COVID-19 | CAMPUS DISINFECTION & SANITISATION GUIDELINES

Enquiries Contact:	Approval Authority	Authorisation Date
info@oneschoolglobal.com	*Global Leadership Team*	*10th March 2020*

INTRODUCTION

Information for this document is drawn from various sources including those listed below and summarised to provide information which is most relevant to our community and schools.

- CDC (Centre for Disease Control USA) https://www.cdc.gov/coronavirus/2019-ncov/index.html
- WHO (World Health Organisation) https://www.who.int/
- NEJM (New England Journal of Medicine) https://www.nejm.org/coronavirus
- European Centre for Disease Prevention and Control https://www.ecdc.europa.eu/en
- UK Public Health https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/wuhan-novel-coronavirus-wn-cov-infection-prevention-and-control-guidance

A valuable document is at https://www.ecdc.europa.eu/sites/default/files/documents/novel-coronavirus-guidelines-non-pharmaceutical-measures.pdf

There is an abundance of information being fed through the media and the news. It is important to fact-check statements relating to Coronavirus (COVID-19) with respected authorities before acting on it. The global situation and knowledge base on COVID-19 is a rapidly evolving scenario. As new facts are discovered, recommendations discussed below may need to change.

COVID-19 is a virus of the Coronavirus family

- Coronavirus is an enveloped virus, lipid or medium size virus. They rely on their host to survive. There is no current vaccine for its treatment however outside the host (e.g. on an inanimate surface) they are very susceptible and succumb quickly to disinfectant and heat.
- Enveloped viruses are least resistant to disinfectants and are effectively deactivated/ killed by many readily available disinfectants.
- Older people and people with certain underlying health conditions like heart disease, lung disease and diabetes, for example, seem to be at greater risk of serious illness.

Education relating to COVID-19 is critical. Community members should be made aware of the danger of the disease, how to prevent spread, hygiene and basic disinfection. Home hygiene should be encouraged to help prevent home infections being transmitted to school.

KEY FACTS

How is Covid-19 spread?

It is important to understand how it is spread so that we know what protocols will be most effective in protecting pupils, staff and visitors. It is spread from person-to-person through droplets and can be deposited onto surfaces through respiratory droplets or body fluids. There is little evidence to suggest that COVID-19 could be an airborne disease such as measles or TB.

Can it be spread before someone is showing sick symptoms?

People are thought to be most contagious when they are most symptomatic (sickest). Some spread may be possible before symptoms appear; there have been some reports of this with COVID-19, but this is not thought to be the main way the virus is spread. ECDC Europe say “There remains no strong evidence of transmission preceding symptom onset.” But transmission can occur when symptoms are mild and don’t necessarily prompt medical attention.

Person-to-person Contact

The primary means of contracting COVID-19 is from an infected person and is therefore transmitted by person-to-person contact through conversation or sneezing, coughing, etc. The victim needs to be close enough to physically receive the infected persons respiratory droplets. Infected respiratory droplets need to be deposited into the victim’s mouth, nose (inhaled) or eyes for infection to occur. It is not absorbed through the skin.

Surfaces

The second most likely transmission path is through inanimate surfaces. This is thought to be a lesser risk than person-to-person contact. If respiratory droplets or other body fluid are deposited onto a hard surface (e.g. handrail) the COVID-19 virus can remain active for several days (the exact length of time is not known yet but is at least 3 days and at the most 9). The victim can then touch the infected surface and receive infected fluid onto his skin, which at that point does not cause infection. However, if he touches his mouth, eyes or nose the virus can enter the body and cause infection.

Outdoor surfaces are a lower risk as the heat and UV of sunshine break down viruses.
https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html

Sensitivity to Biocides

COVID-19 is of the Coronavirus family which fall into the family of enveloped virus, lipid or medium size viruses. Other more familiar viruses in this family are Herpes, HIV and Ebola Virus. Enveloped viruses offer the least resistance to germicidal chemicals of microorganisms. And are less resistant than vegetative bacteria such as p. Aeruginosa, s. Aureus and salmonella. It is important to note that non-enveloped viruses (Poliovirus, Rhinovirus, etc) are a completely different family of microorganisms and are significantly more difficult to deactivate/kill.

