# Financing international collective action for epidemic & pandemic preparedness

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#### Offline: From 1918 to 2018—the lessons of influenza

"The centenary of the 1918 influenza pandemic is a moment to pause and think carefully about the world's present capacity to respond to another worldwide epidemic. The conclusion will be troubling, even alarming."









The traditional approach is cycles of panic and neglect

We know that it is coming, but we have no way of stopping it

As with climate change, no part of the world can insulate itself from the consequences of epidemics Success will require changing from a culture that is 'reactive' to one that is 'proactive'



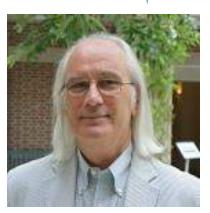
Peter Sands Global Fund



Sylvie Briand *WHO* 



Larry Summers *Harvard* 



Dennis Carroll *USAID* 







International collective action for epidemic & pandemic preparedness: an economic policy brief for the G20 health working group

## A framework for stimulating economic investments to prevent emerging diseases

Daniel L Schar, a Gavin Mark Yamey, b Catherine C Machalabac & William B Kareshc

#### What I'm going to talk about today

- 1. Context: investment framework proposed by *Global Health 2035* 
  - » Global versus country-specific functions
- 2. Investment case for epidemic/pandemic preparedness
  - » Costs of inaction
  - » Large ROIs
- 3. Investing in what? Two preparedness planks: national, ICAH
- 4. Recommendations

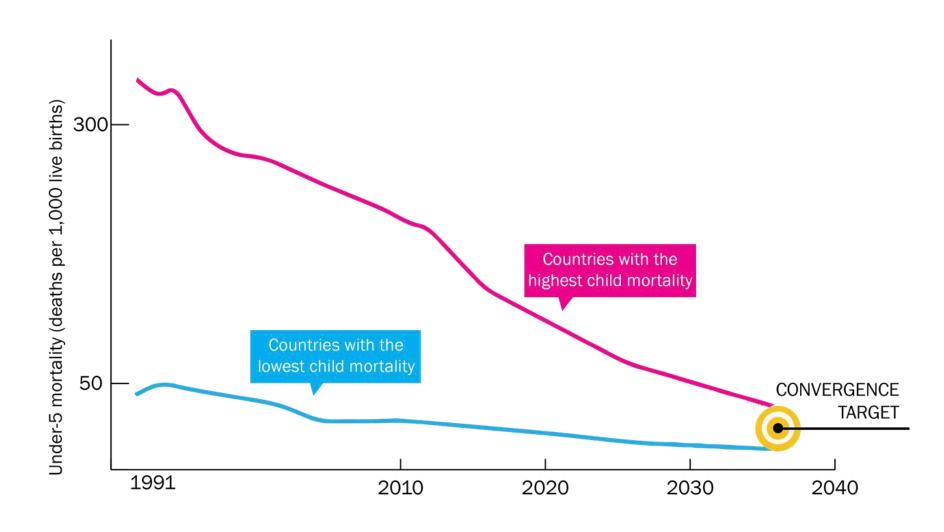


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#### Context: investment framework proposed by Global Health 2035





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- Economic growth in LICs and LMICs → will add \$10 trillion/year to GDP by 2035
- About 1-3% of this growth could fund convergence
- Urged a gradual transition away from direct country support towards global functions



