



# Non pharmaceutical countermeasures against pandemic influenza

5.1.2e


, Expert Influenza, VPI Disease Programme  
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## Expert opinion document



### Objectives of document:

- Summarise evidence on effectiveness of Non-pharmaceutical countermeasures (NPCs) in reducing risk and transmission of human pandemic influenza
  - Provide options for action for each NPC in the case of an influenza pandemic
  - Identify gaps in research
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## Non-pharmaceutical countermeasures

1. Personal protective measures	2. Social distancing measures	3. Environmental controls	4. Travel-related measures
Hand hygiene	Isolation of ill	Surface cleaning	Travel advice
Respiratory etiquette	Quarantine of exposed	Ventilation	Border closures
Facemasks	School closures		Entry and exit screening
Respirators	Workplace measures		Domestic travel restrictions
Other PPE	Mass gathering measures		

- Objective
- Rationale
- Evidence-base of effectiveness
- Operational considerations
- Acceptability
- Options for action



ECDC expert opinion on non-pharmaceutical interventions (not yet published)

## Considerations



- Limited, sometimes indirect or weak evidence on effectiveness for some measures
- Stronger evidence for few measures and sometimes not showing benefit
- Timing and duration of implementation may influence effectiveness
- Early in the pandemic and with longer duration, more effective (but not too early because of socioeconomic cost)
- Acceptability and compliance is variable and may increase during pandemic
- Layered-combined approach is supported by the evidence

## Amendments from previous version



- Applied a quality of evidence rating on the identified reviews (AMSTAR2);
- Added table 3 "Potential model for combining NPCs according to the pandemic severity assessment";
- Strengthened language on recommendations as "ECDC expert opinion";
- Revised Table 2: "Summary of ECDC expert opinion on non-pharmaceutical countermeasures" ;
- Slightly revised structure of chapter on "Use of facemasks and respirators";
- Described in Methods the role of the EU/EEA MS pandemic planning colleagues in reviewing the draft Expert opinion.

## Use of NPCs during the SARS-CoV-2 epidemic



- Technical report with options for action of NPCs to delay and mitigate the impact of COVID-19 (Publication: February 10)

<https://www.ecdc.europa.eu/en/publications-data/guidelines-use-non-pharmaceutical-measures-delay-and-mitigate-impact-2019-ncov>

- Current expert opinion- valuable tool
- Use of evidence base to provide options
- Consider feasibility, socioeconomic and acceptability issues