There are a variety of disinfectant solutions which are effective in deactivating/killing virus strains of the Coronavirus family. The more commonly available solutions include;

- 72% Ethanol (Methylated Spirits) blend
- 65-75% Ethanol gel (Instant Hand Sanitiser)
- A min 1000ppm chlorine mix (dilute 26ml 4% household chlorine bleach per litre of water)
- Hospital Grade disinfectants (E-Guard X and Biosan II)

CRITICAL POINTS

The following points could be of assistance for administration personnel to draw up a protocol for limiting risk and protecting pupils, staff and visitors. Based on what is known about the Coronavirus family and COVID-19 the following is of note.

PERSONAL HYGIENE

Cough & sneeze hygiene

Respiratory and cough hygiene will minimise the risk of cross- transmission of respiratory illness.

- persons should be encouraged to cover their nose and mouth with a disposable tissue when sneezing, coughing, wiping and blowing the nose
- all used tissues should be disposed of promptly into waste bin with a bin liner
- it is better to cough or sneeze into your inner elbow than hand. This helps prevent infected hands contacting hard surfaces after a cough or sneeze.
- Encourage persons to clean their hands with soap and water, alcohol hand rub or hand wipes after coughing or sneezing.

Hand Hygiene

Proper hand hygiene is possibly the most important aspect to minimize transmission.

- where hands are dirty, washing with soap and water must precede use of hand sanitising gel
- if hand washing only is being done – soap and water must be used for at least 30 sec
- Alcohol Hand Sanitiser Gel should be used after using the washroom, on entry to buildings, before eating and after eating food and after any coughing or sneezing episode. 65-75% alcohol sanitizing gel is confirmed by WHO, CDC and other world authorities to be effective against enveloped viruses (Coronavirus) and vegetative bacteria.

Face Masks

Face masks can assist with disease spread prevention however the following should be noted;

- Loose fitting face masks do little to prevent personal infection from coughing or sneezing of colleagues. However, they do stop you touching your nose and mouth which can help prevent infection. They do also help prevent the wearer from infecting others by stopping transmission of respiratory droplets.
- Tight fitting masks will prevent infection from other infected persons by suitably protecting the nose and mouth.
- Face masks can have a negative effect in that a false sense of security is given.

REPORTING

Maintain log of persons moving in and out of locality or school. So that if infection does occur, persons who have been in contact with that person can be easily identified for quarantine. Reporting measures including keeping records of disinfecting protocols can assist with providing evidence of due diligence to interested parties and authorities if required.

ENVIRONMENTAL DISINFECTION

Global authorities recommend thorough disinfection of touchpoints and good housekeeping practice.

Touch Points

Regular disinfection of touch points is the most critical disinfection focus for disease transmission prevention in facilities. Staff should identify what the touch points are in their facility. These include items such as taps, door handles, push plates, handrails, etc. Outdoor touch points exposed to sunlight are of lower risk.

Procedures are provided below for complete disinfection of a facility and procedures for maintenance disinfection. Initially a school facility may consider doing a complete disinfection of all washrooms and a disinfection of all touch points through the school including desks and chairs. This could be followed by implementing a protocol for staff or student leaders to disinfect touch points in washrooms and classrooms at the end of each day.

The principle aims of the methodology used are;

- Effectively disinfect both high and low risk areas.
- Leave residual bactericide on surfaces to prolong the disinfected effect.
- Enable the disinfected areas to be dry within 40 min of completion.
- Provide a program which is sustainable for the weeks and months ahead.

Disinfectant Required

Hospital Grade Disinfectant based on a residual biocide such as benzylkonium chloride or dodecylamine. Examples are given below with company details.

- E-Guard X (dilute 1:50 - 20ml/Lt) Abco Products
- AP439 Biosan II (dilute 1:64 – 16ml/Lt) Actichem
- AP639 Kwiksan (ready-to-use) Actichem → for electronic equipment and shiny surfaces

Biosan II and E-Guard are hospital grade disinfectants based on residual biocides. Local varieties can be used.

Kwiksan is a 72% blend of ethanol with deionised (or distilled water). This blend provides instant inactivation of this group of viruses and vegetative bacteria and is safe for use on electronic equipment including microphones, mobile phones, keyboards, etc.

