

## Preparing for the Next Pandemic: Vaccines and Immunization; H5N1 and Beyond



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### Background

- Not all pandemics the same, and the next one cannot be predicted. Many common preparedness needs and lessons learned from past responses.
- An effective response (including for vaccines) requires preparing on a continuum from surveillance to basic & clinical investigation, to product evaluation, to financing, equity and access, delivery, beliefs & trust, to monitoring safety & effectiveness.



## I. Rapid Vaccine Development, Availability and Access Highly Constrained: Too Little, Too Late

- Current licensed influenza technologies slow, difficult to scale, insufficient global capacity, suboptimal efficacy.
- Even for approved vaccines not requiring RCTs, clinical immunogenicity assessments and potency assays cumbersome/slow.
- Many national regulatory agencies lack pathways and/or capacity for rapid, robust assessments, requirements often unclear, inconsistent.
- No organization, funding or distributed capacity sufficient to ensure or compete for timely global access, especially for LDICs.

## II. A Worsening Trust Deficit Can Defeat the Best of Intentions – And Cost Many Lives

- Global crisis in communication and trust (vaccines, experts, government, industry).
- Need both better behavioral science and lots of time and effort to understand and effectively address – discussed earlier in this meeting.
- Inform vaccine science agenda - studies to ensure we address known and possible concerns, better safety/effectiveness surveillance.
- Communications opportunities and risks must be addressed not only on ground, at community level with trusted partners, but we also must improve and coordinate comms by scientists, companies, govts.
  - Humility, listening, and admitting what we know and don't know

### III. Emergency Response and Immunization Programs Are Stressed and Need Testing and Planning

- Build on experiences from COVID, seasonal influenza, outbreaks.
- Use and support existing infrastructure where possible, include in planning those who will implement the programs in planning.
- Integrate with communications planning and implementation.
- Ensure clear understanding of roles, responsibilities at all levels.
- Integrate expertise to enable analysis of not only health but social and economic risks from both a pandemic and potential mitigations.
- Proactive analysis and preparedness for impacts on supply chains for vaccines and source materials and for health care and other sectors.

#### *Three Recommended Initiatives*

- *Stand up a new, large scale (e.g. Warp Speed/Manhattan Project) US & global effort to develop rapidly scalable vaccines (and other MCMs).*
  - Engage academia, industry, government, regulators
  - Clinical trials before a pandemic, improved assays
  - Stand up a global funded equitable access framework and entity
- *Build and begin comprehensive outreach and communications programs.*
  - Better identify, understand and respond to concerns, rebuild trust
  - Link to emergency response planning and delivery
- *Ensure transparent, in depth testing of response & MCM delivery plans.*
  - From global to national to community levels, including those responsible for delivery, communities, trusted messengers
  - Exercise different disease and vaccine scenarios



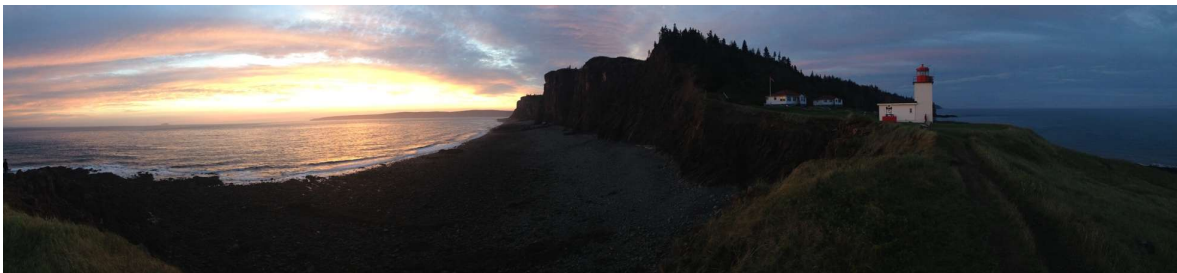
## Current Sitrep: Evolving Challenges for Discussion

- In light of evolving situation including COVID fatigue/denial, mixed messages and funding cuts, what gaps and actions should be prioritized from outside federal govt and how/by who?
  - Examples: messages on mRNA, measles, decreased surveillance and situational awareness, decreased vaccine studies (e.g. corona, mRNA), changes in adv comms, WHO, decreased NIH, CDC , FDA capacity, decreased funding to states, locals
- Will need efforts to build bridges, work together, ensure continued monitoring/assessment and flexibility to track and weather the storm.



## Thanks!

- *Challenging times - but that also means there is a lot we can do to help.*
- *Scientific advances really offer ability to respond faster and better.*
- *A far greater appreciation of communication and trust challenges helps give common purpose and inspire needed adjustments in how we do things.*



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- Detailed report available at: <https://globalhealth.georgetown.edu/publications/h5n1-influenza-vaccines-and-the-current-outbreak>
- Science 3/7/2025: <https://www.science.org/doi/10.1126/science.adw3278>