Seasonal Influenza Prevention and Control

EPI WIN Webinar

World Health Organization

Global Influenza Burden

Seasonal Influenza

1 billion cases annually

3-5 million severe cases annually

290,000-650,000 influenza-related respiratory deaths annually

Zoonotic influenza

H7N9, H9N2, H5NX

Animal viruses continue to spill over into humans

Pandemic influenza

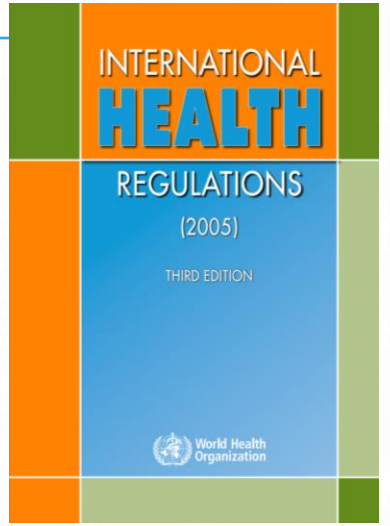
4 pandemics in last century

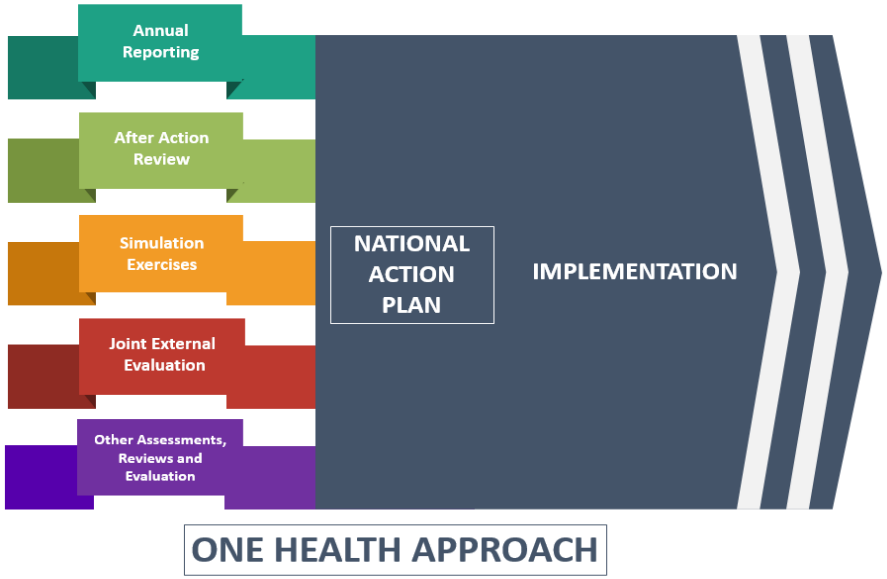
0.5-4.8% of global GDP lost in each

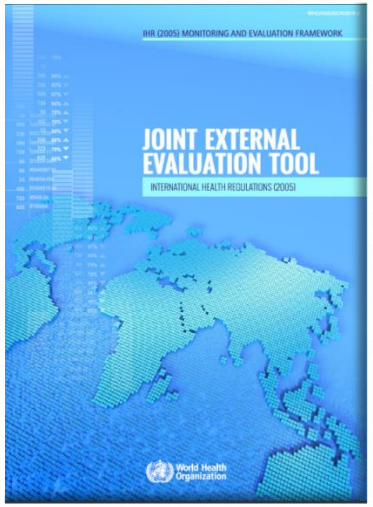
Future pandemics a certainty

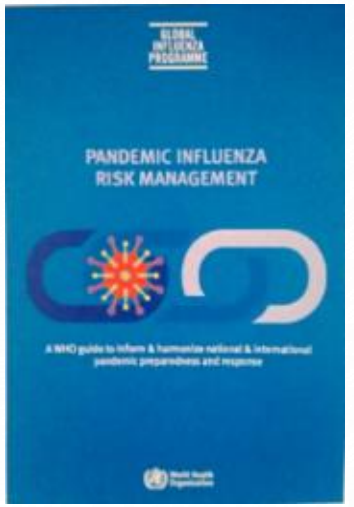
Building Capacity for Influenza

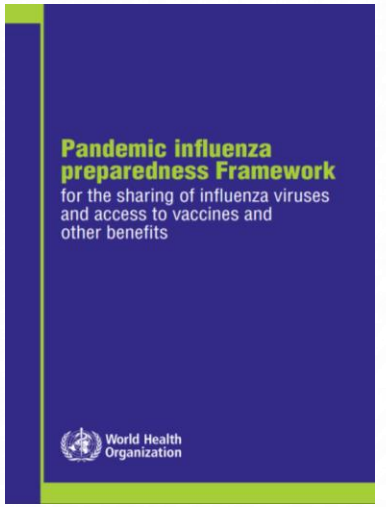
- Influenza is the perfect example of a “poster child” for capacity-building
- Why: Influenza affects every country every year
- Programmes for seasonal influenza surveillance, prevention & control are essential for pandemic preparedness
- Influenza capacity is IHR (2005) core capacity for EIDs











GLOBAL INFLUENZA STRATEGY 2019 – 2030