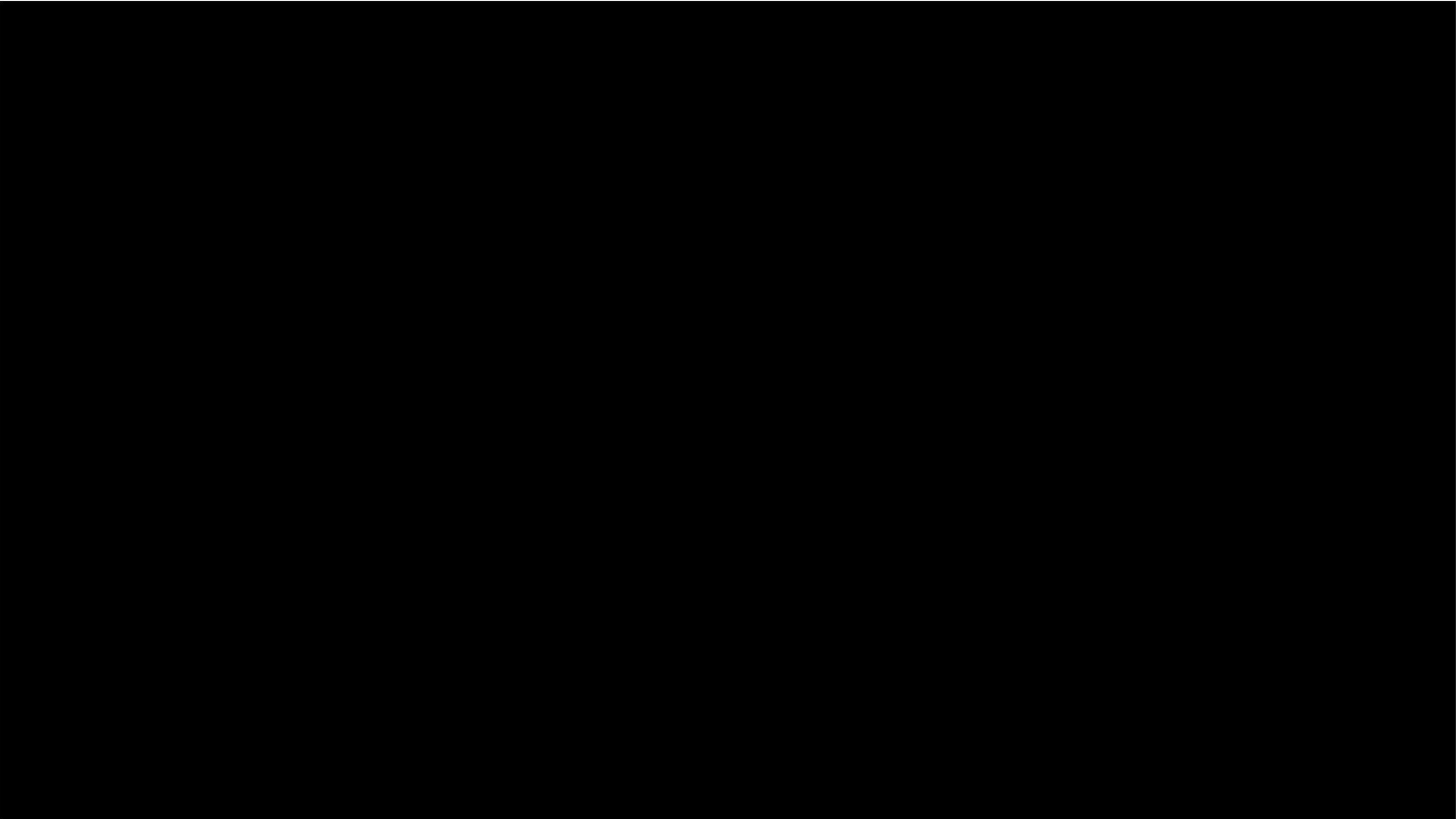


**Thank you for your attention!**

## Categories of NPCs



- Personal protective measures
- Social distancing measures
- Environmental controls
- Travel- related measures



## Personal protective measures



- Hand hygiene: supported at all times, although conflicting evidence
- Respiratory etiquette: supported at all times, although limited evidence
- Facemasks: supported for infected people or people in high risk of infection – may be considered for wider population in severe pandemics
- Respirators: supported for use in health care settings (HCSs) – evidence does not support wide use instead of masks
- Other personal protective equipment: supported for use in HCSs

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## Social distancing measures



- Isolation of ill: supported at all times
- Quarantine of exposed: supported during pandemics, esp. of higher severity
- School closures (reactive/proactive): supported to moderate-high impact situations – decision on duration and timing
- Workplace measures: teleworking/interpersonal distancing supported, closures may be considered in exceptional cases
- Mass gatherings: indirect supportive evidence, cancellation, re-arrangements, postponements based on risk assessment

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## Environmental measures



- Surface cleaning: indirect supportive evidence – supported at all times
- Ventilation: indirect supportive evidence – supported at all times
- UV/humidification: not supported, lack of evidence – safety concerns

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## Travel related measures



- Travel advice: supported, although no evidence of effectiveness
- Entry and exit screening: not supported due to low sensitivity of available systems
- Domestic travel restrictions: supported in early pandemic phases esp. in high impact situations
- Border closures: may be considered at early pandemic phases only in specific contexts, e.g. small island nations but undesirable due to socioeconomic cost

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## Knowledge gaps



- Influenza transmission
- Influenza diagnosis
- Hand hygiene
- Respiratory hygiene and other PPEs
- Environmental measures
- Social distancing measures
- Border control
- Social behaviour and legal aspects

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## Future directions



- Include NPCs in pandemic preparedness plans
- Improve monitoring during regular seasons to enhance mechanisms for NPC implementation during pandemics
- Address knowledge gaps with research

## Guidance documents

- WHO guidance published in 2019
- Public consultation of Expert Opinion - publication in 2020