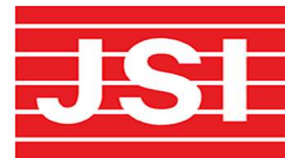


# NPI-PVI Tool Webinar Series

## Session 3: Searching for Evidence Related to Decision Making

Dilshaad Brey and Eposi Haddison  
| Vaccines for Africa Initiative |  
NITAG Support Hub (NISH) | Faculty  
of Health Sciences | University of  
Cape Town



# Searching for Evidence for Decision Making

- Process of Searching for Evidence for Prioritization & Optimization is Crucial
- Systematic, thorough & exhaustive
  - Librarian can assist with the search process



# Searching the Sources

- Primarily via websites – not very sophisticated search engines like scholarly databases
  - Google Search
    - Basic
    - Advanced Search
  - Search functionality on the website
  - Browse: publications/resources

 Search with Google or enter address

Google

Advanced Search

Find pages with...

all these words:

this exact word or phrase:

any of these words:

none of these words:

numbers ranging from:

to



Our Work ▾

RCCs ▾

Resources

Emergencies ▾

Events



# Sources of Evidence



GLOBAL



REGIONAL



NATIONAL



# Global Sources of Evidence



# World Health Organization (WHO)

The Strategic Advisory Group of Experts on Immunization (SAGE) is charged with advising WHO on overall global policies and strategies, ranging from vaccines and technology, research and development, to delivery of immunization and its linkages with other health interventions.

Guidelines and recommendations for effective use of vaccines and vaccination strategies to improve public health.

Resources are crucial for National Immunization Technical Advisory Groups (NITAGs) in decision-making/building trust on the use of vaccines



# WHO Vaccination Policy Papers

## Complete list of WHO Vaccines Position Papers

BCG	Pertussis
Cholera	Pneumococcus
Dengue	Polio
Diphtheria	Rabies
Haemophilus influenzae type b	Reducing pain at time of vaccination
Hepatitis A	Respiratory syncytial virus
Hepatitis B	Rotavirus
Hepatitis E	Rubella
Herpes Zoster	Smallpox and mpox (orthopoxviruses)
Human papillomavirus (HPV)	Tetanus
Influenza	Tick-borne encephalitis

# US Centers for Disease Control and Prevention (CDC)



## Vaccines & Immunizations

SEARCH

Vaccine Basics

Vaccines and the Diseases they Prevent

Vaccines by Age

VaxView Vaccination Coverage

Glossary

Vaccine Schedules For You and Your Family

Vaccine Resources

VIEW ALL >



## Travelers' Health

Search



### Before you go

Get tips on preparing for travel including what to pack and travel tips specific to your destination.

[Learn more](#)

### Destinations



Where are you going?

-- Select One --

Go

[View all destinations](#)

# Other Organisations

Global Alliance for Vaccines and Immunization



UNICEF-the United Nations Children's Fund

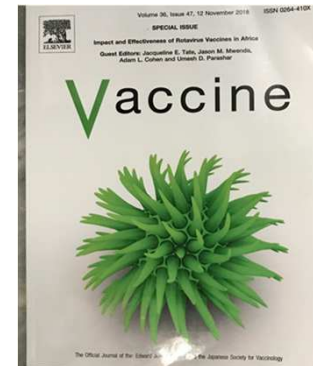


# Universities and Research Institutes



**International  
Vaccine  
Institute**

# Universities and Research Institutes Publications



# Global NITAG Network (GNN)



[Home](#) [Resources](#) [Diseases](#) [Compendium](#) [Training](#) [Evaluation](#) [SYSVAC](#) [News](#) [Webinars](#) [Network](#)

## Welcome to the NITAG Resource Center

The unique resource center on national immunization policies and global recommendations on vaccine-preventable diseases



Explore documentations, publications and systematic reviews from the Global NITAG Network

**FIND**

Pneumococcal disease

COVID-19

Pregnant women

Mpox

# Resources

## Selected

vaccine switching ×

## Type of publications

- NITAG documentation (5)
- Reports (1)
- SAGE documentation (2)
- Systematic reviews (SYSVAC) (11)

## Regions

- Africa (4)
- Europe (3)

## Diseases

## 19 results found

2023 · Rahmadhan, M. A. W. P. Handayani, P. W.

