Queen Mary University of London

Health and Safety Directorate (HSD)

Infectious Coronaviruses: Virus Survival Information and Decontamination Guidance for QMUL

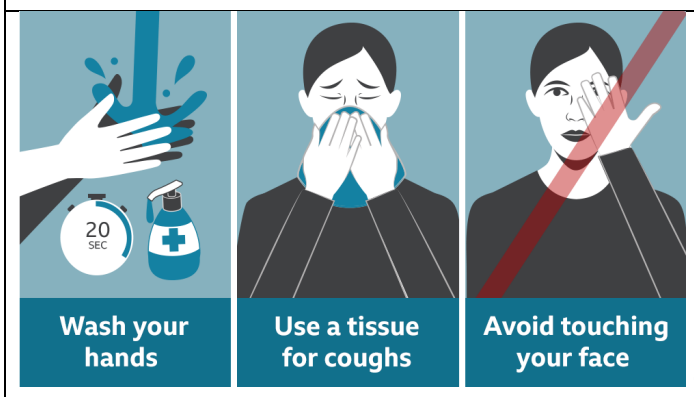
Infectious coronaviruses include 'Severe Acute Respiratory Syndrome' (SARS)-related coronaviruses (SARS–CoV). Coronaviruses may survive on surfaces for periods of time. However, survival of the virus can vary depending the level of contamination on the item, viral species or strain of the virus and environmental conditions such temperature, moisture, humidity and ventilation. SARS-CoV-2 is the causative agent of the respiratory system disease named COVID-19.

Authoritative bio-safety data / publications note the following *potential* survival periods on the following materials. Survival period testing were conducted with viral suspensions following specified testing protocols on materials in laboratory conditions. Public Health England (PHE) assesses that SARS-CoV-2 contaminated items or surfaces would typically under most circumstances decrease significantly by 72 hours after deposit onto the surface or item.

Inert items	**Infected biological / bodily secretions:**
Hard plastics: up to 2 days Soil/water: up to 60 hours glass and metal surfaces: up to 2 days Paper (dry) – low contamination: < 5 min Paper (dry) – heavy contamination: up to 24 hours Cotton gowns: low contamination: < 5 min Cotton gowns: heavy contamination: up to 24 hours Synthetic disposable gowns: low contamination: up to 1 hour Synthetic disposable gowns: heavy contamination: up to 2 days	Respiratory secretions: up to 7 days at room temperature Undiluted ~~f~~aeces and human serum: up to 9 days at room temperature. Infectious droplets: up to 6 days in a dried state.

Disinfection using effective disinfectant liquids and stringent procedures provide a suitable decontamination method to reduce virus contamination by killing a significant percentage.

