



## COVID-19 Bulletin 3: Planning and Preparedness

This is drawn from CDC, Ohio EMS, and federal EMS Office materials, as well as recommendations from local/regional groups. Dayton MMRS has received numerous calls from public safety agencies (law enforcement, fire, and EMS among others) regarding COVID-19. Working with Public Health – Dayton & Montgomery County, Greater Miami Valley EMS Council, the Region 3 Regional Physicians Advisory Board and others, we have developed this bulletin on issues your agency may want to consider.

This is intended largely as a planning document for agencies. Recommendations for immediate steps and clinical actions for EMS are in Bulletin 2.

Both the Chinese and U.S. governments have taken extraordinary public health measures to limit the spread of this disease. China quarantined an area of 35 million people. The United States has prevented travel from China by non-U.S. citizens, and is screening people arriving here from China and other countries.

Expert predictions are in a wide range. Some estimate an outbreak peak between late March and late May, with up to 2.3 million new cases in a single day. Nancy Messonnier, Director of National Center for Immunization and Respiratory Diseases, warned that some experts expect the novel coronavirus to begin spreading at a community level in the United States, with disruptions to daily life that could be “severe.”

There is some evidence that this virus will spread less effectively as temperatures and humidity rise. And it appears to be much less likely to kill than MERS. On the other hand, MERS did not spread widely. One epidemiologist in our region looked at data on the four existing Coronavirus strains in the U.S. His assessment is that if we can hold off outbreaks in the U.S. through April, the disease is less likely to become widespread until mid-December 2020.

Which leaves us with the question: What should public safety agencies reasonably do to provide effective response for our citizens, protect our personnel, and reduce the strain on the regional health system while being fiscally responsible regarding something that may or may not become catastrophic?

Here are recommendations for your consideration. It is the responsibility of each agency’s chief and medical director to determine the procedures for that agency.

## IMMEDIATELY:

- Provide infectious disease prevention training for all personnel.
- Survey your agency's PPE capabilities and provide appropriate PPE for all personnel with appropriate training.
- Be aware that many suppliers are already experiencing shortages of PPE.
- CDC recommends not throwing out any outdated PPE as shortages are already apparent.
- Make a determination on what respiratory protection materials your agency will use, both for sporadic cases, and in the event this becomes widespread.
  - Consider including both PAPRs and N-95 masks
  - If feasible, standardize on one PAPR, and ensure their functionality.
  - If feasible, standardize on one model of N-95, with the understanding that there may be supply chain disruptions
  - One option may be the elastomeric masks bought years ago by GDAHA for every EMS provider in the region. New filters would be needed, along with a current (less than one year) fit-test.
  - Elastomeric respirators are sometimes referred to as reusable respirators because the facepiece is cleaned and reused but the filter cartridges are discarded and replaced when they become unsuitable for further use. Similar to N95 respirators, elastomeric respirators require annual fit testing.
- Once the Department has decided on a mask, complete the fit-testing.
  - N-95 respirators must be fit-tested, and training in donning, wearing, and doffing the respirators is a crucial part of the process.
  - Fit-testing is brand and model specific.
  - Use non-destructive, **Qualitative** fit-testing procedures for disposable N-95 masks. On completion of fit-testing, issue the mask used to the individual in paper bag (plastic bags hold in moisture which can lead to mold or mildew).
  - Many County EMAs have fit-test kits which can be borrowed.
  - CDC has recommended guidance on implementation of extended use and limited reuse of N95 respirators in healthcare settings.
  - Once decided on a mask, begin fit-testing.
  - N-95 fit-testing should be non-destructive, meaning qualitative, not quantitative.
- Training
  - Consider having personnel view the recorded webinar from the NHTSA EMS Office. [Watch the webinar now.](#)
  - We are developing a general infectious disease training, including the right way to perform handwashing, emphasizing FREQUENT handwashing, encouraging people to start practicing not touching your face when you are out and about, and similar zero cost efforts. That will be available on the GMVEMSC website.
  - Did we mention handwashing?
  - We don't know yet how effective antivirals such as Tamiflu and Xofluza will be with COVID-19, but we KNOW they work with influenza. Far too often, people show up at their doctor after being sick for a week. Antivirals work best EARLY (within 48 hours) – every employee (not just public safety personnel) should be encouraged to **contact** their doctor (many will issue a prescription based on a phone call or “MyChart” request) as soon as they have flu symptoms.

- Emphasize cleaning surfaces. Be diligent in cleaning Engines and Ladders, as well as Medic Units.
- Emphasize cleaning surfaces in stations.
- Share information and training with law enforcement personnel, and discuss PPE vendors and supply chain issues with them.
- WHO issued a workplace readiness guide on COVID-19.
  - Make sure workplaces are clean and hygienic
  - Surfaces (e.g. desks and tables) and objects (e.g. telephones, keyboards) need to be wiped with disinfectant regularly
  - Why? Because contamination on surfaces touched by employees and customers is one of the main ways that COVID-19 and influenza spread.
  - Promote regular and thorough handwashing by employees, contractors and customers.
  - Put sanitizing hand rub dispensers in prominent places around the workplace. Make sure these dispensers are regularly refilled.
  - Display posters promoting hand-washing
  - It may seem almost too obvious, but cell phones can harbor harmful microbes. An article on how to shore up herd immunity recommends that phones be disinfected twice a day, and for people to not touch their face.

#### Short-term:

- Begin buying more PPE, including surgical masks, N-95s, PAPRs, impermeable coveralls, nitrile gloves, and face shields while we can still get them. How much to spend is the hard question, because all these materials have expiration dates now.
- Continue providing updated information via different platforms to all personnel.
- Work with hospitals on appropriate transport arrangements, destinations, and turnover for patient and staff safety.

#### Mid-range:

- Begin discussions of how we support Public Health efforts
- Begin discussions of managing dramatic increases in call-volume (both at Dispatch, and on the street)
- Begin planning for EMS involvement in widespread vaccination efforts (as we did with H1N1 in 2009-10). This would require a gubernatorial declaration.
- Begin discussions of distribution of antivirals by EMS. That also probably requires a gubernatorial declaration.
- Begin discussions on cohorting: the practice of grouping together patients who are infected with the same organism, or designated teams of EMS personnel to provide care for such patients.

#### Longer-term:

- Begin discussions of Critical Infrastructure issues (Do we have an assured fuel supply during shortages? Consider impacts if there is widespread absenteeism, not just in public safety, but in the Water, IT, public works, and other departments. Etc.)

- Begin discussions for dealing with Critical Infrastructure issues (cross-training personnel in other departments; telecommuting for secretaries and others; how we get people to work when schools and daycares are closed by the health department)