### Challenges of vaccination information system implementation: A systematic literature review

All age groups Modeling

Rating: Not applicable

2023 · Patikorn, Chanthawat Kategeaw, Warittakorn Perdrizet, Johnna Li, Xiuyan Chaiyakunapruk, Nathorn

### Implementation challenges and real-world impacts of switching pediatric vaccines: A global systematic literature review

Newborn Children Parents/caregivers Acceptance Logistics

Rating: Not applicable

# Vaccine Evidence Compendium



[Home](#) [Resources](#) [Diseases](#) [Compendium](#) [Training](#) [Evaluation](#) [SYSVAC](#) [News](#) [Webinars](#) [Network](#)

## Welcome to the NITAG Resource Center

The unique resource center on national immunization policies and global recommendations on vaccine-preventable diseases



Explore documentations, publications and systematic reviews from the Global NITAG Network

**FIND**

Pneumococcal disease

COVID-19

Pregnant women

Mpox

## What is the Vaccine Evidence Compendium?

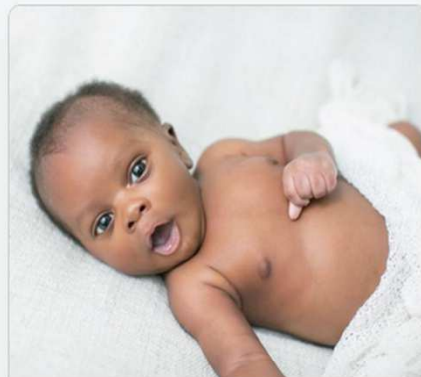
The Vaccine Evidence Compendium (the Compendium) is designed to assist National Immunization Technical Advisory Groups (NITAGs) and other vaccine stakeholders in their decision-making processes by offering a centralized, regularly updated, and user-friendly repository of evidence. [Read more](#)

### Vaccine-specific evidence



#### HPV vaccines

✓ Updated: 21 Aug 2025



#### Hexavalent vaccines

✓ Updated: 21 Aug 2025



#### RSV vaccines

✓ Updated: 21 Aug 2025

## Latest WHO position paper

---

- [WHO position paper for HPV vaccines, December 2022](#)

## Overview

In September 2022, SAGE endorsed a single-dose schedule for HPV vaccination, concluding that a single dose provides solid protection against HPV infections comparable to the traditional two-dose regimen. Following this recommendation, countries have implemented and are considering changes in schedule that can contribute to the simplification of the vaccine delivery and significant budgetary savings

Looking for a comparing key characteristics of different available HPV vaccines?



COMPARE VACCINE TYPE

---

## General indicators for HPV vaccines

✓ Burden & epidemiology

✓ Benefits of the intervention

✓ Safety of the intervention

# HPV vaccines comparison

EXPORT

Compare products

Bivalent



Quadrivalent



Nonavalent



COMPARE

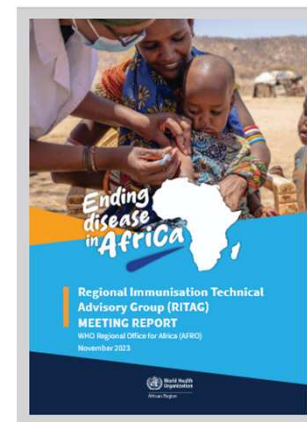
Bivalent			
Cecolin	Cervarix	Walrinvax	Gardasil
^ Marketing authorisation holder(s)			
Xiamen Innovax Biotech	GlaxoSmithKline Biologicals	Walvax Biotechnonology	Merck Vaccines/MSD
^ NRA of first marketing authorisation			
China	EMA	China	FDA
^ Year of first marketing authorisation			
2019	2007	2022	2006
^ Year of WHO Prequalification (PQ)			
2021	2009	2024	2009
^ Antigens			
HPV type 16 L1 protein - 40 µg, HPV type 18 L1 protein - 20 µg	HPV type 16 L1 protein - 20 µg, HPV type 18 L1 protein - 20 µg	HPV type 16 L1 protein - 40 µg, HPV type 18 L1 protein - 20 µg	HPV Type 6 L1 protein - 20 µg HPV Type 11 L1 protein - 40 µg HPV Type 16 L1 protein - 40 µg HPV Type 18 L1 protein - 20 µg.