#### Taxonomy/framework for DAH based on functions

Country-specific investments





National disease control programs & health systems support

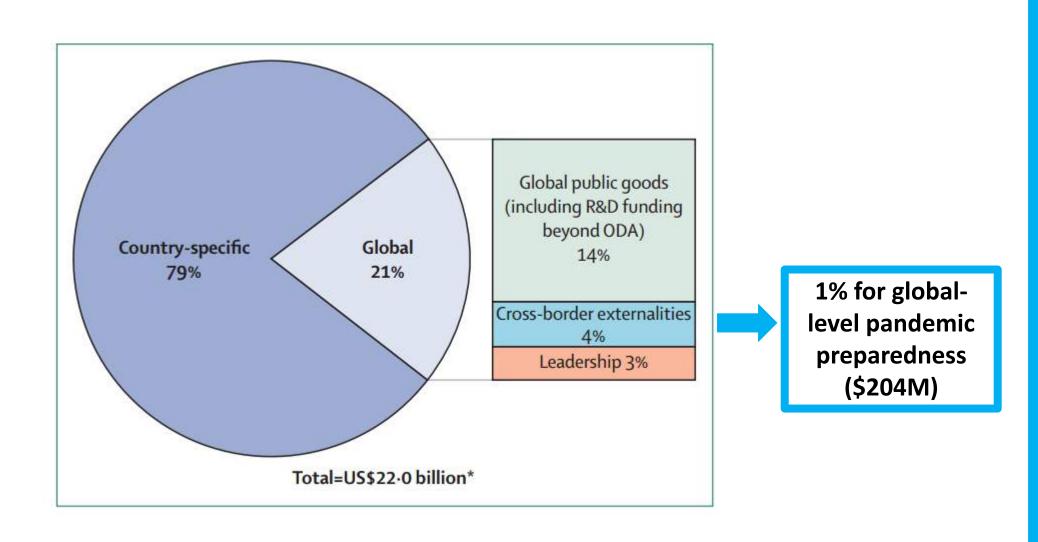


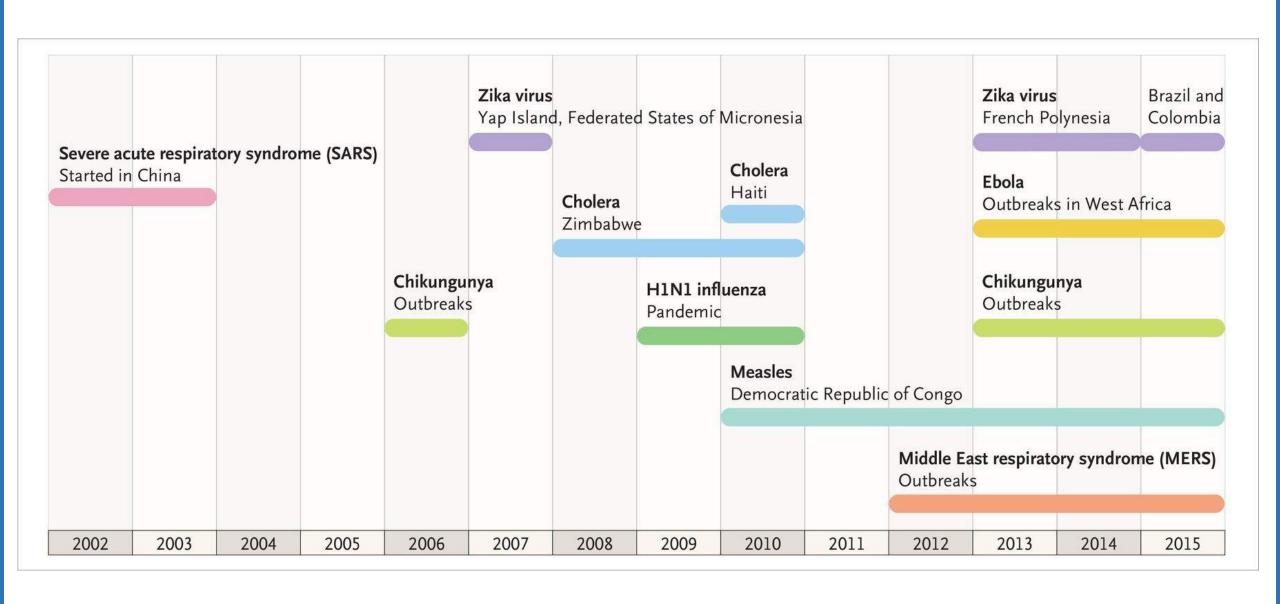
Supporting global public goods; managing cross-border threats; fostering global leadership



## How much donor financing for health is channelled to global versus country-specific aid functions?

Marco Schäferhoff, Sara Fewer, Jessica Kraus, Emil Richter, Lawrence H Summers, Jesper Sundewall, Gavin Yamey, Dean T Jamison