Prevent. Control. Prepare.

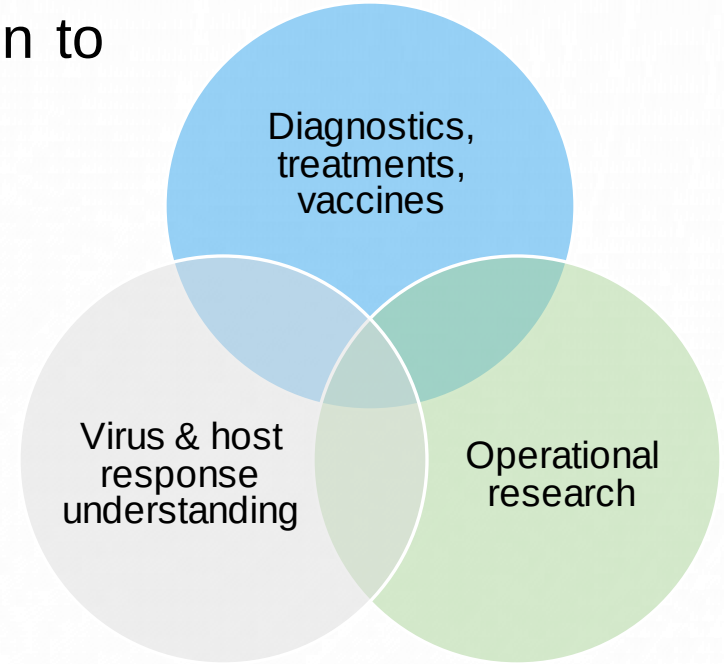
Better Global Tools

Stronger Country Capacities

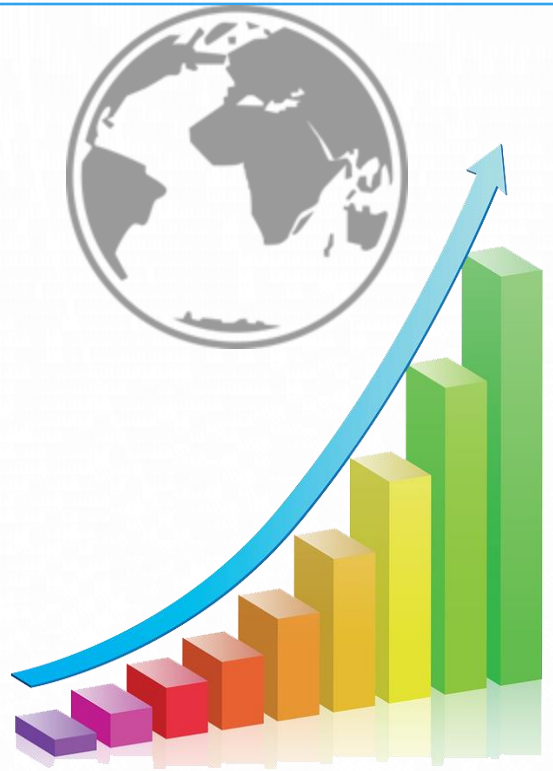
Outcome 1. Better Global Tools

Strategic Objective 1: Promote research and innovation to address unmet needs:

- Improved, novel and universal vaccines
  - Broader immunity, longer lasting
  - Faster, improved technology, timeliness
- More effective therapeutics
  - Antivirals, immune modulators, other drugs
- Better understanding of the virus and host response
- Better detection methods, POC testing
- *Optimized use of current tools in the meantime*



Outcome 2. Stronger Country Capacities



1. Many countries are unprepared for a pandemic (i.e COVID-19, MERS, Ebola, influenza)

2. Strengthen countries' capacity for seasonal influenza and preparedness planning

3. Every country has a **prioritized influenza programme**
   - Evidence based,
   - Optimized to fit their needs, &
   - Contributes to national and global preparedness, response and health security.