Equipment Required

- Microfibre cloths – 3 different colours
- Trigger spray bottles
- Pump-up / pressure sprayers

INITIAL DISINFECTION

High Risk Areas

Washrooms and touch points

- Washrooms
    - Use a pump-up sprayer with fine mist to wet down washroom facilities
    - Wipe over touch points (handles, taps, etc) with a microfibre cloth premoistened with disinfectant solution. Additional solution can be added using a trigger spray bottle. This wiping process is to spread the disinfectant and does not dry the surface. The surface must air-dry.
    - Wipe over toilet seats using a different colour microfibre cloth using the same method as described above for the touch points.
- Door Handles, push plates, light switches and general area touch points
    - Spray apply, using a trigger spray bottle, disinfectant solution to these surfaces. Wipe over with a different colour microfibre cloth premoistened with disinfectant solution. This wiping process is to spread the disinfectant, not dry the surface. The surface must air-dry. Mirrors and shiny surfaces can be treated with Kwiksan to overcome streaking.
- Keyboards and electronic devices
    - Lightly mist Kwiksan, using a trigger spray bottle, to the device. Spray a minimum quantity to achieve a shiny wet surface. Wipe dry with microfibre cloth.

Low Risk Areas

Floors, walls, seats, desks.

- Walls in high traffic areas should be treated by applying disinfectant solution through a pump-up sprayer. Surfaces should be only just shiny wet, not dripping. Surfaces should dry within 60 min maximum. No wiping required.
- Floors should be mopped (or autoscrubber) with disinfectant solution and allowed to dry. This could be fitted in as part of the normal maintenance program
- Carpets should be treated using wet extraction or low-moisture bonnet cleaning. The relevant pre-spray or encapsulation solution should include 3% hydrogen peroxide.
- Carpeting can also be treated by applying disinfectant solution through a pump-up sprayer till the carpet is just damp to touch. Then brush briefly with a medium stiff broom to enhance penetration.

Carpet disinfection may be effectively done by a carpet cleaning professional. Carpets are not a high priority, except perhaps in junior grades.

PERIODIC / MAINTENANCE DISINFECTION

This disinfection program focuses on high risk areas and program sustainability. It should be remembered that disinfection activity is to be affected on clean surfaces only. It is not to replace regular cleaning of surfaces. Furthermore, dirty surfaces, especially carpets and porous substrates will harbour organic matter and in turn microorganisms and make disinfection less effective.

Daily

- Washrooms
    - Spray apply disinfectant solution over touch points (handles, taps, etc) and wipe with a microfibre cloth premoistened with disinfectant solution. This wiping process is to spread the disinfectant and does not dry the surface. The surface must air-dry.
    - Spray apply disinfectant solution over toilet seats and wipe over using a different colour microfibre cloth using the same method as described above for the touch points.
- Door Handles, push plates, light switches and general area touch points
    - Spray apply disinfectant solution, using a trigger spray bottle, to these surfaces. Wipe over with a microfibre cloth premoistened with disinfectant solution. This wiping process is to spread the disinfectant, not dry the surface. The surface must air-dry. Mirrors and shiny surfaces can be treated with Kwiksan in a spray & wipe fashion if streaking is evident.
- Keyboards and Electronic Equipment
    - Lightly mist Kwiksan, using a trigger spray bottle, to the device. Spray a minimum quantity to achieve a shiny wet surface. Wipe dry with microfibre cloth.

School Buses – daily, end-of-run, maintenance [focus on touch points]

- Door handles – internal & external
    - Spray apply disinfectant solution over and wipe with a disposable cloth premoistened with disinfectant solution. This wiping process is to spread the disinfectant not dry the surface. The surface must air-dry.
- Steering Wheel, Arm Rests, Console, Top of seats
    - Spray apply disinfectant solution and wipe with a disposable cloth premoistened with disinfectant solution. This wiping process is to spread the disinfectant not dry the surface. The surface must air-dry.

School Buses – weekly, maintenance

- Seats
    - Lightly mist disinfectant solution over all seat surfaces.
- Refuelling
    - Don disposable gloves on exit from the vehicle when refuelling. Remove the disposable gloves only when the fuel nozzle has been returned to the bowser. Dispose of in the garbage bin on the forecourt.

Policy Code	Date	Version No.	Nature of Change
GDL_OSG_ADM_COVID-19 CAMPUS DISINFECTION SANITISATION GUIDELINES	10.03.2020	1.0	Creation of policy
GDL_OSG_ADM_COVID-19 CAMPUS DISINFECTION SANITISATION GUIDELINES	24.03.2020	2.0	Inclusion of School Bus guidelines