Major Emerging and Reemerging Infectious-Disease Outbreaks, Epidemics, and Pandemics, 2002-2015. Source: *N Engl J Med* 2016; 374:1281-1287

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#### Costs of inaction: massive health/economic shocks

"Inadequate preparedness for the next epidemic or pandemic puts the world at risk of massive loss of life and economic devastation"

CPI & CEPI Economic Policy Brief for G20

Nipah, H5N1 and H7N9

Moderate Risk



pandemic influenza viruses

High Risk



Ebola, Lassa, Marburg

Low Risk

#### Economic damage: causes, measurement challenges

Indirect fiscal shocks are larger than direct shocks

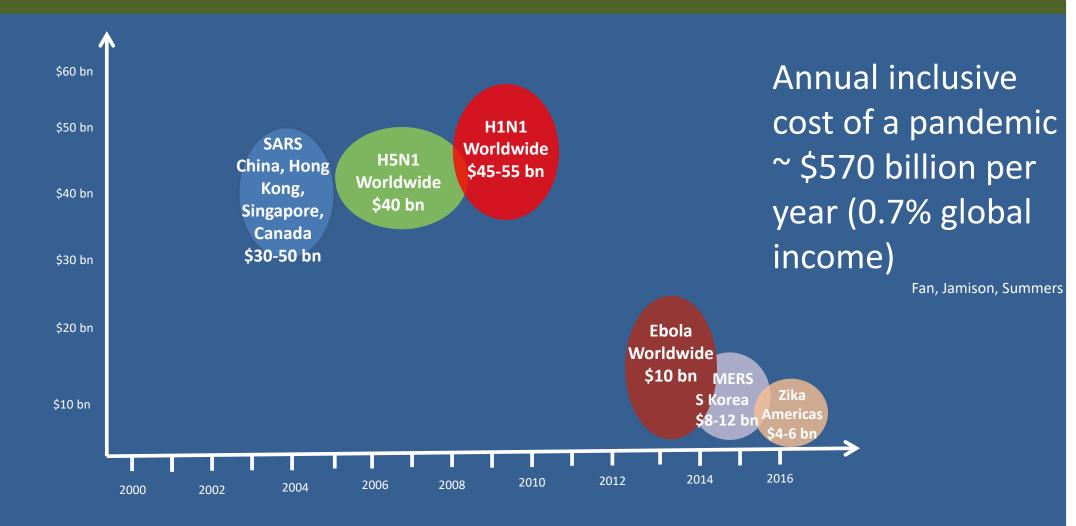


Quantifying likely size of losses is challenging



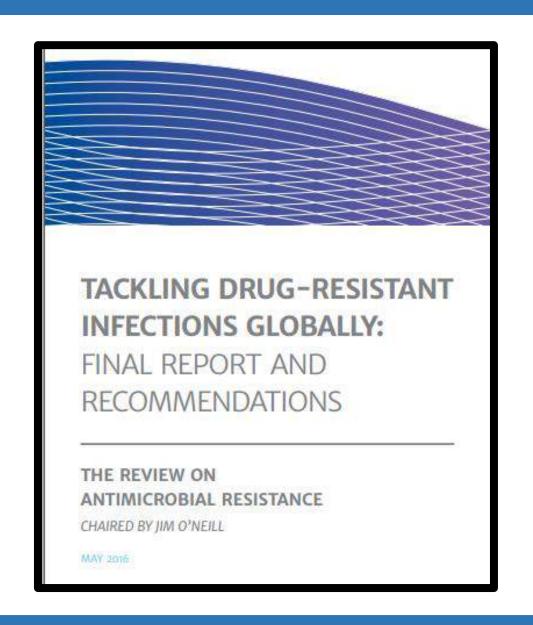


### Economic impact of recent emerging viral diseases





#### Costs of inaction: AMR



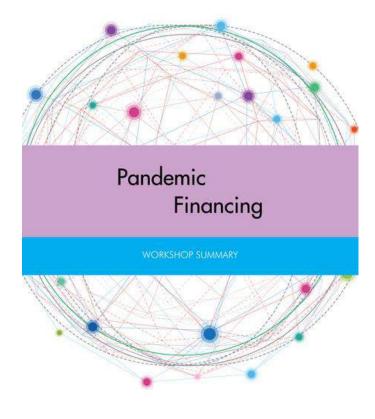
