## ECDC communication toolkit to support infection prevention in schools

Focus: Gastrointestinal diseases

Toolkit: Key messages

**Note:** This list provides a variety of messages indicating what gastroenteritis is, why prevention is important and the key preventive measures. It serves as background for developing specific key messages targeting different audiences (school and health authorities, teachers and parents, children, school staff – canteen, cleaning staff), depending on the concrete focus of communication initiatives. The messages can be used and adapted as appropriate for developing communication materials. Where appropriate, it is indicated in brackets to which particular audience the message can be addressed.

#### **TOP-LINE KEY MESSAGE**

To prevent gastroenteritis from spreading in schools and nurseries, all stakeholders need to engage in preventive measures, of which good hygiene is fundamental.

#### SUPPORT MESSAGES: WHAT IS GASTROENTERITIS

- Gastroenteritis<sup>1</sup> is an inflammatory reaction in the intestinal tract caused by a wide variety of viruses, bacteria or parasites. Germs can spread by one or more of the following routes:
  - food, water;
  - hand to mouth (faecal-oral);
  - person to person (directly or indirectly, e.g. person-contaminated food-person);
  - airborne (through small droplets spread through vomit).
- Gastroenteritis should be taken seriously.
- Gastroenteritis' most common symptoms include usually diarrhoea and/or vomiting. Other symptoms may include nausea, stomach cramps, headaches, moderately high fever of 38-39°. Complications include dehydration: particularly dangerous for infants and babies.
- **Gastroenteritis may be highly contagious**<sup>2</sup> and for example viruses can survive on surfaces for up to several weeks. It is therefore prone to spread easily in confined spaces such as schools.

<sup>1</sup> When preparing messages for specific audiences, terms like 'diarrhoea and vomiting', or tummy bugs (UK) – in the case of messages addressing children – etc. may be more appropriate than the word 'gastroenteritis'.

<sup>2</sup> Depending on target audience, another way of explaining the term may need to be used, e.g. 'very easy to catch'.

#### SUPPORT MESSAGES: WHY PREVENTION IS IMPORTANT

- **Gastroenteritis is easily preventable,** in order to save lives and avoid the spread of disease. Preventive measures are usually inexpensive.
  - Public health officials have a key role to play in preventing gastroenteritis in schools and nurseries by developing guidance and informing all stakeholders on appropriate disease prevention measures. (Health authorities)
  - Education authorities have an important role to play in order to ensure that preventive
    measures are taken into account by the school community and that information is
    conveyed in case of an outbreak. (School authorities)
  - Preventive measures are more likely to produce results when teachers and parents are
    also actively involved in promoting the health of the children. In turn, the child's family
    can also benefit from the health information provided at school. (Teachers / Parents)
- Whether people show gastroenteritis symptoms or not, they can be potential carriers of the disease and can spread infection without knowing it. It is therefore important that everyone regularly follows preventive hygiene measures.
- Gastroenteritis spreads particularly quickly in confined places such as schools. Children suffer particularly because they are more prone to complications such as dehydration than adults, and young children specifically because their immune system is more immature.
- It affects parents and teachers: It puts strains on the parents who worry about their children being ill and have to find solutions for taking care of them, as well as on teachers who cannot follow their teaching programme due to half empty classes. Gastroenteritis also increases absenteeism in the workplace.
- **Burden:** On top of the human and social burden, gastroenteritis also has an economic burden due to absenteeism it causes. Institutions may even be legally liable for not following existing laws and regulations (where applicable depending on the context) on aiding in the control of diseases and protecting children and staff from illness.

#### SUPPORT MESSAGES: HOW TO PREVENT IT

- Effective health promotion programmes in schools are a cost-effective investment in disease prevention for countries. (Health authorities / School authorities)
- It is important that everyone follows preventive hygiene measures (e.g. hand washing, appropriate disinfection of contaminated surfaces, use of gloves by canteen workers and correct food handling, use of light masks and gloves for people cleaning up vomit and other contaminated areas, staying home if infected, etc.).
  - Information should be available for the school communities on the modes of transmission of gastroenteritis, as well as signs and symptoms. (Health authorities / School authorities)