Global Influenza Strategy: Four Strategic Objectives

Vision for 2030

Attainment of the highest possible influenza prevention, control and preparedness to safeguard the health of all people

Thank you!


GLOBAL
INFLUENZA
STRATEGY
2019 – 2030
Prevent. Control. Prepare.
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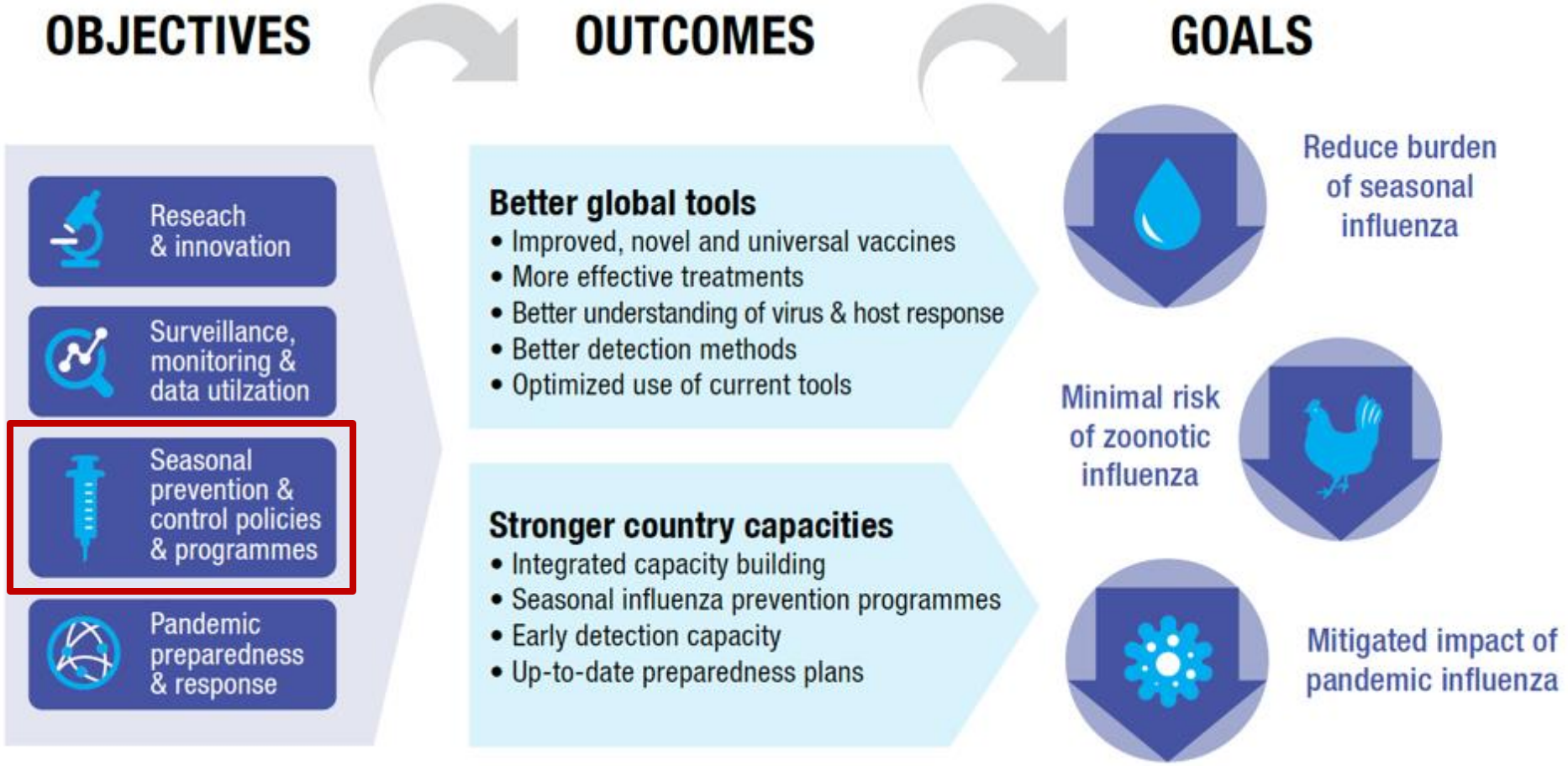
Seasonal Influenza Vaccination: Developing and Strengthening National Programmes