Where no visible virus contamination is observed	**Heavy virus contamination**
(A) Decontamination in Teaching and Office Areas	**(B) Decontamination in Teaching and Office Areas**
Where assessed as required for multiple user touch hard surface items: Wipe with 70% or 100% alcohol impregnated wipes. Ensure wiping is thorough. Dispose of wipe into domestic waste bin. **Effectiveness:** 70% or 100% alcohol impregnated wipes would provide a significant reduction of virus within 5 minutes. **Examples and Compatibility:** Plastic computer keyboards, computer mouse, telephone receivers and telephone pad keys, plastic light switches, door handles or plates, or hard surface desks. Most hard surface items would be compatible with alcohol wipes, but stop if deterioration of item is observed, check supplier compatibility information and seek an alternative method. **For cleaning staff:** if wiping *multiple* items within a short period of time, wear protective disposable nitrile gloves (EN374 standard, Cat II) to protect against repeat exposure to alcohol. At the end of cleaning session, dispose of gloves into sanitary bins or other offensive waste bins. **Soft furnishings:** If no visible contamination and not touched by multiple users, no need to decontaminate. Follow normal cleaning and / or laundering procedures.	Cordon area off, the room door should remain shut, with windows opened (safely to an outside space) and the air conditioning switched off, until it has been cleaned with the disinfectant**.** A detergent may be used ahead of the disinfectant if gross contamination is identified. Designated trained cleaning team to disinfect following Public Health England (PHE) guidance and procedures at https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control A chlorine-based disinfectant should be used, in the form of a solution at a minimum strength of 1,000ppm available chlorine. All cleaning personal protective equipment, absorbent / cleaning items to be disposed as single use items into clinical waste stream (QMUL procedures at http://www.hsd.qmul.ac.uk/a-z/hazardous-waste/) Once this process has been completed, the room can be put back in use immediately. **Examples of chlorine releasing disinfectants:** Sodium dichlorisocyanurate (NaDCC) – tradename PRESEPT, tradename Actichlor Plus. Do not use chlorine disinfectants on urine as it can release chlorine gas (some alternatives are listed in J below). Follow PHE Disinfection SOPs, supplier information on preparation, contact time and COSHH risk controls for use of chlorine based disinfectants. **Note** – PHE assess that public areas where a symptomatic individual has passed through and spent minimal time in (such as corridors) but which are not visibly contaminated with respiratory secretions / body fluids do not need to be specially cleaned and disinfected.
(C) Decontamination in Residencies	**(D) Decontamination in Residencies**
Follow guidance for multiple user touch hard surface items as noted in (A). Soft furnishings: If no visible contamination and not touched by multiple users, no need to decontaminate. Follow normal cleaning and / or laundering procedures.	Follow guidance as noted in (B) for heavy virus contamination. Following disinfection and if re-usable: package soft furnishings for high temperature (>60 deg C) laundering by authorised cleaning company or in house.
(E) Decontamination of toilets, hand wash basins and lavatory rooms	**(F) Decontamination of toilets, hand wash basins and lavatory rooms**
QMUL currently utilise the following cleaning and sanitising agents: 1. Toilet bowls are cleaned and disinfected by using: Shield 3 Way and Shield Limescale cleaners 2. Toilet seats are wiped down using: Taski Sani calc 3. Hand wash basins – wiped down using: Taski Sani calc 4. Floors are damp mopped using: Jontec tensol (contains approx. 60% stabilised alcohol) 5. Toilet flush handle / door handles / plates are cleaned and disinfected using: Oxivir **Effectiveness:** As the floor cleaner (4) contains 60% alcohol, it would provide a significant reduction of virus within 5 minutes.	Follow guidance as noted in (B) for heavy virus contamination.

The other cleaning agents contain components that may cause a reduction in virus but currently there is no supplier coronavirus effectiveness information. **Procedure:** Follow existing Disinfection SOPs and COSHH risk controls for use.	
(G) Decontamination in QMUL Public Spaces	**(H) Decontamination in QMUL Public Spaces**
If no visible contamination and item not hand touched by multiple users, no need to decontaminate. Follow normal cleaning and / or laundering procedures.	Follow guidance as noted in (B) for heavy virus contamination.
(I) Decontamination in Laboratory and Workshops Areas	**(J) Decontamination in Laboratory and Workshops Areas**
Follow guidance as noted in (A). Other disinfectants that may be used and which provide a similar effectiveness to chlorine (list not exhaustive): RelyOn+ Virkon, Distel High Level Laboratory Disinfectant, Trigene Advance Follow existing Disinfection SOPs and COSHH risk controls for use.	Follow guidance as noted in (B) for heavy virus contamination. Other disinfectants that may be used and which provide a similar effectiveness to chlorine (list not exhaustive): RelyOn+ Virkon, Distel High Level Laboratory Disinfectant, Trigene Advance. Follow PHE Disinfection SOPs and existing COSHH risk controls for use.
Public Hygiene measures must still be followed by all	**Further Information**
 © BBC News Website	**QMUL Health & Safety Directorate** http://hsd.qmul.ac.uk/Contact%20Us/index.html - for advice on SOPs, risk assessments and risk controls and see http://www.hsd.qmul.ac.uk/a-z/decontamination/ Specific references or information on disinfectants is available on request from the **Biological Safety Adviser.** Public Health England (GOV.UK) https://www.gov.uk/government/publications/guidance-to-employers-and-businesses-about-covid-19/guidance-for-employers-and-businesses-on-covid-19 Health & Safety Executive (HSE) http://www.hse.gov.uk/coshh/index.htm