

Comprehensive training

28 June – 21 July 2022

HOSTED BY GAVI, WHO, UNICEF & US CDC



Public Health and Social Measures for managing epidemics and epidemic risk

Eva Rehfuess

Chair of Public Health and Health Services
Research

LMU Munich – Pettenkofer School of
Public Health



Outline

1. Public Health and Social Measures (PHSM)
 - a. Definition
 - b. Problem Statement
2. PHSM Concept
 - a. Aims
 - b. Measures and Mechanisms
 - c. Further Key Aspects
3. Example: School Measures
4. Key Messages with Regards to PHSM





Learning Objectives

Participants will...

- Understand what PHS M are and what their role in managing epidemics is.
- Understand how PHS M can be conceptualized.
- Apply the concept of PHS M in an example.



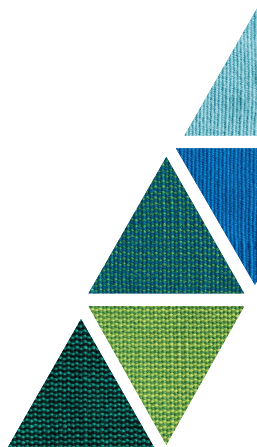


Definitions

Public Health and Social Measures (PHSM):

Are measures or actions by individuals, institutions, communities, local and national governments and international bodies to slow or stop the spread of an infectious disease, such as COVID-19.

Examples: face masks, ventilation, vaccination, lockdowns.





Problem Statement

- **PHSM:**

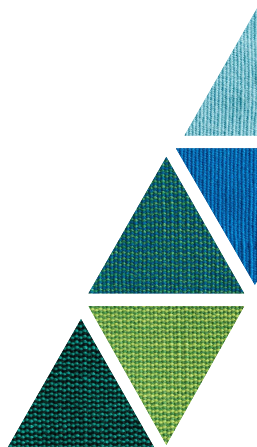
- Essential for managing epidemics and epidemic risks.
- Defined, planned and implemented very differently.

- **Consequences:**

- Lack of evidence on effectiveness.
- Insufficient attention paid to unintended consequences.
- No agreed tools for decision-makers and practitioners.

- **Need:**

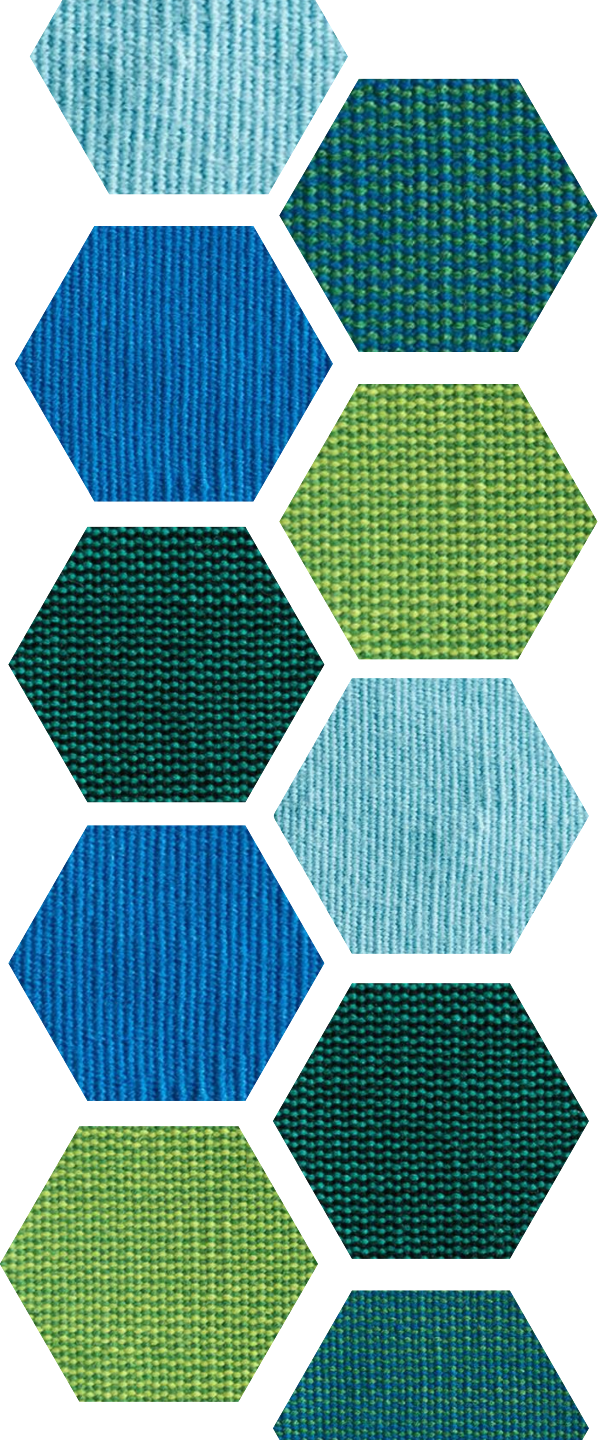
- Shared language and understanding of PHSM.