Shoshana Goldin
World Health Organization

World Health Organization

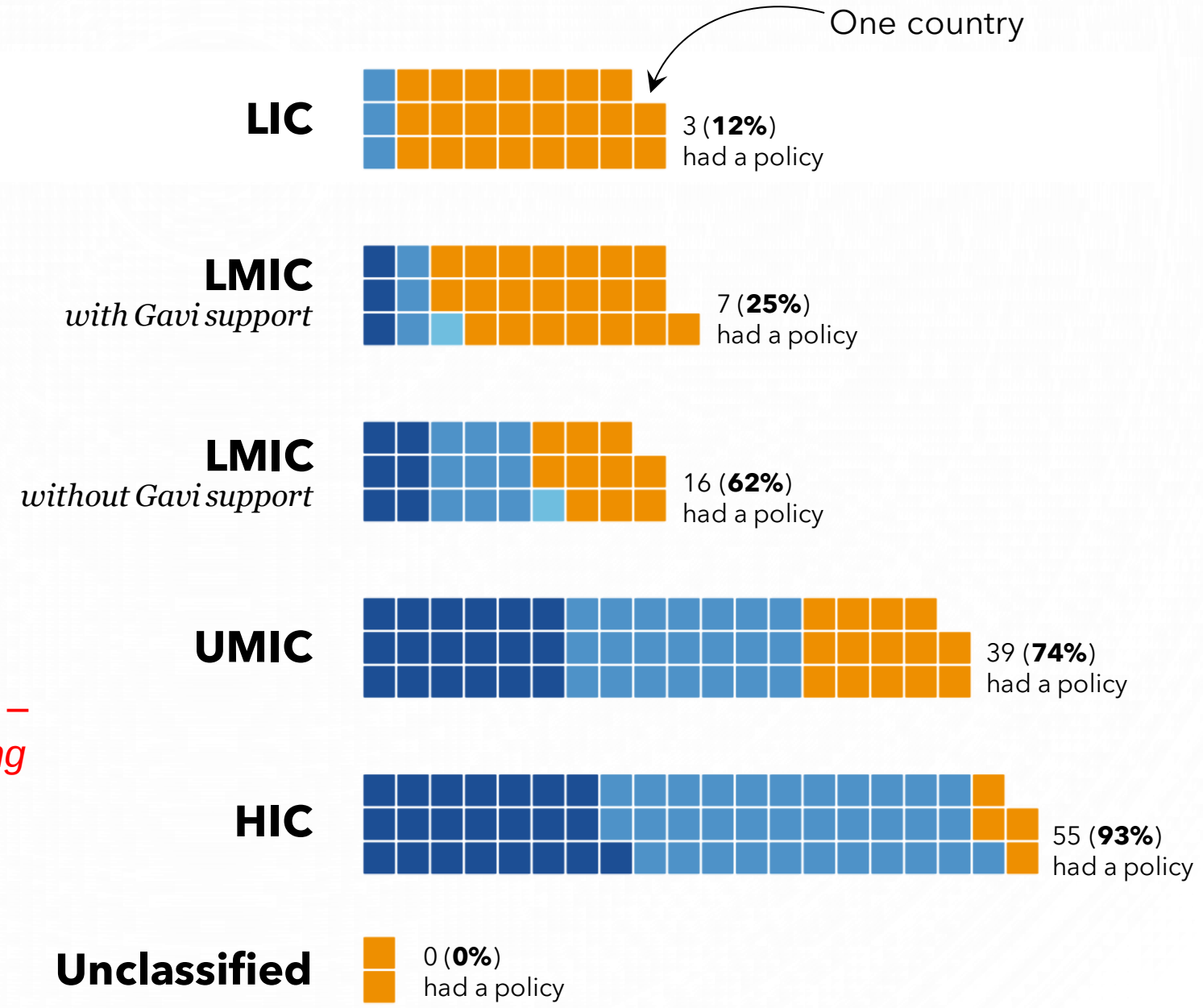
WHO recommends that all countries should consider implementing seasonal influenza vaccination programmes

Vision for 2030
Attainment of the highest possible influenza prevention, control and preparedness to safeguard the health of all people



National influenza vaccination policies

Existed in all income groups but were reported more often in higher income countries and countries that were eligible for support from Gavi.



