

# COVID-19 in children and schools

Preparedness and Response  
27 August 2020

## Q & A on COVID-19 in children aged 0 – 18 years and the role of school settings in COVID-19 transmission



### 1. How likely are children to catch and transmit the virus in school settings?

School outbreaks have not been a prominent feature in the COVID-19 pandemic, mostly due to the fact that the majority of children do not develop symptoms when infected with the virus, or develop a very mild form of the disease.

No evidence has been found to suggest that children are the primary drivers of SARS-CoV-2 virus transmission. However, research has shown that children can become infected, and spread the virus to adults while they are symptomatic.

### 2. When and how will schools be reopened? What are the most important measures for preventing the spread of infection in schools?

Specific measures to observe in school settings are increased physical distancing, improved ventilation, regular hand-washing, and the use of masks when feasible. These measures will probably reduce transmission of the virus in schools and help to mitigate the impact of other respiratory infections during the upcoming autumn and winter season, thereby reducing pressure on schools and healthcare facilities. Check with your national health and education authorities for more information.

### 3. Is it safe for my child(ren) to go back to school?

It is generally recognised that schools need to reopen for children to have a suitable learning environment and to mitigate the unintended negative social effects of school closures.

So far, the available evidence suggests that schools are no different to any other communal environment in terms of the risk of spreading the virus.

While there is evidence of transmission from adults to children in household settings, there is little evidence of this occurring within school environments.

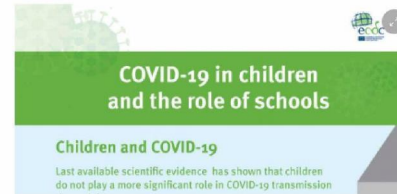
For more information on evidence found in children's households, see an indication that they are less susceptible to receive

## Infographic: COVID-19 in children and the role of schools

Infographic  
6 Aug 2020



This infographic is based on the ECDC technical report on COVID-19 in children and the role of school settings in COVID-19 transmission.



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### COVID-19 transmission in schools

ECDC has published an overview of the epidemiology and disease characteristics of COVID-19 in children and the risk of transmission in school settings.

[Read more](#) →

Coronavirus disease (COVID-19)

COVID-19: Transmission in schools

COVID-19: Guidance on cruise ships

Call for ECDC Fellowship Programme



## COVID-19 in children



- <5% of overall COVID-19 cases reported in the EU/EEA and UK are among children 0-18 years
- Most commonly reported symptoms in children: fever and cough
  - Other: gastrointestinal issues, sore throat, shortness of breath, nasal congestion, headache
  - Children much more likely to have mild symptoms or no symptoms
- Symptomatic children shed virus in similar manner to symptomatic adults
  - Unknown if children transmit the infection to an equal extent



## COVID-19 in children



- Proportion of hospitalised:
  - Lowest in age groups 5-11 years (3%) and 12-18 years (4%)
  - Highest among 0-4 year olds (10%)
- Deaths in children extremely uncommon
  - 6 deaths of the 19 654 cases in TESSy (0.03% crude case fatality rate)
  - All-cause mortality among 0-14 year olds in Euromomo has not exceeded background rates



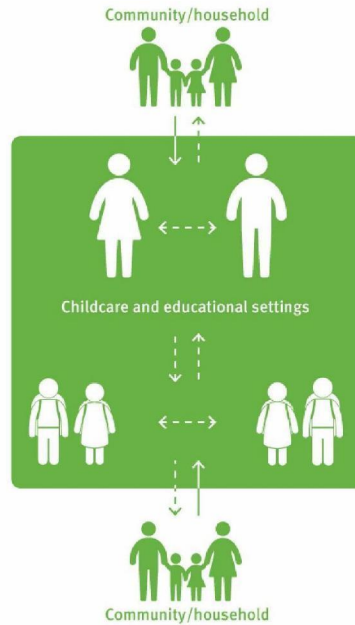
## COVID-19 in schools



- ECDC collected data from Member States and conducted follow-up interviews with selected countries about outbreaks in schools
  - 6 countries reported clusters in schools of limited size and involved only a few secondary cases
  - 10 countries did not have strong indications of child-to-adult transmission within schools
  - 1 country reported knowledge of a single event in which one child transmitted infection to the parents (in household setting)
  - Secondary transmission within the school setting itself was considered rare

## COVID-19 in schools

Diagram of known transmission routes between children and adults within childcare and educational settings and between the community/household



## Impact of school closures on health and well-being of children



- Disrupted learning opportunities, exacerbation of disparities, mental health issues, increased risk of domestic violence
  - Children from vulnerable and marginalised populations are at even higher risk
- Disruption in opportunity to engage and learn from peers results in depression, guilt, and anger in children
  - Social withdrawal, isolation
- Virtual/digital learning is not ideal for young(er) children
- Children with disabilities lose access to support



## Results



- Member States should have preparedness plans to help schools make rational decisions about school re-opening/closing depending on community outbreaks
  - Need operational research to understand and optimise approaches to re-opening schools
  - Need assessments of efficacy and compliance of IPC measures in school settings across age groups
  - Need formal assessments of high-level school-specific measures such as limiting class sizes and movement of groups of students
- Mitigation measures should be in place in both the community and school settings to prevent unnecessary harmful school closures





**Thank you**