# Regional Sources of Evidence



# WHO Regional Offices and Others

- AFRO & Regional Office for the Eastern Mediterranean (EMRO)
- RITAGs Regional Technical Advisory Groups on Immunization
- Other Immunization Technical Advisory Groups
- EPI Managers Meeting Reports
- Regional Committee (RCs) Meeting resolutions



# Regional Sources of Evidence, 2

- AFRICA CDC- Health Agency of the African Union (AU)
- Regional Offices of Organisations such as GAVI & UNICEF
- Regional Reference laboratories (RRLs)
- Universities & Research Institutions



**AfricaCDC**  
Centres for Disease Control  
and Prevention

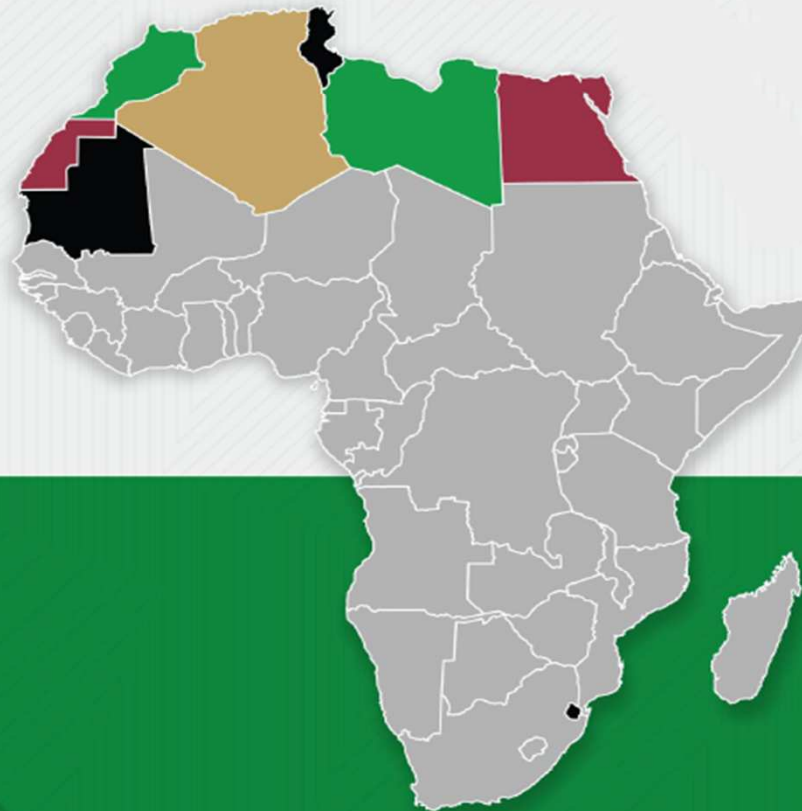


**African  
Union**



# PRIORITIZATION AND RISK RANKING OF EPIDEMIC-PRONE DISEASES FOR EMERGENCY PREPAREDNESS AND RESPONSE IN NORTHERN AFRICA

CAIRO, EGYPT  
20-22 MAY 2025



# NISH LibGuides

NITAG Support Hub (NISH) – Project of Vaccines for Africa (VACFA), Health Sciences Faculty, University of Cape Town

Library Guides (LibGuides) are:

- Organized, curated collections of reliable and authoritative resources
  - Related to a particular topic or subject e.g. A specific vaccine or immunization-related topic



# NISH LibGuides, 2

## Include

- Primarily, published, scholarly peer-reviewed journal articles
- Grey (unpublished) literature
- Free, available 24/7
- Full-text access to open source material
- Where possible, non-OA articles are made available on request via the [NISH Helpdesk](#)



