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|  | <i>Industrial and Medical Gas Safety Alert</i> |
| 8 March 2020 | <i>Corona Virus And Other Infectious Agents: Business contingency planning and equipment cleaning</i> |

This GAWDA Safety Alert is issued to inform GAWDA members of potential measures to assist in development of business contingency plans and cleaning and disinfection of cylinders and equipment. Refer to Safety alert 27 February 2020 for protection measures for [Employees](#).

Business plans

The Center for Disease Control (CDC) published [Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\), February 2020](#). The Coronavirus (CONID-19) requires similar preparation as the H1N1 virus of 2009. Compressed gas distributors can take specific measures to ensure business continuity:

1. Redundant supply chain
 - Communicate with your supplier and develop a contingency plan for bulk delivery; e.g.: If a supplier plant had to shut down due to the virus, how would bulk delivery be affected.
 - Communicate with other gas firms (GAWDA members) in your area to share backup product delivery plans. GAWDA members have a long history of helping each other and the community during emergencies.
2. Customer prioritization
 - Medical facilities and other customers that require product to maintain life should be prioritized over non life-critical applications.
3. Stockpile inventory
 - Review product demand, specifically Medical oxygen, and determine how long deliveries could be sustained if production were interrupted.
4. Plan for Employee absenteeism.
 - Contingency plan may include:
 - Managers step in to line jobs
 - Shift rotation to allow employees to care for family needs

This information was developed to assist GAWDA members in complying with government regulations; it does not constitute legal advice, and users are advised to obtain legal counsel to develop their individual compliance programs. Additionally, GAWDA does not guarantee that use of this material will ensure compliance with any regulatory or legal standard.

5. Equipment cleaning and disinfecting

- Wipe down all surfaces frequently touched in your facilities:
 - Doorknobs, phones, computer keyboards, counters, time clocks, cylinder carts
- The CDC has published [Basic cleaning and disinfecting methods](#), including isopropyl alcohol. For a larger list of virucides, CDC relies on the [American Chemistry Council](#) to determine qualified products, however not all are oxygen compatible.

6. Communication to Employees:

- Explain the contingency plan to your employees
- Train them on the CDC's [personal health steps](#)
 - Avoid close contact with people who are sick.
 - Avoid touching your eyes, nose, and mouth.
 - Stay home when you are sick.
 - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
 - Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.
 - Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing.
 - If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.
- Remind them to wear gloves whenever handling cylinders. If the gloves become contaminated, they should dispose of them and obtain new gloves before resuming work.
- Post [CDC](#) posters on COVID-19 and [What to do if you are sick with COVID-19](#) , and [Handwashing](#)
- Advise them on your company's sick time policy and travel policy.
- Instruct drivers, and other customer service personnel, that cylinders containing potential biological waste, bodily fluids or possible infectious agents are to be properly cleaned by the customer before being accepted for return to the filling plant.

7. Communication with Customers

- Communicate the prioritization of customer needs, servicing the community and protecting your employees.
- Communicate to your customers your company's policy on biological contamination on returning cylinders.

8. Communication with Local Emergency mgmt.

- Communicate with the Local emergency management and Health Department to keep abreast of the virus in your community. GAWDA members are stewards for the community and this may be a time where your company may be called to assist with medical oxygen, etc.

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- The customer should refer to CGA P-83, *Guidelines for Cleaning Externally Contaminated Medical Gas Containers* and CDC guidelines before cleaning cylinders.
- The customer should specifically be aware that some cleaning materials can cause damage/stress corrosion cracking to the valve. Examples of cleaning materials that should not be used are those which contain ammonia, amine-based compounds or chlorine containing compounds (such as bleach). Only qualified and approved cleaning materials and procedures should be used.
- After removing the contamination, the cylinder may be cleaned with, for example, isopropyl alcohol (IPA) or equivalent disinfectant wipes.
- The application of flammable disinfectants (e.g. alcohols) must be controlled to prevent excessive amounts which could create a fire hazard.
- All cleaning and disinfection agents must be removed from the cylinder after use.
- **For further guidelines, please read:**

CGA P-83, *Guidelines for Cleaning Externally Contaminated Medical Gas Containers*

CGA SA-30-2017, *Handling Cylinders After Natural Disaster Exposure*

CGA SA-31-2017, *Receiving Cylinders After Natural Disaster Exposure*

CGA G-4.1-2018 *Cleaning of Equipment for Oxygen Service*

CGA C-10-2013, *Guidelines to Prepare Cylinders and Tubes for Gas Service and Changes in Gas Service*

GAWDA members have free access to these publications by joining the GAWDA/CGA Safety Program: <https://www.gawda.org/resources/cga-subscription-program/>

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