From the field: 1.COVID-19 School Measures

- **Challenge:**
- School measures have been implemented worldwide.
 - Variation in packages of measures and their mode of implementation.
 - Variation in educational settings, populations targeted and context.
 - Unclear definitions, e.g. "mandatory masks": Who wears which type of mask in which situation?
- How can we know what works (best)?
- How are school measures affected by vaccination?



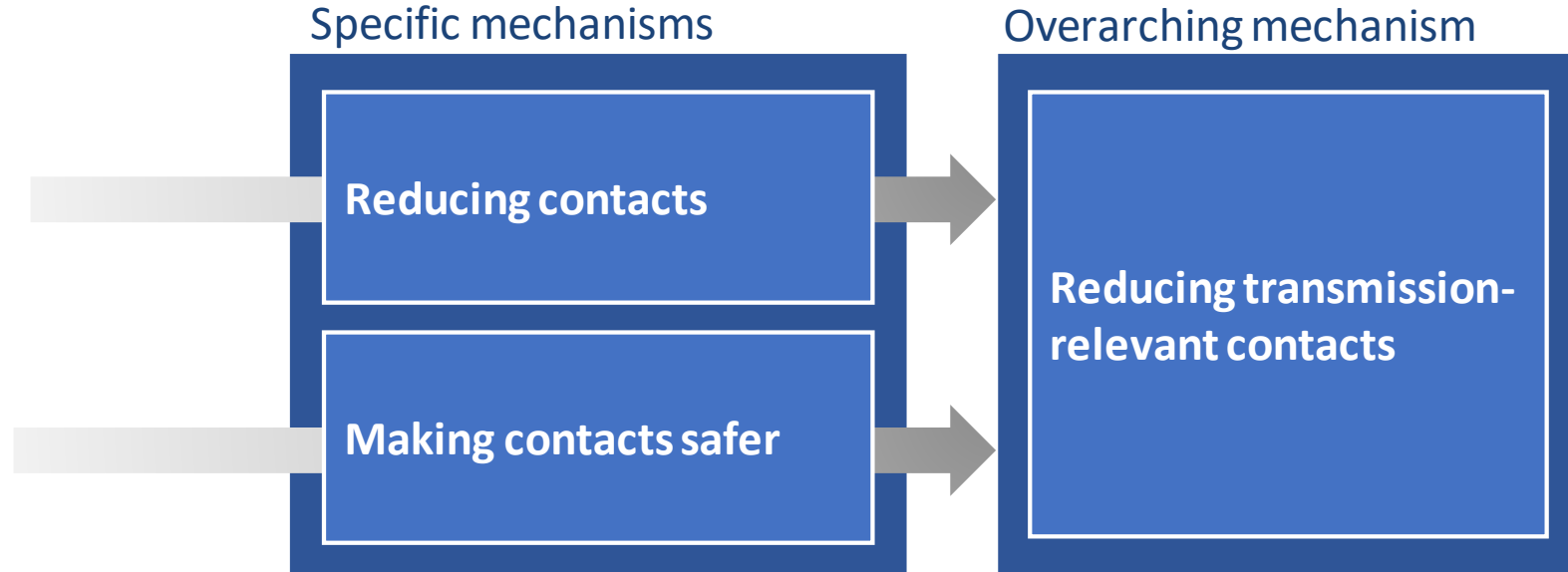
What are the aims of PHSM?