# List of NISH LibGuides

COVID-19 Vaccine  
Confidence in Africa

Malaria in Africa

Human Papillomavirus  
(HPV) in Africa

Hepatitis A

Interventions to  
promote routine  
vaccine coverage

Mpox

Vaccines against  
enteric diseases

MMR Vaccine with a  
Specific Focus on  
Mumps

Hepatitis B Birth Dose

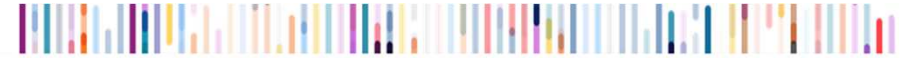
Pentavalent  
Meningococcal  
Conjugate Vaccine

Whole-cell (wP)  
Hexavalent vaccine

Typhoid Conjugate  
Vaccine (TCV)

\*\*Measles Containing  
Vaccine (MCV) Vial  
Presentation Switch\*\*

# https://health.uct.ac.za/nish



Home About Services Courses **Assets & Resources** News & Events Helpdesk Contact



Data visualisations: COVID-19 Dashboard in African countries

**LibGuides: General Introduction** >

Evidence gap maps (EGMs) >

DTP Boost - Vaccination Strategy Tool

Event Resources

Video recordings

Vaccine safety

Glossary A-Z

LibGuide: COVID-19 Vaccine Confidence in Africa

LibGuide: Malaria in Africa

LibGuide: Human Papillomavirus (HPV) in Africa

LibGuide: Hepatitis A

LibGuide: Hepatitis B Birth Dose

LibGuide: Interventions to promote routine vaccine coverage

LibGuide: MMR Vaccine with a Specific Focus on Mumps

LibGuide: Measles Containing Vaccine (MCV)

LibGuide: Mpox

LibGuide: Pentavalent Meningococcal Conjugate Vaccine

LibGuide: Typhoid Conjugate Vaccine (TCV)

LibGuide: Vaccines against enteric diseases

LibGuide: Whole-cell (wP) Hexavalent vaccine



# NISH (NITAG Support Hub) 11: Measles Containing Vaccine (MCV) Vial Presentation Switch LibGuide: Home

This Library Guide is a collection of useful documents & evidence on the efficacy, effectiveness and impact of the Measles Containing Vaccine (MCV) switch to support NITAGs

- Home
- WHO Position Paper on Measles
- TechNet
- News
- Scientific articles
- MCV Missed Opportunities Resource Repository
- Linksbridge publications
- Systematic Reviews



## Introduction

### What is measles

Measles is a highly contagious disease caused by a virus. It spreads easily when an infected person breathes, coughs or sneezes. It can cause severe disease, complications, and even death WHO, (2024).

World Health Organization. (2020). Measles and rubella strategic framework: 2021-2030. In *Measles and rubella strategic framework: 2021-2030*.

<https://iris.who.int/handle/10665/339801>.

World Health Organization/Igor Sergienko (202?). Measles and Rubella Laboratory Network.

<https://www.who.int/europe/initiatives/measles-and-rubella-laboratory-network>

# NISH (NITAG Support Hub) 11: Measles Containing Vaccine (MCV) Vial Presentation Switch LibGuide: WHO Position Paper on Measles

Search this Guide

Search

This Library Guide is a collection of useful documents & evidence on the efficacy, effectiveness and impact of the Measles Containing Vaccine (MCV) switch to support NITAGs

Home

WHO Position Paper on Measles

TechNet

News

Scientific articles

MCV Missed Opportunities Resource Repository

Linksbridge publications

Systematic Reviews

WHO Position Paper on Measles

<https://www.who.int/publications/i/item/who-wer9217-205-227>

2017, 92, 205–228

No 17



World Health  
Organization

Organisation mondiale de la Santé

Weekly epidemiological record  
Relevé épidémiologique hebdomadaire

28 APRIL 2017, 92th YEAR / 28 AVRIL 2017, 92<sup>e</sup> ANNÉE

No 17, 2017, 92, 205–228

<http://www.who.int/wer>

## Contents

205 Measles vaccines: WHO  
position paper – April 2017

## Sommaire

205 Note de synthèse de l'OMS  
sur les vaccins contre  
la rougeole – avril 2017

## Measles vaccines: WHO position paper – April 2017

### Introduction

In accordance with its mandate to provide guidance to the Member States on health policy matters, WHO issues a series of regularly updated position papers on vaccines and combinations of vaccines against diseases that have an international

