

Investing in the Future

Reframing the Cost of Pandemic Preparedness

Matthew P. Shearer

Associate Scholar

Johns Hopkins Center for Health Security

Global Health & Welfare Forum in Taiwan

November 7, 2023



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Center for
Health Security



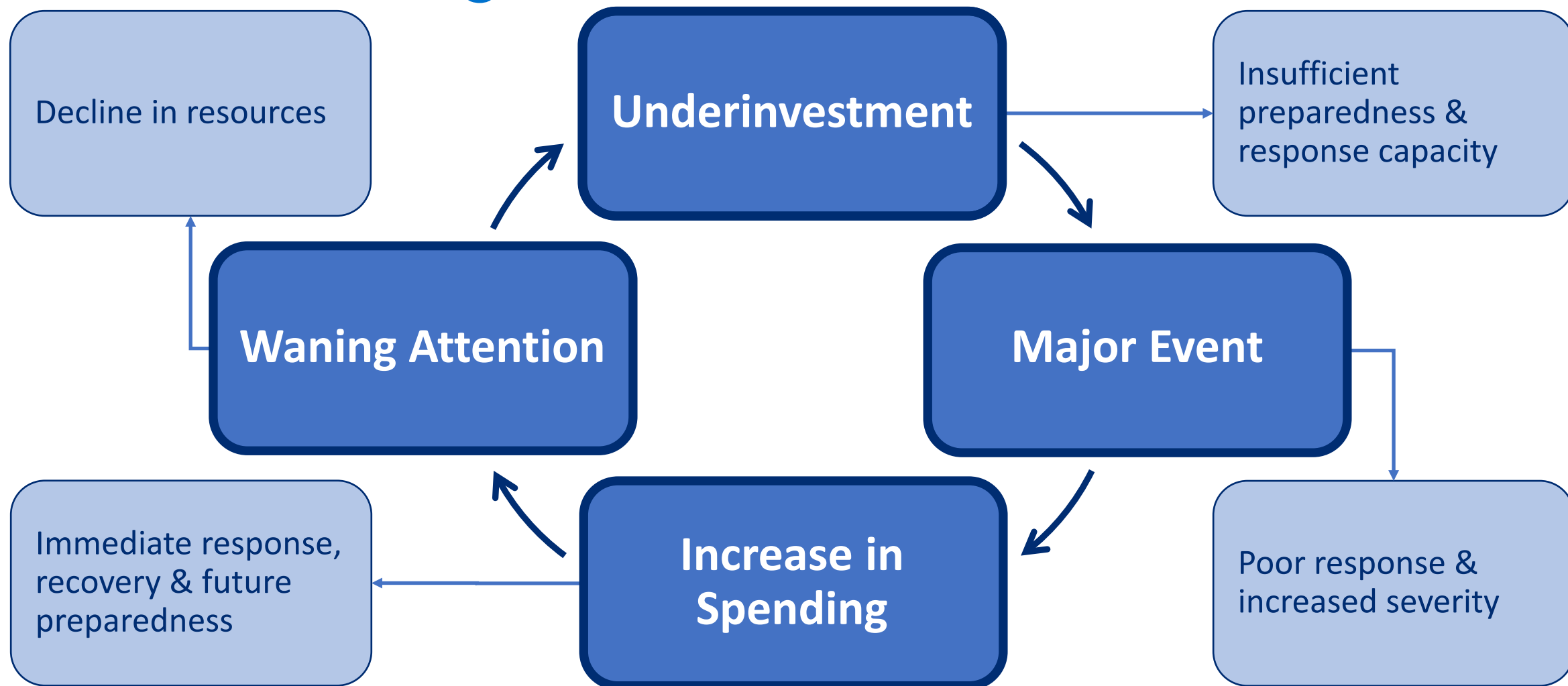
Our Mission

The Center for Health Security works to protect people's health from the consequences of epidemics and disasters and to ensure that communities are resilient to major challenges.