- **Hand hygiene is key:** It is important that everyone is taught and follows the correct hand washing technique, including warm running water, liquid soap<sup>3</sup> and drying hands well with disposable paper towels.
  - Hands should be washed before and after touching/handling/preparing food (eating),
     after toilet use, after having been outside, after contact with contaminated surfaces (e.g. rubbish bins, cleaning cloths).
  - Pre-school children should be supervised when washing and drying their hands.
  - Schools should inform staff 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 should be washed before applying and after removing personal protective equipment.
- Schools need to have adequate supplies of appropriate materials to secure hygienic environments (Health authorities / School authorities) e.g. provision of sinks with running water, liquid soap and disposable paper towels in all necessary areas (e.g. kitchen and food preparation areas, toilets), detergents, virus-inactivating disinfectants, gloves, light masks, etc.
- Information should be given to schools on adequate cleaning and disinfection procedures, as well as adequate food hygiene and catering standards. The compliance with standards should be monitored.

## Adequate cleaning and disinfection

- Education and training of school staff on adequate cleaning and disinfection procedures is important, including a schedule of when and where to clean signatures/dates when performed, detergent and water for general environmental cleaning, allowing for thorough drying, appropriate disinfectant use, detergent cleaning of soiled areas prior to disinfection, sealed disposable waste bags in separate areas, e.g. kitchens, bathrooms).
- Information should also be given on how to manage spillage of body fluids. Personal protective equipment (e.g. disposable gloves and apron) should be used by people cleaning up vomit and other body fluids.
- Parents, teachers and staff should be encouraged to raise concerns about the level of cleanliness in the school setting.

## Food hygiene and catering standards

- All food handlers/catering staff should be trained in and follow the recommendations on appropriate food hygiene and catering standards. This includes correct food safety, storing, handling and preparation.
- Food handlers should not be involved in child toileting.
- Access to food preparation areas shall be restricted to kitchen staff.

<sup>3</sup> A more specific message for some target audiences can include the information that alcohol-based hand gels shall not be seen as a substitute for washing with soap and water.

#### Isolation and exclusion

- **Information should be given to schools on appropriate isolation and exclusion criteria** for children and staff who are affected with gastrointestinal disease. **(Health authorities)**
- Any child or staff member who has diarrhoea and/or vomiting, stomach pain or generally feels unwell or appears to be unwell should be isolated and sent home.
- If ill, one should rest, drink plenty of liquids, stay home, and inform the school/working place.
- **Infected people should stay at home** preferably for at least 2 days (48 hours) after the end of symptoms, and according to national recommendations <sup>4</sup>.
- Schools should have a clear policy stating the exclusion criteria and communicate it to parents/ guardians and staff to enhance compliance.
  - Appropriate parent notification when a child gets ill shall be ensured, in order to contact parents on time so they can bring their ill child home.
  - Adequate sick staff policies should be in place in order not to compel staff to return to work too early when affected with gastrointestinal disease.

#### **Outbreaks**

- National/local public health guidelines on prevention and management of gastroenteritis outbreaks, where applicable, should be followed.
- Schools should have the necessary resources and information to prevent and manage outbreaks, e.g. an outbreak response plan.
- Schools should have clear information on when to declare an outbreak, processes in place for notifying an outbreak and how to collaborate with outbreak investigation.
  - Public health / environmental authorities should be notified if there are 2 or more cases
    of diarrhoea and/or vomiting in a 24 hour period that are connected in time, place and
    person.
- Education and training for staff on the key methods for managing and preventing future outbreaks should be provided, including rehearsing outbreak situations.
- In case of an outbreak the importance of hand hygiene should be further emphasised.

For example, food handlers are generally recommended to stay home until 48-hours symptom free.

#### SOME FACTS AND STATISTICS

#### Gastroenteritis in general

- Acute gastroenteritis is one of the most common diseases in children, particularly in the first 3 years of life, and the second leading cause of morbidity and mortality worldwide. (Journal of Pediatric Gastroenterology and Nutrition, 46:S81–S184 # 2008)
- In most EU countries acute gastroenteritis is usually a mild disease, but it is still associated with a large number of hospital admissions and a not negligible number of deaths.
- **Rotavirus** is the most frequent agent of acute gastroenteritis. (*Journal of Pediatric Gastroenterology and Nutrition*, 46:S81–S184 # 2008, S84)

#### Food-borne diseases outbreaks in the EU<sup>5</sup>

- **5,550 food-borne outbreaks were** reported in the **European Union in 2009** (including both possible and verified outbreaks), causing nearly **49,000 people to be ill.**
- Of these ill people, over 4,000 needed to be hospitalised and 46 died.
- In 85% of the verified outbreaks (977 in total) the setting was specified, and included:
  - Households (36.4 % of the outbreaks and with 18.7% of human cases) followed by restaurants/cafés (20.6 % of outbreaks / 17.5% of cases) and schools and kindergartens (5.5 % of outbreaks / 14.8% of cases).

