

ECDC communication toolkit to support infection prevention in schools

Focus: Gastrointestinal diseases

Toolkit: List of key preventive measures – Schools

- This list of key preventive measures is based on the ECDC technical report on ‘Prevention of Norovirus Infection in Schools and Childcare Facilities’¹, a guideline adaptation and review developed to support public health practice and promote gastroenteritis infection prevention (in particular Norovirus) in schools and childcare settings.
- These key preventive measures are the basis of the key messages of the communication materials of the ECDC toolkit on gastrointestinal disease prevention in schools.
- Priority audiences to address when promoting these measures are indicated in the table below.

¹ ECDC technical report ‘Prevention of norovirus infection in schools and childcare facilities’ (<http://ecdc.europa.eu/en/publications/Publications/norovirus-prevention-infection-schools-childcare-facilities.pdf>).

Key preventive measures	Priority audience addressed (who needs to know)				
	Health authorities	School authorities	Teachers and parents	Children	School staff
KNOWLEDGE ABOUT GASTROENTERITIS					
Provide education to the school community on the modes of transmission of gastroenteritis, as well as signs and symptoms. Key information includes:					
<ul style="list-style-type: none"> Modes of transmission: hand-to-mouth / person-to-person, aerosolised particles, foodborne. Infants, children and vulnerable individuals can be at risk from dehydration and its complications. High virulence and infectivity (i.e. for norovirus). 	✗	✗	✗	✗	✗
HAND HYGIENE					
Emphasise the principles of correct hand hygiene as a key measure to prevent transmission: Thorough hand washing and drying, because people may be carrying infective organisms on their hands, even when not unwell themselves.	✗	✗	✗	✗	✗
Ensure availability of hand washing facilities in appropriate locations:					
<ul style="list-style-type: none"> Provision of sinks with running water, liquid soap dispensers and disposable paper towels in all necessary areas (e.g. kitchen and food preparation areas, toilets, etc.). Toilets and toilet seats should be visibly clean, with sufficient toilet roll and nearby hand washing facilities. Facilities should be inspected and cleaned at regular times. 	✗	✗	✗	✗	✗

HAND HYGIENE	Educate when to wash hands:	<ul style="list-style-type: none"> • Wash hands after using the toilet, before and after touching/handling/preparing food (eating) and after having been outside / playing. • Ensure hand washing practices – routines. 				
	Educate how to wash hands:	<ul style="list-style-type: none"> • Adequate duration: Proper hand-washing usually takes around 20-60 seconds. • Liquid soap applied to all hand surfaces and drying hands completely using disposable towels. 				
		<ul style="list-style-type: none"> • Refer to the WHO hand washing procedure as endorsed method (see http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf, figure II.2, p. 156) – Running water (not hot) to wet hands, liquid soap applied from dispenser, sufficient to cover all hand surfaces, thorough rub over entire hand surface, rinse, disposable paper towel used to dry hands, elbow or paper towel to close tab. 				
		<ul style="list-style-type: none"> • Alcohol-based hand gels / hand sanitizers should not be regarded as a substitute for washing with soap and water (they only have a role when hand washing facilities are not available; hand washing is always the required method if hands are visibly soiled). 				
		<ul style="list-style-type: none"> • Demonstrate how to wash hands (teachers & parents). 				
	Other occasions for hand washing for specific audiences are:	<ul style="list-style-type: none"> • After potty or nappy changing (e.g. in childcare facilities). • After contact with contaminated surfaces such as rubbish bins, cleaning cloths. 				

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It is advised that pre-school children are supervised on how (and when) to wash and dry their hands.			✗		
Inform that using protective gloves does not replace the need for hand washing and drying (skin may become contaminated through tears, or when removing gloves).		✗			
• Hands to be washed before applying and after removing PPE. ²					
ISOLATION AND EXCLUSION OF AFFECTED INDIVIDUALS					
Emphasise the need for immediate separation from the group/class and sending home of individuals – children and staff – with diarrhoea and vomiting until symptom free for 48 hours. This helps to minimise contact with persons during the most infectious periods of their illness.		✗	✗	✗	
Have clear written policies that state when to stay at home and communicate these to parents/guardians to enhance compliance.		✗	✗		
Ensure appropriate parent notification.		✗	✗		
Have staff sick policies that do not compel staff to return to work too early.		✗			
ENVIRONMENTAL CLEANING AND DISINFECTION					
Educate and train cleaning staff on adequate cleaning and disinfection procedures.		✗		✗	

