

Health Advice for Properties Management
for the Prevention of Middle East Respiratory Syndrome (MERS)

The Department of Health advises properties management to take the following precautionary measures at their workplaces to minimize the risk of contracting and spreading MERS.

Causative agent

Coronaviruses are a large family of viruses which include viruses that may cause mild illness like common cold as well as severe illness like severe acute respiratory syndrome (SARS) in humans. There are 3 main subgroups of coronaviruses: alpha (α), beta (β) and gamma (γ). Middle East Respiratory Syndrome Coronavirus (MERS-CoV), formerly known as novel coronavirus (NCoV), is a beta coronavirus which has not been identified in humans before and is different from any coronaviruses (including SARS-coronavirus) that have been found in humans or animals.

Affected Areas

The affected areas of MERS include the Arabian Peninsula and its neighboring countries (including Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Kingdom of Saudi Arabia, State of Palestine, Syria, United Arab Emirates, Qatar and Yemen). So far, over 95% of the confirmed cases were reported by Middle East countries. For the remaining cases, most of them either acquired the infection in the Middle East during travel or work, or through close contact with another patient who acquired the infection in Middle East. Moreover, there has been an outbreak of MERS in Korea since the end of May 2015 with transmissions mainly occurred in healthcare facilities. Please refer to website of Centre for Health Protection for affected areas update:

http://www.chp.gov.hk/files/pdf/distribution_of_mers_cases_en.pdf

Maintain Good Personal Hygiene

- Keep hands clean
 - Wash hands frequently with liquid soap and water especially after sneezing, coughing or cleaning the nose
 - Rub hands with 70 – 80% alcohol-based handrub if not visibly soiled
 - Avoid touching your eyes, nose and mouth before washing hands
- Cover nose and mouth with tissue paper while sneezing or coughing and dispose of soiled tissue paper in a lidded rubbish bin
- Build up good body immunity by having a balanced diet, regular exercise and adequate rest, do not smoke and avoid alcohol consumption

Maintain Environment Clean and Hygienic

Though coronaviruses may survive for some time in the environment, they are easily destroyed by most disinfectants. It is important to:

- Maintain good ventilation
- Keep environment clean – clean and disinfect frequently touched surfaces, furniture, commonly shared items and floor at least once daily by using appropriate disinfectant. For non-metallic surface, clean with diluted household bleach (mixing 10ml of bleach containing 5.25% sodium hypochlorite with 990ml of water), wait until dry and then rinse with water. For metallic surface, disinfect with 70% alcohol

Maintain Toilet Clean and Hygienic

- Keep toilets clean and dry.
- Provide liquid soap and disposable paper towels for washing hands.
- Ensure the flushing system of the toilet, and hands drying machines are in proper function at all times. Flush immediately after using toilet.
- Ensure the water traps must be filled with water (including U-shaped water trap, bottled trap or anti-syphonage trap) to prevent foul odour and insects in the soil pipe from entering the premises.

Updated Infection Control & Prevention Situation for Middle East Respiratory Syndrome

For update on the latest situation of Middle East Respiratory Syndrome, please visit CHP website at <http://www.chp.gov.hk/en/content/9/24/26528.html>

Centre for Health Protection

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(Last updated on 15 June 2015)

Preparing and Using Diluted Bleach

1. Keep windows open when diluting or using bleach to ensure good ventilation
2. Put on personal protective gear (e.g. mask, gloves and goggles) when diluting or using bleach as it irritates mucous membranes, the skin and the airway.
3. Cold water should be used for dilution of bleach as hot water decomposes the active ingredient of bleach and renders it ineffective. 4. Bleach containing 5.25% sodium hypochlorite should be diluted as follows:
 - 1 to 99 diluted household bleach (mixing 10 ml of bleach with 990 ml of water) can be used for general household cleaning.
 - 1 to 49 diluted household bleach (mixing 10 ml of bleach with 490 ml of water) is used to disinfect surfaces or articles contaminated with vomitus, excreta and secretions.
4. Make adjustments to the amount of bleach added if the concentration of sodium hypochlorite is above or below 5.25%.
 - Calculation: Multiplier of the amount of bleach added = 5.25% concentration of sodium hypochlorite in bleach For example, when diluting bleach containing only 5% sodium hypochlorite, the multiplier is $5.25 / 5 = 1.05$. That means $10 \text{ ml} \times 1.05 = 10.5 \text{ ml}$ of bleach should be used.
 - For accurate measurement of the amount of bleach added, a measuring cup can be used.
5. Rinse disinfected articles and surfaces with water and wipe dry.
6. Cleaning tools should be soaked in diluted bleach for 30 minutes and then rinsed thoroughly before reuse. Finally, wash hands with liquid soap and water, then dry hands with a clean towel or disposable paper towel.

Precaution

1. Avoid using bleach on metals, wool, nylon, silk, dyed fabric and painted surfaces.
2. Avoid touching the eyes. If bleach gets into the eyes, immediately rinse with water for at least 15 minutes and consult a doctor.
3. Bleach should not be used together or mixed with other household detergents as this reduces its effectiveness in disinfection and causes chemical reaction. For instance, a toxic gas is produced when bleach is mixed with acidic detergents such as those used for toilet cleaning. This could result in accidents and injuries. If necessary, use detergents first and rinse thoroughly with water before using bleach for disinfection.
4. As undiluted bleach liberates a toxic gas when exposed to sunlight, it should be stored in a cool and shaded place out of reach of children.
5. Sodium hypochlorite decomposes with time. To ensure its effectiveness, it is advised to purchase recently produced bleach and avoid over-stocking.
6. For effective disinfection, diluted bleach should be used within 24 hours after preparation.