# Additional facts on importance of hygiene $^6$

- Overall, despite significant investment at all levels, food-related, waterborne, and other nonfood-related infectious intestinal diseases remain at unacceptably high levels, even in developed countries.
- Since milder cases of gastrointestinal illness (GI) often go unreported, this means that the overall GI infection burden, particularly that which is not food-borne, is unknown; the most informative data on the overall burden of infectious GI illness (both food-borne and non-food-borne) in the community comes from various community-based studies, which have been carried out in Europe and the USA.
- For infectious intestinal diseases the link between poor hygiene and spread of disease is well
  established and is supported by a wealth of epidemiological as well as microbiological and other
  data.
- Studies have shown the strong causal relationship between hand hygiene and gastrointestinal disease risk.
- Complications: Clusters of *Campylobacter* infections are known to arise in family households, and complications (Guillain Barré syndrome) which require ongoing treatment are a real concern. Foodborne illness has been estimated to result in chronic sequelae in 2–3% of cases. A report from the European Commission cited evidence of chronic disease, such as reactive arthritis, following 5% of *Salmonella* cases, with 5% also of E. coli O157 cases progressing to the serious and often fatal complication of uraemic syndrome.
- 5 EFSA-ECDC: EU Summary Report on Trends and Sources of Zoonoses; EFSA Journal 2011; 9(3): 2090
- 6 Bloomfield SF, Exner M, Fara GM, et al (2009). The global burden of hygiene-related diseases in relation to the home and community. An IFH expert review; published on <a href="https://www.ifh-homehygiene.org">www.ifh-homehygiene.org</a>

## ECDC communication toolkit to support infection prevention in schools

# Focus: Gastrointestinal diseases Toolkit: Key messages

# Messages targeted at children

**Note:** This list of suggested messages – indicating what gastroenteritis is, why prevention is important and which are the key preventive measures – serves as background for developing specific key messages targeting children. The messages can be used and adapted as appropriate for developing communication materials.

#### **TOP-LINE KEY MESSAGE**

Tummy bugs can be kept away from schools if children follow the advice of their teachers and parents. Good hygiene is very important.

## SUPPORT MESSAGES: WHAT IS TUMMY (STOMACH) DISEASE

- **Tummy (stomach) disease is caused by bugs that are very small, so they cannot be seen.** You can catch the bugs in 4 different ways:
  - From contaminated food or water.
  - From putting dirty hands into your mouth. For example if hands are not washed properly after using the toilet or after having played outside.
  - Person to person (for example a person who has tummy disease touches food and this food is then taken by another person).
  - Through the air (through small droplets spread when someone vomits).
- The most common symptoms of tummy disease include usually diarrhoea and/or vomiting. Other symptoms may include nausea, stomach cramps, headaches, fever. Complications include dehydration, which can happen when a person loses a lot of water and salts because of, for example, diarrhoea and vomiting.

## SUPPORT MESSAGES: WHY PREVENTION IS IMPORTANT

- Tummy disease is easily preventable.
- Whether children show tummy disease symptoms or not, they can carry bugs that cause the disease and spread them without knowing it. It is therefore important that everyone follows the advice of the teachers and parents on how to prevent catching the bugs.
- Tummy bugs are very easy to catch in places where many people come together such as schools.

## SUPPORT MESSAGES: HOW TO PREVENT IT

- **It is important that everyone follows good hygiene** (e.g. hand washing with soap and water before touching food or eating, after toilet use and after having been playing outside; staying home if ill, etc).
- **Hand hygiene is key:** It is important that everyone is taught and follows the correct hand washing procedures in school: Washing hands with warm running water, liquid soap and drying them well with disposable paper towels.
- If feeling ill, it is important to warn teachers and parents and follow their advice.
- Children with tummy disease should stay at home and follow their parents' or caregivers' advice as to when they can return to school.