² PPE: Personal protective equipment

ENVIRONMENTAL CLEANING AND DISINFECTION	<p>Adequate cleaning and disinfection (general and during an outbreak) includes:</p> <ul style="list-style-type: none"> • A documented schedule of when and where to clean (responsibilities / signatures / dated when performed). • Adequate provision of appropriate materials, e.g. detergent, cleaning equipment, gloves and other PPE, effective disinfectants. • Appropriate methods for cleaning (including separate equipment used for different areas and appropriate cleaning, drying and storing, or disposing of equipment after use). Use of gloves for cleaning. • Daily cleaning of toilets and bathroom fittings and frequently contacted surfaces, e.g. tables. • Use detergent and water for general environmental cleaning, thorough drying needed. Change cleaning utensils at regular intervals. • Provide information on how to manage spillage of body fluids, including use of PPE (single-use gloves and aprons for circumstances where the staff member is likely to come into contact with faeces or vomit –some guidelines also advise use of surgical filter masks on this occasions–, and also when cleaning or nappy changing or other contact with an ill child where hands or body are likely to be contaminated). • Proper cleaning is needed before disinfection. • Appropriate disinfectant use. • Lined pedal bins should be placed in specific areas (e.g. kitchens, bathrooms); the disposable bin-liner sealed and discarded at a regular schedule. • Terminal cleaning and disinfection after an outbreak (more details below). 	    
		<p>Staff and parents should be encouraged to raise concerns about the level of cleanliness when felt justified.</p>

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FOOD HYGIENE / CATERING STANDARDS					
Ensure and document appropriate food hygiene and catering standards, e.g. according to Hazard Analysis and Critical Points (HACCP) principles or other instructions given by local health protection authorities.	✗	✗			✗
Educate all food handlers / catering staff on hand hygiene, correct food safety, storing, handling and preparation. In addition:	✗	✗	✗		✗
<ul style="list-style-type: none"> • Food handlers should not be involved in child toileting / nappy changing. • Access to food preparation areas shall be restricted to catering and kitchen staff. 					
DEALING WITH OUTBREAKS					
Ensure that schools have the necessary resources and information to prevent and manage outbreaks, e.g. a documented outbreak response plan.	✗	✗			✗
Early recognition and notification of an outbreak to public health/ environmental authorities: Authorities should be notified when 2 or more cases of diarrhoea and/or vomiting occur at the school in a 24 hour period (refer to the ECDC technical report for more information on notification and assessment of a suspected outbreak).					
<ul style="list-style-type: none"> • Have clear information on when to declare an outbreak. • Health protection team should be contacted to assess and investigate the situation. They should, if deemed appropriate, provide advice on infection control precautions and contact other organisations to coordinate specimen collection and diagnostic testing. 					

DEALING WITH OUTBREAKS	<p>During an outbreak the responsible staff in the school should:</p> <ul style="list-style-type: none"> • Focus on infection control and documentation of outbreak characteristics and measures. • Ensure that all staff understands standard infection control precautions and how to apply them. • Document the trainings/occasions when information on infection control procedures and advice have been given. • Document the outbreak characteristics and organise systematic collection on data (e.g. symptoms, children and staff affected – date of first symptoms, last attendance, when parents were contacted to collect child). • Retain food samples according to HACCP plan or agreement with local health protection authorities for further investigation. • Common dining areas should be closed during an outbreak, but if this is not possible, all areas should be sanitised daily after the end of activities. <p>Implement key infection control measures:</p> <ul style="list-style-type: none"> • Exclusion of affected individuals from groups and classes. • Emphasize importance of hand hygiene. • Environmental cleaning and disinfection – Frequently touched environmental surfaces to be cleaned and disinfected more frequently than the daily cleaning routines (this includes e.g. door handles). 	

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DEALING WITH OUTBREAKS					
Based on own decision or recommendation by the health protection team, terminal cleaning and disinfection before the outbreak is declared to be over (e.g. 72 hours after last diarrhoea and vomiting in environment, following an outbreak).	✗	✗			✗
• Closure of the school may be required to allow for this (decision to be taken in coordination between the facility and the public health/environmental authority).	✗		✗		
Communicate the end of the outbreak to all institutional staff and those involved in the investigation.	✗	✗			✗
Post event review and remediation planning:			✗	✗	✗
• Education and training for staff on the key methods for managing and preventing future outbreaks.					