



WATER AND SEWERAGE AUTHORITY
Striving towards organisational efficiency and effectiveness

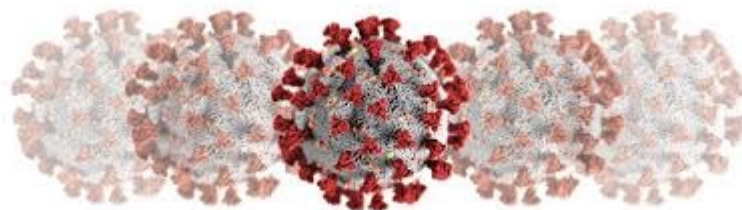


CWWA – Online Discussion Forum WATER UTILITY PREPAREDNESS FOR COVID-19

PPE Requirements and Workplace Preparation

APRIL 03rd 2020

WATER AND SEWERAGE AUTHORITY





INTRODUCTION



- Inundated with information and how do we use what we need and apply in our workplace and sector....we intend to share and learn from others
- WASA prepared a COVID 19 Response Plan that looks at Business Continuity and also guided by WHO, PAHO, CDC. US OSHA has good training material/videos.
- There is a little overlap with the topic on sanitization and hygiene but will focus on PPE use.



GENERAL PREPARATION



Objective is to reduce the risk to employees and customers as well as your workplace being a node of transmission. This is important in utilities' ability to maintain delivery of service.

- Personal Hygiene Provisions –Soap, Paper Towels
- Posters that promote personal hygiene, respiratory protection, cleaning of hands. Placed in common areas- washrooms, pantries, public areas, etc. Include customers, contractors.
- Recognizing Symptoms of illness, etc.
- Develop alternative Work Arrangements, Physical Distancing
- Identify Critical Personnel and Critical Support Services
- PPE including Training



PPE REQUIREMENTS



- Selection of PPE is premised on an understanding of COVID-19 and mode of transmission.
- Droplet spread – inhalation or indirect contact with contaminated surfaces via hands and then placing hands on face, eyes, mouth, nose..... Virus that wants to get access to the respiratory system
- There are numerous studies on how long it remains viable on a variety of different surfaces.....dependent on temperature, humidity, type of surface, ventilation. It is an enveloped organism so not as hardy outside of the body.
- While not airborne such as chicken pox, measles, TB...WHO has indicated 3-8 hours airborne in enclosed areas, confined spaces



PPE REQUIREMENTS



- PPE is recommended based on risk factors related to environment and type of possible interaction/activity.
- Three basic areas are General, Handling Sick Person in Workplace, Sanitisation

1. General Work Settings, it is expected that Workplace Sanitisation, Personal Hygiene and Social Distancing measures are being done such as Provision of Soap, Sanitisers, Paper Towels. Also 6 feet distancing, teleworking, etc.

Front Line Staff who interact with the public – security, customer representatives, visiting homes.....we recommend masks (N95), GLOVES....providing of course some of these are either suspended or being done remotely over the telephone.



PPE REQUIREMENTS



2. Handling Sick Employees:

In General, encourage sick employees to stay home

- If someone is sick, give them a surgical mask and either get them to leave immediately for home or if can't leave immediately, place in a separate room.
- The surgical mask is really to prevent them for spreading droplets via sneezing, coughing.
- Persons handling sick employee should also have N95 masks, and gloves. There is a concern of using face shield or eye protection as in hospital setting...



PPE REQUIREMENTS



3. Sanitisation:

In sanitisation of workplace, focus is on protecting the employee from chemical being used as well as any pathogen present.

- For Basic cleaning using Lysol wipes, cleaning agents, gloves are sufficient.
- Goggles required if using spray and there is risk of chemical entering eye... there is no need for mask since in general areas are well ventilated and chemicals are simple cleaning products.
- For Sanitisation & Disinfection. First read the MSDS for the chemical being used. Bleach solution (5000ppm or 1 in 9 dilution for 5% concentration). There are also quaternary ammonium products other chemicals...recommend disposal TYVEX coveralls, googles, respirators, gloves especially since if being applied in aerosol medium



Personal Hygiene & Protection

- Clean Hands before donning PPE
- Train employees of how to select and use PPE properly
- While working, keep hands away from face, eyes, nose, mouth
- If using sanitizing solution, change frequently to ensure its potency and effectiveness
- Don't eat drink or smoking while conducting sanitizing process



Sanitizing Procedure



- Wash and sanitize mops and other cleaning utensils used and store in an uncontaminated area
- PPE should be replaced if torn or damaged
- Place all disposable PPE into designated garbage bags, tie the mouth and place in bins with a cover



Sanitizing Procedure



- Once PPE have been removed, they should be discarded and new PPE should be used when re-entering the space
- On completion of the task, remove PPE and shower. Keep work clothes separate.
- On reaching home, immediately shower and change/wash clothing before making contact with family members in the household.

Sanitizing Procedure



- Don't mix bleach with other cleaning agents

DO NOT MIX THESE CLEANING PRODUCTS

BLEACH + VINEGAR

Bleach and vinegar mixture produces chlorine gas, which can cause coughing, breathing problems, burning and watery eyes.



BLEACH + AMMONIA

Bleach and ammonia produce a toxic gas called chloramine. It causes shortness of breath and chest pain.



BLEACH + RUBBING ALCOHOL

Bleach and rubbing alcohol makes chloroform, which is highly toxic.



HYDROGEN PEROXIDE + VINEGAR

This combination makes peracetic/peroxyacetic acid, which can be highly corrosive





Summary



- Basic Hygiene is just as important as PPE
 - Gloves – Latex, Nitrile
 - N95 masks (without exhaust valve)
 - Surgical Masks
 - Goggles
 - Disposable Coveralls
 - Respirators
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- Some of these items will already be part of your HSE PPE and Basic Sanitation Programme