Policy

- Public & private sectors
- Public sector
- Private sector

No policy

Preliminary findings – Publication upcoming

HIC: high income; LIC: low income; LMIC: lower-middle income; UMIC: upper-middle income.

Source: 2022 programme data collected via the 2023 WHO/UNICEF eJRF supplemented with the most recent JRF report (2017–2021) when a 2022 report was unavailable | Based on data available 26 September 2023 (n = 194).

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Is influenza vaccination available in your country?

ⓘ Start presenting to display the poll results on this slide.

Vaccines against influenza: WHO position paper – May 2022

- **New position paper published on 13 May 2022:**
  - SAGE decision-making process reflected in evidence-to-recommendation tables
  - Replaces the previous 2012 WHO position paper on influenza vaccines

- **Focus is on vaccines and vaccination against seasonal influenza**
  - Intended for use by national public health officials and immunization programme managers
  - May also be of interest to funding agencies, vaccine advisory groups, vaccine manufacturers, health professionals, researchers, scientific media, and the general public

Selection of target groups

For countries considering initiation or expansion of seasonal influenza vaccination programmes, WHO recommends the following as priority target groups (alphabetical order):

- Health workers
- Individuals with comorbidities and underlying conditions
- Older adults
- Pregnant women

Other groups to consider:

Children
Individuals living in congregate-living settings (e.g., prisons, refugee camps, group homes)
Disadvantaged populations
Indigenous populations

Selection of target groups is ultimately based on local context (e.g., burden of disease, national goals and policies) and programme feasibility (e.g., capacity, resource availability)

When to vaccinate?

WHO recommends annual seasonal influenza vaccination prior to the beginning of the influenza season

For tropical and subtropical areas with multiple peaks of influenza activity, WHO recommends seasonal influenza vaccination **prior to the start** of the primary period of increased influenza activity.

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Have you been vaccinated against influenza this year?

ⓘ Start presenting to display the poll results on this slide.

Materials to Support Influenza Vaccination Programmes

Policy Brief

- Key elements to include in seasonal influenza vaccination policy

https://www.who.int/publications/i/item/9789240084636

BeSD Tool

- Tool to better understand behavioral and social drivers for influenza vaccination

Will be published in 2024

Vaccination Toolbox

- Training, guidance, campaign materials, and other useful resources

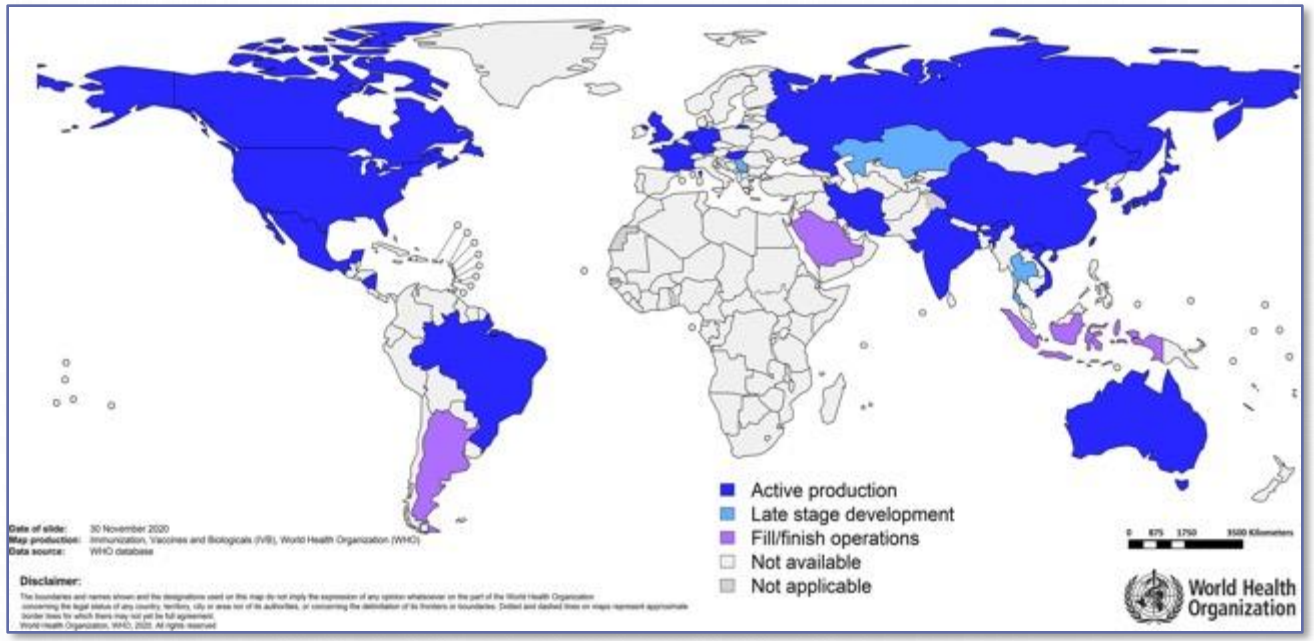
https://www.who.int/teams/global-influenza-programme/vaccines/influenza-vaccination-toolbox