## Note de synthèse de l'OMS sur les vaccins contre la rougeole – avril 2017

### Introduction

Conformément à son mandat, qui est de fournir des conseils aux États Membres sur les questions relatives aux politiques de santé, l'OMS publie une série de notes de synthèse régulièrement actualisées sur les vaccins et les associations vaccinales contre des maladies qui ont



## References derived from the WHO Position Paper Part 1

Guidance for the development of evidence-based vaccine-related recommendations. Available at [http://apps.who.int/gb/ebwha/pdf\\_files/wha63/a63\\_18-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/wha63/a63_18-en.pdf); accessed January 2017.

Strebel PM et al. (2017). Chapter 21 - Measles vaccine. In: Offit SA, Plotkin WA, Orenstein PA (eds.). <https://www.nejm.org/doi/pdf/10.1056/NEJMcp1905181>

Vaccines (7th Edition). [In press] 4 See No. 45, 2016, pp. 525–536. 5

Rota PA et al. Measles. *Nat Rev Dis Primers*. 2016 Jul 14;2:16049. (NOT OA)

Global eradication of measles: report by the Secretariat. World Health Organization, Geneva, 2010. Available at [http://apps.who.int/gb/ebwha/pdf\\_files/wha63/a63\\_18-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/wha63/a63_18-en.pdf); accessed January 2017.

7 Global Vaccine Action Plan 2011–2020. World Health Organization, Geneva, 2013. Available at [http://www.who.int/immunization/global\\_vaccine\\_action\\_plan/GVAP\\_doc\\_2011\\_2020/en/](http://www.who.int/immunization/global_vaccine_action_plan/GVAP_doc_2011_2020/en/); accessed December 2016.

8 Pan American Health Organization. Plan of Action for Maintaining Measles, Rubella, and Congenital Rubella Syndrome Elimination in the Region of the Americas: Final Report [Internet]. 55th Direction Council; 66th session of the WHO Regional Committee for the Americas; 26–30 September 2016; Washington, DC. Washington, DC: PAHO; 2012 (Resolution CD55/INF/10). Available at [http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=12528%3Aregion-americas-declared-free-measles](http://www.paho.org/hq/index.php?option=com_content&view=article&id=12528%3Aregion-americas-declared-free-measles); accessed December 2016.

9 Thompson, KM. Evolution and use of dynamic transmission models for measles and rubella risk and policy analysis. *Risk Analysis* 2016; 36(7):1383–1403. 10 De Serres G, Gay NJ, Farrington CP. Epidemiology of transmissible diseases after elimination. *Am J Epidemiol* 2000; 151: 1039–1048. (NOT OA)

De Serres G, Gay NJ, Farrington CP. Epidemiology of transmissible diseases after elimination. *Am J Epidemiol* 2000; 151: 1039–1048 (NOT OA)

Module 7: measles update 2009. The Immunological basis for immunization series. World Health Organization, Geneva, 2009. Available at <http://www.who.int/immunization/documents/>

## References derived from the WHO Position Paper Part 2

Information sheet. Observed rate of vaccine reactions – measles, mumps and rubella vaccines, May 2014. World Health Organization, Geneva, 2014. Available at [http://www.who.int/vaccine\\_safety/initiative/tools/MMR\\_vaccine\\_rates\\_information\\_sheet.pdf?ua=1](http://www.who.int/vaccine_safety/initiative/tools/MMR_vaccine_rates_information_sheet.pdf?ua=1); accessed December 2016

. 42 Grading of scientific evidence – table IV: Safety of measles vaccine in young children and adolescents. Available at [http://www.who.int/immunization/documents/measles\\_grad\\_safety.pdf?ua=1](http://www.who.int/immunization/documents/measles_grad_safety.pdf?ua=1)

What clinicians need to know about MMRV vaccine safety. Atlanta, US Centers for Disease Control and Prevention. <http://www.cdc.gov/vaccinesafety/vsd/mmr.htm>; accessed April 2017.