> \$100 trillion

- ► Cumulative economic impact to 2050
- ► 2/3 in LICs and MICs

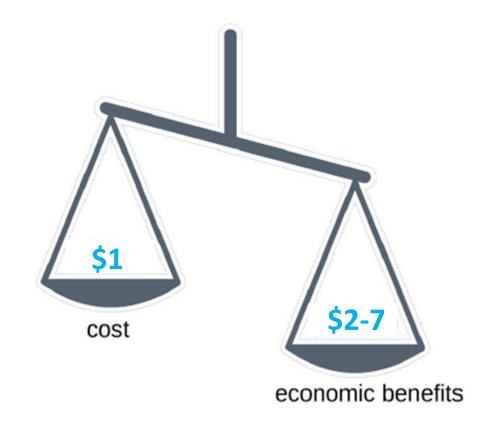


#### Large returns on investment

#### GLOBAL HEALTH RISK FRAMEWORK

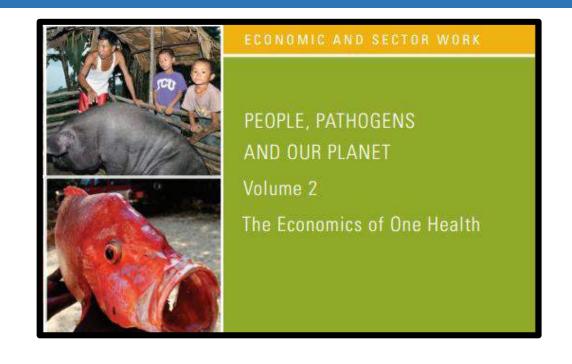


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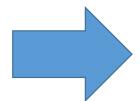




#### Large returns on investment (cont'd)



investment
US\$ 1.9-3.4 billion/y



benefit >US\$ 30 billion/y



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#### Investing in the national preparedness plank





Public health capacities (especially human & animal surveillance, clinical research)



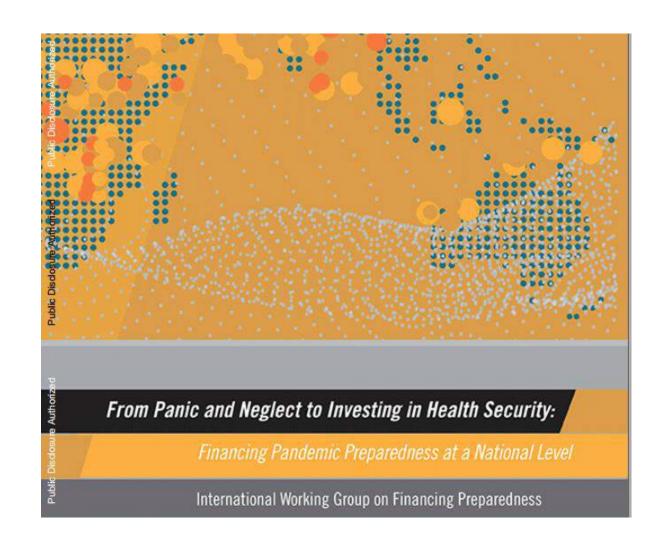
Strengthen system building blocks (e.g. workforce, HIS)



Rigorous external assessment (JEE, PVS)