Policy Brief: Key components of national policies

- Rationale
- Surveillance, burden of disease, and economic burden
- NITAG roles and responsibilities, national recommendations, and estimates of target groups
- Preferred vaccine types and costs
- Vaccine supply and market authorization
- Distribution and administration (E.g. timing, sites, supplies, cold chain, waste, inventory)
- Risk communications, community engagement, and demand generation
- Documentation and reporting
- M&E and research
- Funding
- Process for updating the policy

Links to helpful resources (e.g. WHO recommendations, manuals, and tools)

Global influenza vaccine production capacity



Income status	# of facilities	% capacity seasonal	% capacity pandemic	% of world population
LIC	0	0%	0%	9%
LMIC	5	2%	1%	38%
UMIC	15	29%	19%	37%
HIC	20	69%	80%	16%

	Seasonal influenza	Pandemic influenza
By vaccine type		
IIV	89.6%	88.9%
LAIV	5.0%	3.4%
Recombinant	5.4%	7.7%
By substrate		
Eggs	84.5%	79%
Cell culture	15.5%	21%

- **31 manufacturers (2019)**
- **Maximum annual production capacity**
  - Seasonal: 1.48 billion doses
  - Pandemic: up to 8.31 billion doses *(best case)*
- **Production capacity largely concentrated in HICs**

Sparrow E, Wood JG, Chadwick C, Newall AT, Torvaldsen S, Moen A, et al. Global production capacity of seasonal and pandemic influenza vaccines in 2019. Vaccine. 2021;39(3):512-20.

Resources

- **Vaccines against influenza: WHO position paper – May 2022:** https://www.who.int/publications/i/item/who-wer9719
- **Evidence-to-recommendations tables:** https://cdn.who.int/media/docs/default-source/immunization/position_paper_documents/influenza/influenza-sage-annexes-04-05-22.pdf?sfvrsn=566a6082_1
- **Influenza vaccination toolbox:** https://www.who.int/teams/global-influenza-programme/vaccines/influenza-vaccination-toolbox
- **Influenza vaccines overview for policymakers:** https://apps.who.int/iris/handle/10665/336951
- **Guidance on the economic evaluation of influenza vaccination:** https://apps.who.int/iris/bitstream/handle/10665/250086/WHO-IVB-16.05-eng.pdf
- **WHO Flutool plus – seasonal influenza immunization costing tool (SIICT) and training:** https://openwho.org/courses/influenza-costing-tool
- **Understanding the behavioural and social drivers of vaccine uptake position paper:** https://apps.who.int/iris/bitstream/handle/10665/354458/WER9720-eng-fre.pdf

Thank you

World Health Organization

Seasonal Influenza Vaccination (Jordan)

Context:

- Influenza vaccines have been used in Jordan since 2003.
- A formal seasonal influenza vaccination policy will strengthen the programme. The Ministry of Health (MOH) in collaboration with the National Immunization Technical Advisory Group and national stakeholders developed the first draft of the influenza vaccination policy
- The policy development was supported by WHO and the Task Force for Global Health's Partnership for International Vaccination Introduction. The policy is currently under legal review to be endorsed.

To support uptake of the vaccine, MOH is also:

1. Conducting educational sessions for MOH, health workers, primary health care centers, and hospitals to address barriers for influenza vaccination.