Overview

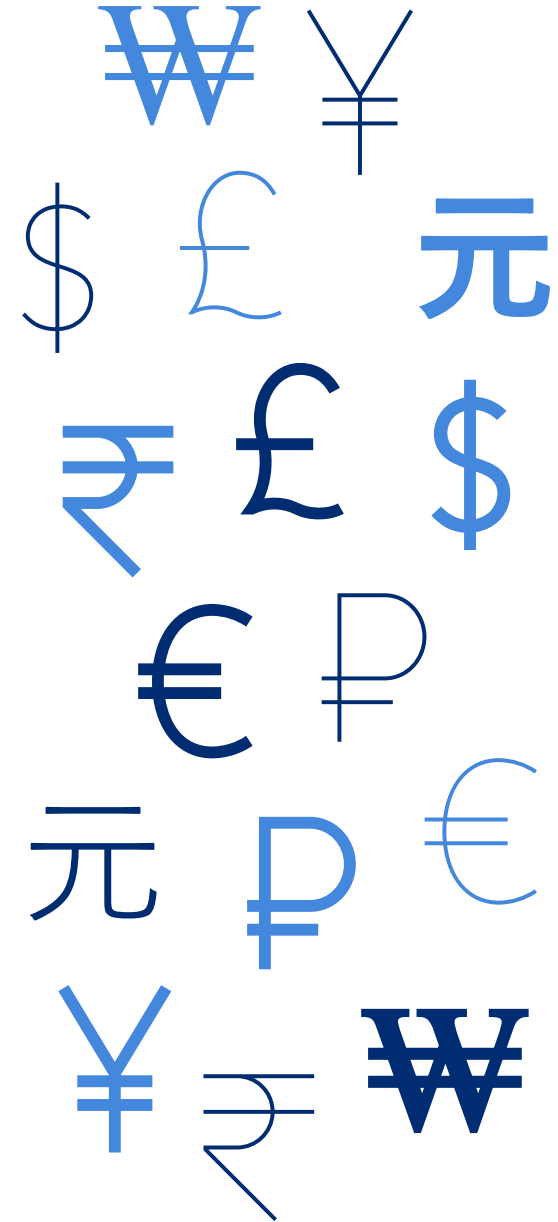
- **WE** know the importance & value of pandemic preparedness
 - But that's not enough
 - Need to improve how we communicate that value
- Rethink how we discuss pandemic preparedness resources
 - Pandemic preparedness is an investment
 - Preparedness is cheaper than response
 - Shorter-term benefits from longer-term investments
 - Assessing pandemic preparedness capacity

Panic & Neglect



Value of Pandemic Preparedness

- Cost of preparedness
 - Establish & maintain necessary programs & capacities
- Impact of a pandemic
 - Cases & deaths
 - Response activities & economic impact
 - Social impact
- Effect of pandemic preparedness in mitigating risks
- Non-pandemic benefits
 - Addressing other needs or threats



Pandemic Preparedness as a Cost

- Public perception
 - Drain on limited resources
 - Need to combat more immediate threats
- Public health successes are invisible
 - Failures are very public
 - Both make it difficult to argue for additional resources
- Pandemic preparedness is not a deterrent
 - Won't stop viruses from evolving & emerging

How to Reframe Pandemic Preparedness Costs?

- Demonstrate value of pandemic preparedness
 - Impact may not be immediate or obvious
 - Illustrate tangible benefits
- Establish pandemic preparedness as a priority
 - Especially relative to more immediate needs
 - Build support for investing resources now
- Pandemic preparedness as an investment
 - Saving for retirement
 - Insurance

Preparedness is Cheaper than Response

“An ounce of prevention is worth a pound of cure.”

-Benjamin Franklin

Cost of Pandemic Preparedness

- Projections vary widely¹
 - Need long-term, sustainable funding

Pre-COVID-19

- US National Academy of Medicine (2016)²
 - \$4.5 billion/year increase
- WHO (2019)³
 - \$8 billion/year
 - \$1 per person/year

Post-COVID-19

- G20⁴
 - \$15 billion/year increase for next 5 years
- WHO & World Bank⁵
 - \$31 billion/year
- McKinsey⁶
 - \$85-130 billion for next 2 years
 - \$20-50 billion/year

Cost of a Pandemic

COVID-19: 800 million cases & 7 million deaths⁷

Response Costs

- Japan: ¥68.5 trillion⁸
 - ~\$470 billion
- US: \$11 trillion⁹
 - 2019 budget: \$4.4 trillion¹⁰

Economic Impact

- US: \$14 trillion¹¹
- Global: \$35 trillion¹²

Pandemic Preparedness Cost

\$30 Billion per year



Japan Response = \$470 Billion → Would fund pandemic preparedness for: 16 Years



US Response = \$11 Trillion  Would fund pandemic preparedness for: 367 Years



US Response +
Economic Impact = \$25 Trillion



Would fund pandemic
preparedness for:

833 Years



Global Economic Impact

= \$35 Trillion



Would fund pandemic preparedness for:

1,176 YEARS!



Shorter-Term Benefits from Longer-Term Investments

Demonstrate immediate value from pandemic preparedness to address today's priorities & threats.

