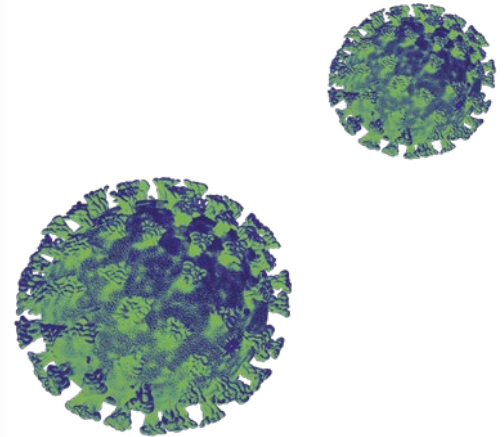


# Infection prevention and control (IPAC) measures applied in education and childcare settings for children: a summary

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Public Health Wales (PHW)





This presentation is based on a  
report produced by the  
**Wales COVID-19 Evidence Centre  
(WCEC)**



**Our reports are available from the WCEC Website:**

<https://healthandcareresearchwales.org/about-research-community/wales-covid-19-evidence-centre>

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# Question Background

The role played by children and educational settings in the community transmission of COVID-19 has been a constant concern throughout the pandemic.

A range of IPAC measures have been introduced in schools and education settings worldwide.

Investigating the effectiveness of these measures in order to determine which measures should remain in place as restrictions are eased is critical for informing Welsh Government infection control strategies.

# Aim

To identify, appraise and synthesise the evidence from **secondary research** evaluating the effectiveness of IPAC measures applied in education and childcare settings.

# Extent of the evidence

Preliminary searches identified 2 rapid reviews and 8 *ongoing reviews*. Findings from one RR and one ongoing SR summarised:



National Collaborating Centre  
for Methods and Tools

Centre de collaboration nationale  
des méthodes et outils

## **Living Rapid Review (NCCMT 2021)**

Based on a strict selection criteria / Updated regularly  
Critically appraised and found to be of good quality



## **Ongoing Rapid review (Krishnaratne et al. 2021)**

Expected to follow robust and rigorous methodology  
Relevant outcomes

**Aim:** explore the specific **role of daycare and school settings** in Covid-19 transmission.

**Population:** children and adolescents (**1-18 years**)

**Evidence:** up to **July 22, 2021**

**Included:** 3 syntheses and 6 primary studies  
(1 cluster RCT, 5 observational studies)

**Overall certainty of evidence is low (GRADE)**  
“findings are likely to change as more evidence accumulates”

## Reduced Risk Of transmission

Adhered IPAC  
Measures in  
PS and DCS

Multicomponent  
approaches



Secondary  
Schools (SS)



**RESTRICTED  
AREA**  
**NO  
ENTRY**

**CANCELLED:**  
ALL AFTER-SCHOOL  
ATHLETICS/EXTRACURRICULARS



Outdoor  
Instructions



Daily Symptoms  
Screening

## Inconsistent Findings



Primary  
Schools (PS)



Class Size



Improved  
Ventilation



Increased Risk of transmission



## Hybrid/part-time in-person learning

- Greater likelihood of students engaging in extracurricular activities outside of school (more mixing)
- USA study
- Not peer-reviewed

Krishnaratne , S., Littlecott , H., Coenen , M., et al. (2021) **Measures implemented in the school setting to contain the COVID-19 pandemic: a rapid review.**

## **Review Questions:**

1. What are the implications of these measures for non-transmission-related outcomes (e.g. healthcare utilization, broader health outcomes, and economic, societal, and ecological outcomes)?
2. How are these measures implemented within the school setting?

# Areas of Uncertainty / Evidence Gaps

Most of the available evidence from the **USA**  
– may limit generalisability of findings to Welsh context

Many of the emerging studies are **pre-prints/not peer reviewed**  
– caution when interpreting evidence

Unclear what effect the **Covid vaccine and alert level zero** changes  
will have on compliance with IPAC measures

No evidence on the effect of IPAC measures on **other outcomes** such as:  
children's hospitalisation rates, school days lost, mental health and wellbeing,  
and pre-school child development, or outcomes relating to consistency in implementation

Limited evidence related to **variants of concern** or impacts on  
**hard-to-reach populations and special education settings**

# Policy Implications

Strategies based on a **multicomponent approach** and in line with the **local pandemic situation**, should be considered when planning IPAC measures for schools and education settings.

Further **well-designed higher quality studies**, especially from the UK or other European countries, needed to better understand the effect of IPAC measures in schools and daycare settings.





Wales COVID-19  
Evidence Centre  
Canolfan Dystiolaeth  
COVID-19 Cymru

**RE**search

**GENE**ration

**A**ssimilation

**T**ransfer

**E**MBEDDING



Ymchwil Iechyd  
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*The WCEC and authors of this work declare that they have no conflict of interest.*



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