44 Schink T et al. Risk of febrile convulsions after MMRV vaccination in comparison to MMR or MMR+V vaccination. *Vaccine*. 2014 Feb 3;32(6):645–650. <https://doi.org/10.1016/j.vaccine.2013.12.011>

45 Angel JB et al. Vaccine-associated measles pneumonitis in an adult with AIDS. *Ann. Intern. Med.* 1998;129:104–106. <https://doi.org/10.7326/0003-4819-129-2-199807150-00007>

46 Scott P et al. Measles Vaccination in HIV-Infected Children: Systematic Review and Meta-Analysis of Safety and Immunogenicity. *Oxford Journals Medicine & Health The Journal of Infectious Diseases*. Volume 204, Issue suppl 1.pp. S164–S178. <https://doi.org/10.1093/infdis/jir071>

The heterogeneity I<sup>2</sup> value is defined as the proportion of the total variation in estimated risk ratios due to between-trial heterogeneity rather than to chance.

49 Grading of scientific evidence – table V: Measles revaccination of HIV-infected children receiving highly active antiretroviral therapy. Available at [http://www.who.int/immunization/policy/position\\_papers/measles\\_grad\\_hiv\\_revac.pdf](http://www.who.int/immunization/policy/position_papers/measles_grad_hiv_revac.pdf)

51 Sukumaran L et al. Adverse Events Following Measles, Mumps, and Rubella Vaccine in Adults Reported to the Vaccine Adverse Event Reporting System (VAERS). 2003–2013. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*. 2015 May 15;60(10):e58. <https://doi.org/10.1093/cid/civ061>

52 Gao J et al. Epidemic of measles following the nationwide mass immunization campaign. *BMC*

# National Sources of Evidence



# National Sources of Evidence

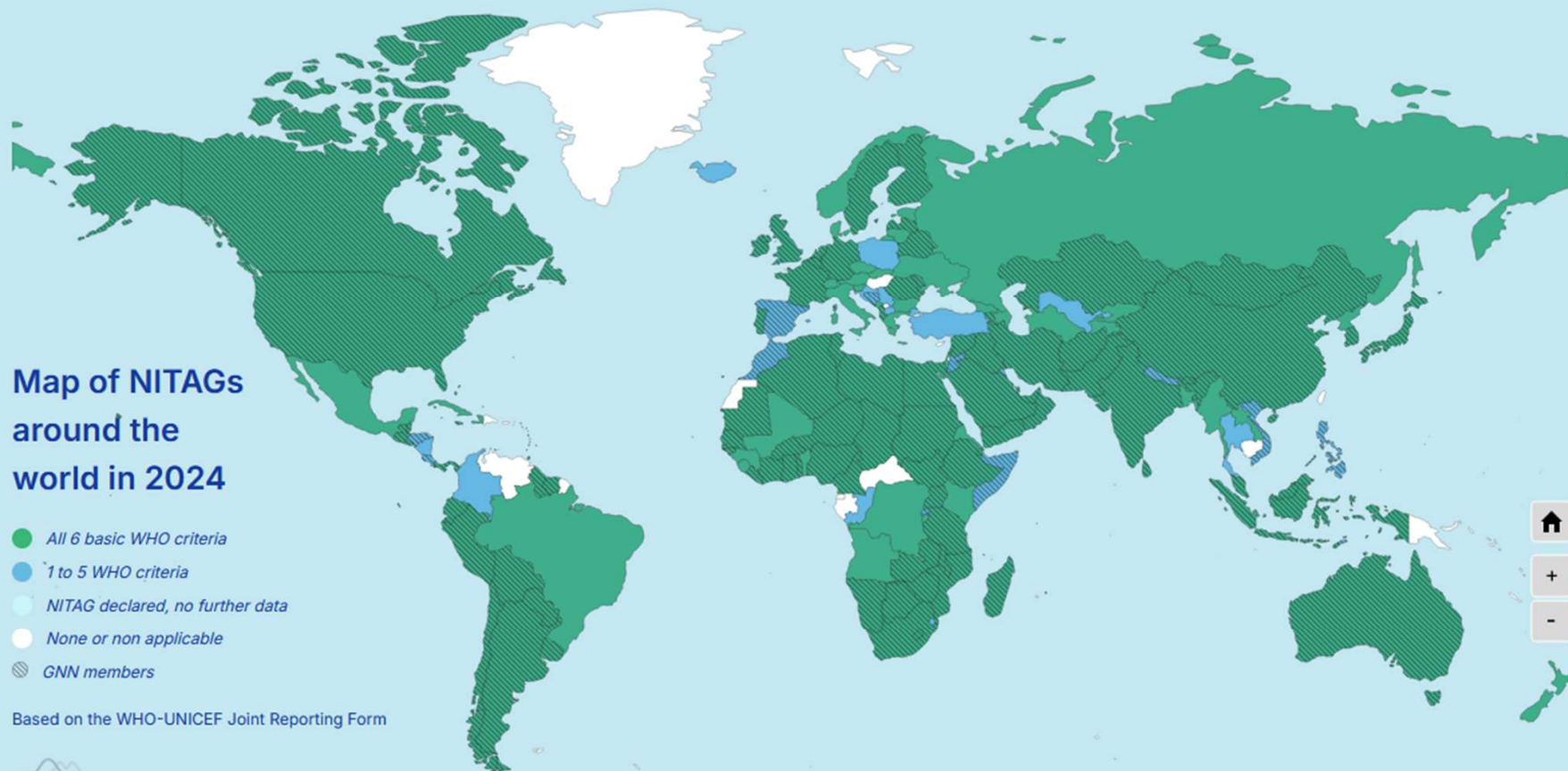
## National Health Agencies, Institutions and Ministries of Health