Providing Immediate Benefit

- Don't have to wait until a pandemic to reap the benefits
 - Address more immediate needs
 - Continual value over time
 - Added value on top of pandemic resilience
- Public health & healthcare workforces¹³
- Disease surveillance & forecasting systems
- MCM manufacturing capacity¹⁴
- Global supply chains

Assessing Pandemic Preparedness

How do we know we're making progress?

How do we show we're making progress?



Refine Preparedness Metrics

- Current preparedness metrics did not align with COVID-19 response success¹⁵
 - Joint External Evaluation (JEE)
 - Global Health Security Index (GHSI)¹⁶
- Ongoing efforts to identify & implement COVID-19 lessons
 - After-action reviews
 - Updating IHRs¹⁷
 - Pandemic Accord¹⁸
- Need tools to assess preparedness & response capacity



Assessing & Demonstrating Progress

- Ensure we are focusing on appropriate needs
 - Are we developing the right programs & capacities?
- Illustrate progress
 - Show improvement over previous capacities
- Demonstrate these efforts are building pandemic preparedness
 - Translate resources into programs & capacities
 - Translate programs & capacities into resilience

Investing in the Future

*Reframe pandemic preparedness as
an investment, not a burden.*



Investing in the Future

- We know the areas we need to strengthen
- We know pandemic resilience will require resources
- Need to illustrate the value of pandemic preparedness
- Call to action
 - Reframe pandemic preparedness costs as investments
 - Preparedness is cheaper than response
 - Provide immediate benefits from longer-term investments
 - Develop metrics to effectively assess preparedness capacities

References

1. <https://www.thinkglobalhealth.org/article/rethinking-financial-estimates-pandemic-preparedness-and-response>
2. <https://nap.nationalacademies.org/catalog/21891/the-neglected-dimension-of-global-security-a-framework-to-counter>
3. <https://www.who.int/news-room/feature-stories/detail/8-things-to-know-about-pandemic-influenza>
4. <https://pandemic-financing.org/report/>
5. <https://thedocs.worldbank.org/en/doc/5760109c4db174ff90a8dfa7d025644a-0290032022/original/G20-Gaps-in-PPR-Financing-Mechanisms-WHO-and-WB-pdf.pdf>
6. <https://www.mckinsey.com/industries/public-sector/our-insights/not-the-last-pandemic-investing-now-to-reimagine-public-health-systems>
7. <https://covid19.who.int/>
8. <https://english.kyodonews.net/news/2023/08/65c9778d3a31-japans-4-yr-spending-on-covid-inflation-relief-hit-685-tril-yen.html>
9. <https://www.covidmoneytracker.org/>
10. <https://www.cbo.gov/system/files/2020-04/56324-CBO-2019-budget-infographic.pdf>
11. <https://healthpolicy.usc.edu/article/covid-19s-total-cost-to-the-economy-in-us-will-reach-14-trillion-by-end-of-2023-new-research/>
12. <https://www.imf.org/en/Publications/fandd/issues/2021/12/Pandemic-preparedness-Patel-Sridhar>
13. <https://www.who.int/health-topics/health-workforce>
14. <https://africacdc.org/news-item/african-vaccine-manufacturing-capacity/>; https://cepi.net/news_cepi/cepi-invites-vaccine-developers-and-manufacturers-to-join-global-outbreak-response-network/
15. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7506172/>; https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf; <https://www.thinkglobalhealth.org/article/all-bets-are-measuring-pandemic-preparedness>; <https://bmjopen.bmj.com/content/11/12/e050052>
16. <https://www.ghsindex.org/wp-content/uploads/2021/11/2019-Global-Health-Security-Index.pdf>; <https://ourworldindata.org/explorers/coronavirus-data-explorer?country=PER~BGR~BIH~HUN~MKD~GEO~HRV~SVN~MNE~CZE~LVA~SVK~SMR~MDA~GRC~LTU~ROU~GBR~USA~BRA&Metric=Confirmed+deaths&Interval=Cumulative&Relative+to+Population=true>
17. [https://www.who.int/news/item/25-02-2023-governments-hold-first-detailed-discussions-on-proposed-amendments-to-the-international-health-regulations-\(2005\)](https://www.who.int/news/item/25-02-2023-governments-hold-first-detailed-discussions-on-proposed-amendments-to-the-international-health-regulations-(2005))
18. <https://www.who.int/news-room/questions-and-answers/item/pandemic-prevention--preparedness-and-response-accord>

Thank you

謝謝

Matthew P. Shearer

Associate Scholar, Johns Hopkins Center for Health Security

mshearer@jhu.edu



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

**Center for
Health Security**

