Conceptual framework for public health and social measures in the context of infectious disease transmission

VERSION AS OF FEBRUARY 2024
Why is a conceptual framework for public health and social measures important?

During the COVID-19 pandemic, inconsistencies in defining and categorizing public health and social measures (PHSM) hampered policy monitoring, research and communication efforts.

To address this, WHO and partners developed a conceptual framework for PHSM to harmonize the understanding and language used to describe how they work during health emergencies.

The PHSM conceptual framework aims to:

- Guide coordinated, interdisciplinary research on PHSM effectiveness, unintended consequences and uptake and adherence.
- Facilitate coherent, comparable PHSM policy monitoring.
- Inform equitable, balanced and context specific PHSM decision-making and implementation.
# What is the PHSM conceptual framework?

## The PHSM conceptual framework applies a “complex systems lens” to describe:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Implementation considerations</td>
<td>A holistic view of PHSM implementation</td>
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<tr>
<td>Contextual factors</td>
<td>Emphasis on the dynamic and multi-sectoral nature of PHSM</td>
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<tr>
<td>Transmission-related outcomes</td>
<td>Use of a multi-level approach, with each layer becoming more detailed</td>
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<tr>
<td>Unintended consequences</td>
<td>Harmonized definitions and a high-level categorization of PHSM for multiple hazards</td>
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## Principles underlying the framework:

- The framework is the conceptual basis for a suite of tools to support PHSM decision-making, monitoring and research developed under the umbrella of the [WHO Initiative to measure effectiveness and impact of public health and social measures during health emergencies](https://www.who.int).
How was the PHSM conceptual framework developed?

1. Initial draft*:
   • Developed by WHO and the University of Munich
   • Based on a review of existing taxonomies and frameworks
   • Applied COVID-19 as a use case

2. Iterative consultation:
   • Involved PHSM experts from academia, policy and practice
   • Workshop at the “Building coalitions for strengthening PHSM” meeting
   • Feedback from PHSM focal points at WHO

3. Continued adjustments:
   • Treated as a living document to reflect emerging insights and developments

Updated conceptual framework for public health and social measures

FIRST LEVEL

PHSM first-level categories
- Active case finding and contact identification measures
- Personal protection measures
- Environmental measures
- Social measures
- International travel and trade measures

Operating mechanisms
- Measures reducing exposure
- Measures making exposure safer

PHSM implementation package
- Enabling functions
- Bundle of context-specific PHSM
- Mitigation measures

Uptake and adherence
- Transmission-related outcomes
- Health, social and economic consequences

Pathogen characteristics

Contextual factors
- Principles guiding the decision and implementation stages

Monitoring and evaluation of PHSM implementation
- Situation analysis using epidemiological data, behavioural and infodemic insights
Updated conceptual framework for public health and social measures
## Categories of public health and social measures

<table>
<thead>
<tr>
<th>First-level PHSM category</th>
<th>Definition</th>
<th>Examples</th>
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</table>
| Active case-finding and contact identification measures | Systems and actions implemented to identify, track and manage potential and confirmed cases of disease; these may include case-finding, testing and contact tracing, as well as isolation (i.e. to separate individuals with a confirmed or suspected infection) and quarantine (i.e. to separate individuals at high risk of infection from those who are likely to already be infected) | • Testing  
• Screening  
• Isolation  
• Quarantine |
| Personal protection measures              | Measures comprising the use of personal protective equipment as well as specific behaviours that reduce the risk of individuals transmitting the disease or becoming infected with a pathogen with epidemic or pandemic potential | • Hand hygiene  
• Respiratory etiquette  
• Condom use  
• Safe food handling  
• Bednet use |
| Environmental measures                    | Measures targeting the physical infrastructure/environment including the human–animal interface through modifications, re-purposing and/or appropriately maintaining existing or newly set up structures to limit transmission of a pathogen with epidemic or pandemic potential | • Ventilation  
• Surface cleaning  
• Water and sanitation measures  
• Solid waste management  
• Window and door screens |
| Social measures                           | Measures at national and subnational levels comprising (i) modifications to social interactions between individuals and groups of people; (ii) adaptation, cancellation or modifications to the timing of services or activities; and (iii) adaptations or restrictions to movement within and between specific settings and within or across national borders | • Physical distancing  
• Modification of mass gatherings  
• School measures  
• Business measures  
• Domestic movement restrictions |
| International travel and trade measures   | Measures that use a risk-based approach to reduce the travel- and trade-associated exportation, importation and onward transmission of a pathogen with epidemic or pandemic potential across borders<sup>a</sup> | • Travel advice  
• Entry and exit screening  
• Quarantine on arrival  
• Travel bans  
• Testing before departure and upon arrival |