- Conduct research and collect epidemiological data
- Produce reports that highlight epidemiological trends, help to monitor VPDs and control disease outbreaks



**Uganda Virus Research Institute**  
REPUBLIC OF UGANDA

# National Sources of Evidence,2



NITAG in numbers



182 reported NITAGs



151 meeting the 6 criteria



120 GNN members

# Evaluating the Quality and Relevance of Evidence

## Methodology Assessment

Evaluating the **methodology** used in studies is crucial for determining the reliability of evidence. A well-designed methodology enhances the validity of findings.

## Sample Size Consideration

The **sample size** of a study impacts its statistical significance and applicability. Larger sample sizes generally yield more reliable results.

## Applicability of Findings

Assessing whether the findings of a study are **applicable to a specific context** is essential for effective decision-making. Contextual relevance enhances the utility of evidence.

# Evidence Integration

- Global, regional, and national evidence for informed decision making
- Utilize various sources of evidence
- Decision making must be:
- Evidence-based; and
- Based on the latest scientific data available and best practices

# Select Links / URLs

Africa CDC

<https://africacdc.org/>

GAVI, the Vaccine Alliance

<https://www.gavi.org/>

Global NITAG Resource Center

<https://www.nitag-resource.org/>

International Vaccine Institute

<https://www.ivi.int/>

Map of NITAGs around the world

<https://nitag-resource.org/network/map>

National Institute for Communicable Diseases

<https://www.nicd.ac.za/>

# Select Links / URLs, 2

NISH LibGuides

<https://health.uct.ac.za/nish/libguides-general>

Regional Technical Advisory Groups on Immunization (RITAGs)

[https://www.who.int/teams/immunization-vaccines-and-biologicals/policies/regional-technical-advisory-groups-on-immunization-\(ritag\)](https://www.who.int/teams/immunization-vaccines-and-biologicals/policies/regional-technical-advisory-groups-on-immunization-(ritag))

UNICEF

<https://www.unicef.org/>

US CDC

<https://www.cdc.gov/index.html>

UK. The Joint Committee on Vaccination and Immunisation (JCVI)

<https://www.gov.uk/government/groups/joint-committee-on-vaccination-and-immunisation>

Vaccine Evidence Compendium

<https://www.nitag-resource.org/compendium>

World Health Organization. Vaccine Policy Papers

<https://www.who.int/teams/immunization-vaccines-and-biologicals/policies/position-papers>

# Acknowledgement

This presentation was partly adapted from:  
*Mwenda, Jason. Sources of Evidence Relevant to  
NITAGs' work.*

4th Annual Vaccinology Course for National  
Immunization (AVCN), 2014. [Unpublished]



# Thank You! Merci! Shukran

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