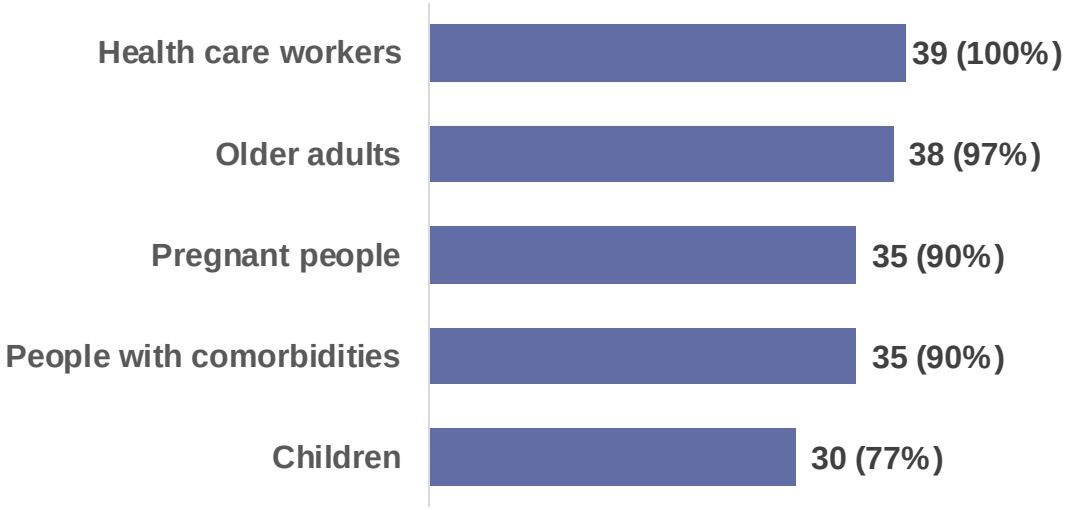
2. Educating the public on the importance of influenza vaccination before the season through national interviews on media outlets.

3. Refining the WHO tools for Understanding Behavioural and Social Drivers of Seasonal Influenza Vaccination by field testing them in two primary health centers.

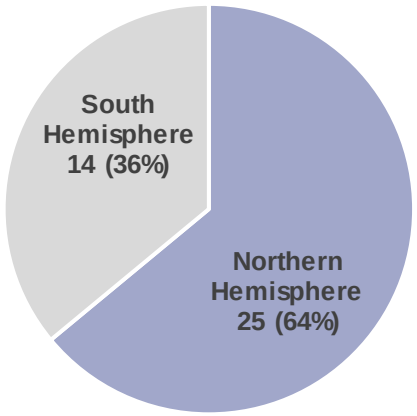
Seasonal influenza vaccination in the Americas

39 (89%) of the countries in the American Region have seasonal influenza vaccination