- Reducing transmission
- Addressing unintended consequences



PHSM – Measures and Mechanisms

What are the mechanisms?



All PHSM operate through two basic mechanisms.

This principle applies with both airborne (e.g. SARS-CoV-2) and other modes of transmission (e.g. Ebola).



PHSM – Measures and Mechanisms

Reducing contacts



Making contacts safer

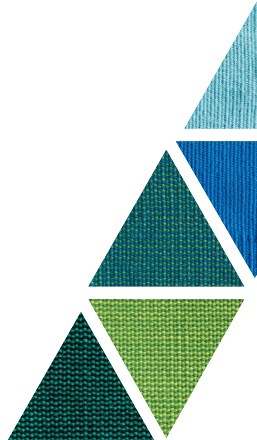


Reducing contacts and making contacts safer



PHSM – Further Key Aspects

- ***How?*** (Mode of Enactment)
 - Facilitating uptake
 - Enforcing uptake
- ***To Whom?*** (Population)
- ***Where?*** (Settings)
- ***Outcomes***
 - Transmission-related
 - Unintended consequences-related





From the field: 2.COVID-19 School Measures

- Why? *e.g.: reducing transmission in school*
- What? *e.g.: hand hygiene (or school closure)*
- How? *e.g.: restricting choice by making it mandatory*
- To Whom? *e.g.: students, teachers, school staff*
- Where? *e.g.: in primary schools*
- Outcomes? *e.g.: fewer cases and hospitalisations*





From the field: 3.COVID-19 School Measures





PHSM Guiding Principles

3 Guiding Principles for Practitioners

1. PHSM are essential in managing epidemics and epidemic risk.
2. PHSM operate through two basic mechanisms: reducing contacts and making contacts safer.
3. PHSM operate as packages and have to be adapted to population, setting and epidemic situation.



Adaptations for different environments



- **Individuals:** practice frequent hand hygiene, physical distancing, respiratory etiquette, use of masks if ill or attending to someone who is ill, and environmental cleaning and disinfection at home.



- **Communities:** Reduce crowding, limit access to, or close public spaces, restaurants, sporting events, sports clubs, entertainment venues, places of worship, or venues with limited ventilation



- **Governments:** Communicate risk, policy and plans, regularly and often • Develop strategies and products to counter mis-information and myths • Engage with communities in decision-making and to strengthen engagement for public health measures • Identify local networks and engage communities, businesses, religious leaders, and local influencers; • Support police and security forces to ensure clear role and avoid mishap



Key References and Resources

- World Health Organization. (2021). **Considerations for implementing and adjusting public health and social measures in the context of COVID-19: interim guidance**, 14 June 2021. World Health Organization. <https://apps.who.int/iris/handle/10665/341811>.
- Krishnaratne S, Pfadenhauer LM, Rehfuess E et al. **Measures implemented in the school setting to contain the COVID-19 pandemic: a scoping review**. Cochrane Database Syst Rev. 2020 Dec 17;12:CD013812. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013812/full>
- Kratzer S, Verboom B, Biallas R, Featherstone R, Klinger C, Movsisyan A, et al. **Unintended consequences of measures implemented in the school setting to contain the COVID-19 pandemic: a scoping review**. Cochrane Database of Systematic Reviews, in press.



Group work



Group Exercise

Design a 20-minute group exercise that can be done virtually in breakout groups, keeping in mind that breakout groups will be done by language (English and French) and if you need facilitators, provide facilitator guidance.

Key exercise components to include:

- Objective of group exercise with linkage to lecture (PPT format)
- Agenda
- Facilitator guide
- Instructions for participants
- Design of group activity (including any templates for reporting)
- Example materials or data
- Tools you want to use (Slido, Google Slides and Miro are supported)
- Number of people needed to support this exercise and roles (including language ability)
- Special technical requests (e.g. play video)

To be developed.

We will ask participants to place a selection of measures on the graph displayed in SLIDE 12 – this will hopefully lead to a lot of interesting discussions regarding whether measures address individuals vs. populations and reduce contacts vs. make contacts safer.