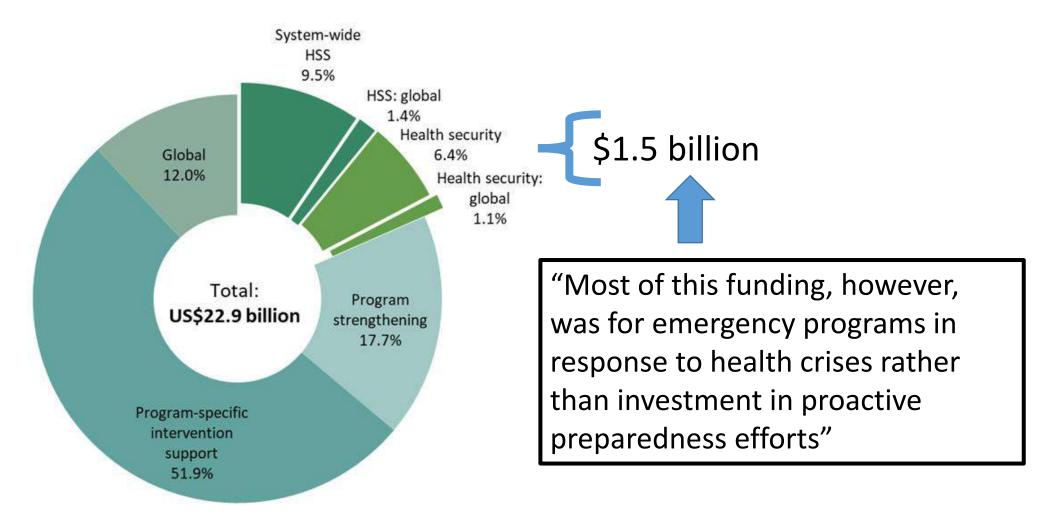
#### The price tag for national preparedness



"In countries where there is a reasonably comprehensive and well-functioning underlying health system, which would include a number of LICs and MICs, financing improved preparedness might cost less than \$1 per person per year, not a huge sum compared to the scale of the risks to human lives and livelihoods."



#### Our study: donors are under-investing in national preparedness



Constant US\$, 2015 prices

DAH to achieve universal health coverage. Study commissioned by International Health Partnership for UHC2030. Geneva: WHO (forthcoming)



#### Investing in the international preparedness plank





Accelerate R&D for missing MCMs



Strengthen global & regional outbreak preparedness & response system



#### R&D price tag





US\$ 180-740 million/y to fund development of one vaccine candidate for each of 10 priority EIDs or 2-3 candidates for three priority diseases

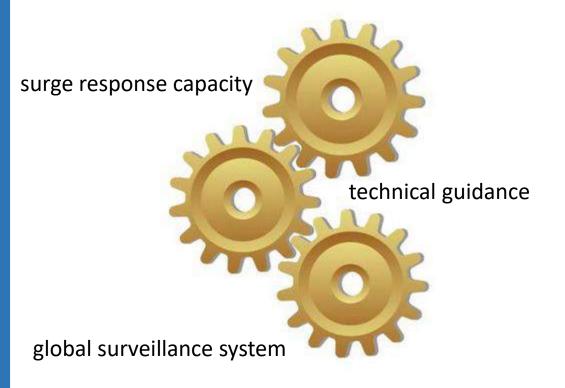
US\$ 860 million/y to fund at least one drug for 6 priority EIDs and at least one diagnostic for 8 priority EIDs

2023

2018

### Global & regional outbreak preparedness & response

#### **CRITICAL COMPONENTS**



#### FINANCING ENVELOPES

- WHO Contingency Fund for Emergencies
  - » Only reached \$44.5M of its \$100M target
- ► WHO Health Emergencies and Health Systems Preparedness Programmes
  - » Annual shortfall of \$225M
- ► World Bank Pandemic Emergency Financing Facility



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### Recommendations to G20 from CPI/CEPI workshop



Accelerate R&D: support CEPI, Blueprint



Strengthen global system: close gaps in global financing windows



Support national preparedness efforts including JEE process



Support creation of regional/national risk & preparedness index



Support global effort to develop pandemic investment plans



#### Recommendations from our Bulletin paper

## A framework for stimulating economic investments to prevent emerging diseases

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- 1. Strengthen economic evidence base, e.g. cost of inaction ("hidden losses"), ROI
- 2. Scale economically informed innovations, e.g. land-use planning that accounts for economic impact of disease emergence from disrupted landscape
- 3. Incentivize risk mitigation, e.g. incorporate epidemic risk profiles into macro-economic analyses and bond ratings
- 4. Mobilize funds: DRM, ODA, private finance
- 5. Keep pandemics at top of agenda as a GPG: G7, G20, GHSA



### Acknowledgements



# SEEK DEVELOPMENT

