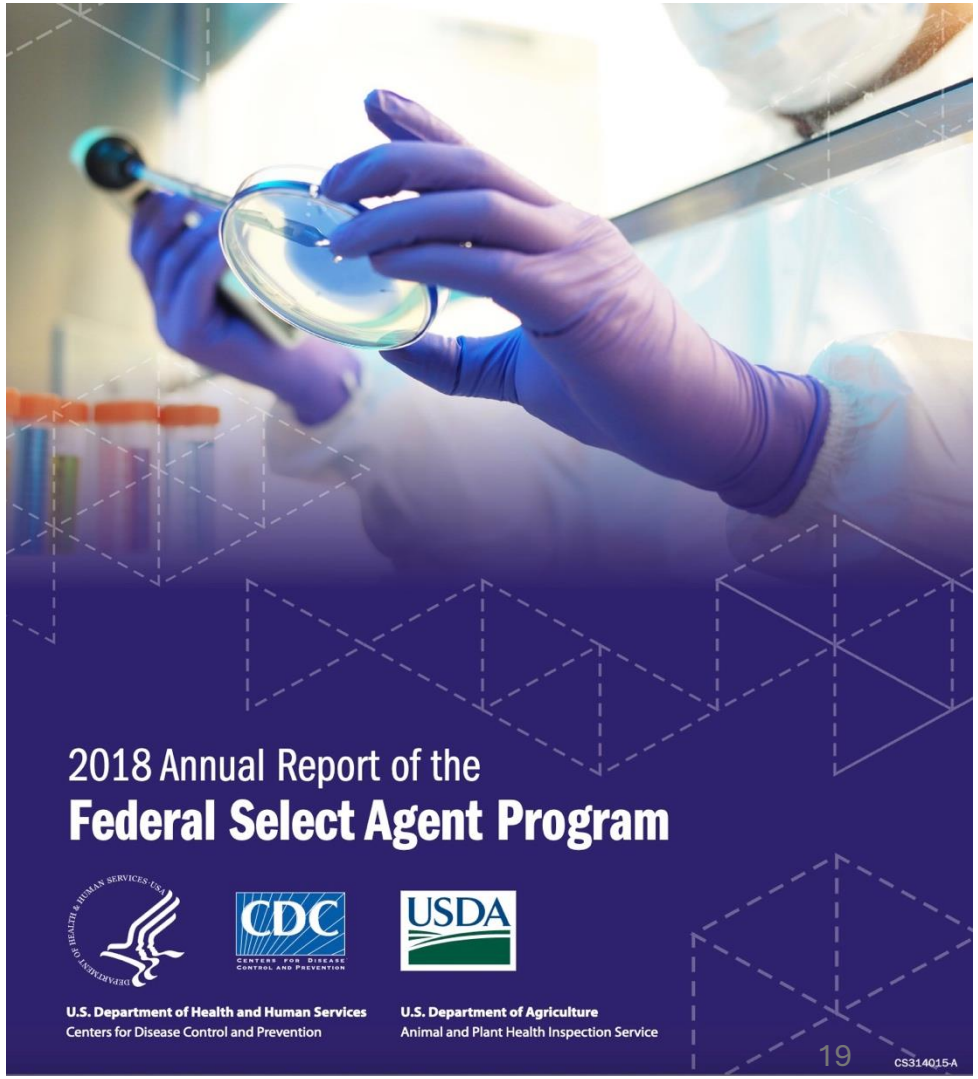
https://petermcculloughmd.substack.com/p/former-white-house-covid-czar-warns

- We don't know what bioweapons or types of pandemics may occur; choosing products to develop is based on guesswork
- You can spend an infinite amount on drugs and vaccines but still not be protected when a different pandemic occurs
- Studying deadly organisms always leads to accidents or escapes
- Studying deadly organisms can lead to the creation of more deadly organisms and proliferation among enemy groups or nations
- **It is impossible to test new vaccines fast enough for them to have any impact on a pandemic, unless you ignore efficacy and safety**

'Preparedness' is very risky!

- CDC and USDA run a Select Agent program for ~60 US Potential Pandemic Pathogens that could affect humans, plants, livestock
- There are **200 lab accidents per year** reported to CDC re: select agents studied in the US
- In 2018 alone, 173 (of 201 reported) releases led to "***895 individuals [receiving] occupational health services, including medical assessments and, if needed, diagnostic testing and prophylaxis.***"

https://web.archive.org/web/20200410035210/https://www.selectagents.gov/resources/FSAP_Annual_Report_2018_508.pdf



Transboundary and Emerging Diseases

Research Article | Open Access

Experimental Infection of Bundibugyo Virus in Domestic Swine Leads to Viral Shedding with Evidence of Intraspecies Transmission

Charles E. Lewis, Mathieu M. Pinette, Steven M. Lakin, Greg Smith, Mathew Fisher, Estella Moffat, Carissa Embury-Hyatt, Brad S. Pickering

First published: 09 January 2024 | https://doi.org/10.1155/2024/5350769 |

The authors are from the USDA, Canada's Biodefense Lab, and US and Canadian universities with gov't affiliations

"we conducted a series of studies aimed at determining the susceptibility of domestic pigs to BDBV thereby demonstrating that pigs are not only susceptible to experimental infection but that the development of productive infection, tissue dissemination, and **shedding of infectious virus can also occur while animals remain clinically normal. The role of pigs as a possible interim or amplifying host for ebolaviruses is a concern for both human public health and food security."**