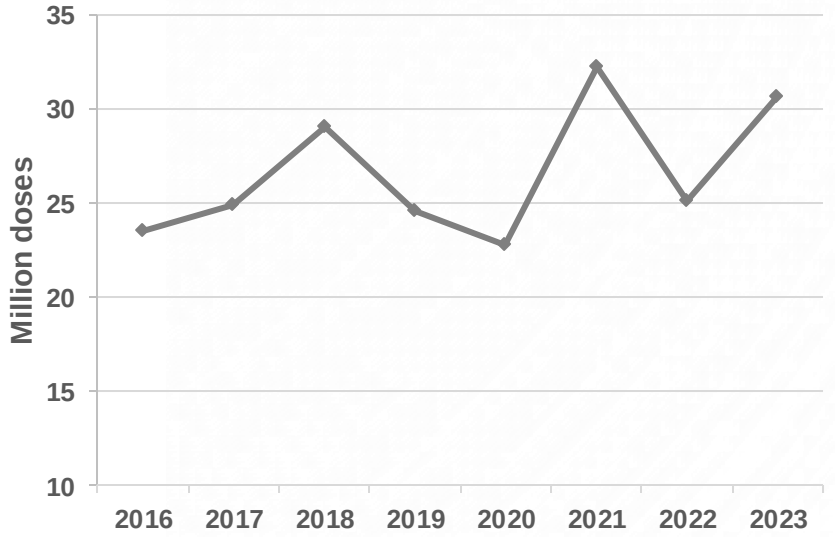
Number of countries by priority group



Number of countries by vaccine composition



Number of doses distributed through PAHO Revolving Fund for Access to Vaccines

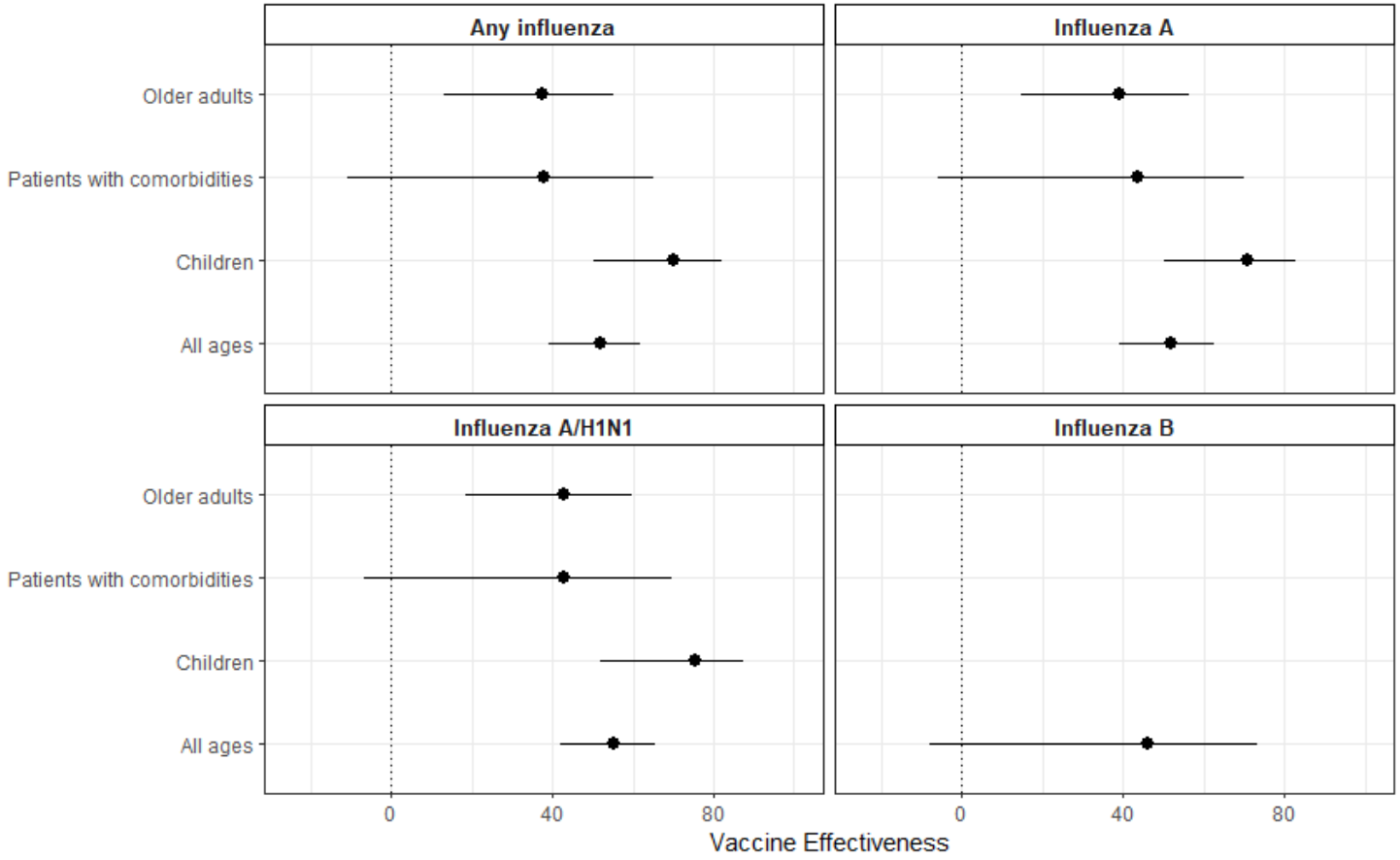


eJRF 2022. PAHO Immunization Brochure 2022. https://www.paho.org/en/tag/immunization-brochure

PAHO Revolving Fund for Vaccines: https://www.paho.org/en/revolving-fund

Regional Vaccine Effectiveness Network

Influenza vaccine effectiveness against hospitalization, SH 2023



Antivirals (Japan)

- Recommended and available antivirals for influenza in Japan
  - Oseltamivir (Oral), Zanamivir (Inhaled), Peramivir (Intravenous), Laninamivir (Inhaled), Baloxavir (Oral)
- Antivirals are commonly prescribed to patients with influenza
  - Antivirals are recommended for those at higher risk of influenza complications
  - Clinicians can prescribe antivirals to non-high-risk patients based on clinical judgement
  - Antivirals for prophylaxis can be considered in certain settings (e.g. outbreaks in hospitals and long-term care facilities)
- Antivirals should be given as soon as possible (< 48 hours after onset of illness)
- Antivirals for treatment and rapid antigen tests are covered by the health insurance

We welcome your questions through the Q&A feature!

World Health Organization