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FIRST RESPONDERS AND COVID-19 PRELIMINARY TRAINING AND BEST PRACTICE GUIDANCE

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FIRST RESPONDERS AND COVID-19:

PRELIMINARY TRAINING AND BEST PRACTICE RESOURCES

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1.0 Executive Summary

There is a need for formal sources in the development, implementation, and dissemination of occupational safety and health and infection control worker training programs in the first responder community to COVID-19 and other infectious diseases. This documents objective is to gather the sources of best available practices and provide resources for those developing training programs to COVID-19 and other infectious diseases to take action. This documents goal is to combat the misinformation that can circulate concerning COVID-19 and other infectious diseases with reliable resources to avoid harm among first responders.

2.0 Background

In December 2019 a novel coronavirus (COVID-19) emerged in Wuhan, China[1]. The World Health Organization (WHO) declared the disease of COVID-19 caused by the virus severe acute respiratory syndrome -CoV2 a pandemic in March 2020, and the United States (U.S.) would follow by issuing a national emergency declaration[2,3]. As of March 2020, New York State and City have become the epicenter of U.S. cases and fatalities related to the disease of COVID-19[4,5]. At the frontlines of responding to the public health emergency of the COVID-19 pandemic are first responders, i.e. law enforcement, emergency medical services (EMS), and fire services. There is an urgent need to protect the safety and health of first responders to COVID-19 and prepare those workers by providing reliable and credible information at a time of vast and dangerous misinformation.

As cases escalate in New York City, at least 7% of New York Police Department (NYPD) officers are out sick[6]. However, not all cases of officers calling out sick can be attributed to the disease of COVID-19. Instead absenteeism may be contributing to the alarming number of officers not reporting to work. Concerns to health and safety, and personal protective equipment (PPE) availability have also contributed to absenteeism within the first responder community. Often times, those who seek information and are not versed in academic or medical terminology rely on informal sources for knowledge. The WHO would cite an "infodemic" of citing false claims making it "hard for people to find trustworthy sources and reliable guidance when they need it"[7].

Severe acute respiratory syndrome (SARS) in 2003 did not end naturally[8]. It was eradicated by public health interventions. This involved isolating cases of sick patients, quarantining their contacts, social distancing, and community containment. By interrupting all human-to-human transmission the spread of SARS was effectively stopped. Such methods can bring an end to the disease of COVID-19 pandemic by stopping the transmission of SARS coronavirus 2.

There is currently no vaccine, treatment, or other biological therapy for COVID-19[9]. The best way to prevent COVID-19 is to reduce exposure by maintaining a safe distance of about 6

feet from others who may be sick. COVID-19 is principally transmitted by the respiratory droplets of a sick person coughing or sneezing. Those who have COVID-19 may not show any signs and symptoms that may appear within 2 to 14 days after an exposure to the virus. The most common symptoms include fever, cough, and shortness of breath. Communicating risk to public safety has principally focused on proper hygiene, such as handwashing with soap and water for at least twenty seconds, staying home when sick and to wear a facemask when sick and out in the public, and cleaning and disinfecting with EPA-registered surfaces that are commonly touched.

However, general public measures are not enough alone to raise awareness and advance operations for job tasks that put workers at increased exposure outside the healthcare facility setting, such as those in law enforcement, EMS, and fire services. Making sure workplace training matches the duties of the specific job tasks are important for the safety and health of those vulnerable.

3.0 Current Best Practice Guidance (March 2020)

The following sections focus on law enforcement, emergency medical and fire services, and trainers in those respective fields, and resources for those seeking information on how to best protect themselves from COVID-19 in those lines of work.

Law Enforcement:

The risk to COVID-19 for law enforcement workers during their daily activities are minimal[10,11]. The Centers for Disease Control (CDC) recommends following the Interim Guidance for Businesses and Employers, which focuses on preventing workplace exposures[12]. For those who must make contact with confirmed or suspected cases of COVID-19 the CDC recommends following the Interim Guidance for EMS[13].

For law enforcement, the recommendation of using alcohol-based hand sanitizer with a minimum of 60% alcohol is not applicable if that person has been handling illicit drugs[10]. Narcotics, such as fentanyl, can become absorbed more readily through the use of hand sanitizer. Therefore, washing your hands with soap and water for at least 20 seconds is the applicable preventive measure.

It is vital that law enforcement be trained and refreshed on how properly donning and doffing PPE[10]. This part of training should not be implemented through e-learning methods, since the hands-on activities of this training are essential to learning[14]. Appropriate PPE at a minimum for dealing with someone with COVID-19 is disposable nitrile examination gloves, disposable gown or coveralls, NIOSH-approved respirators, and eye protection. Currently, the CDC has laxed guidelines to respiratory protection to include the use of facemasks[15]. Face masks and respirators differ, where face masks are meant to protect the environment from a sick person, while respirators are for protecting the person from a contaminated environment. Facemasks are an acceptable practice currently not due to safety, but because of PPE supply shortage globally.

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CDC Guidance for Law Enforcement: https://www.cdc.gov/coronavirus/2019-ncov/downloads/guidance-law-enforcement.pdf

CDC Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019: https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html

International Association of Chiefs of Police Information for Law Enforcement on COVID-19: https://www.theiacp.org/resources/document/law-enforcement-information-on-covid-19

Emergency Medical Services and Fire Services:

EMS and fire services plays a crucial part in responding to COVID-19 patients[16]. The EMS guidance applies to all first responders who are anticipating close contact with suspected or confirmed COVID-19 cases during their job tasks. With the heightened exposure to those suspected of COVID-19, training and guidance to EMS workers is paramount as they treat, transport, triage, and assist patients. Due to not being in controlled settings such as healthcare facilities, EMS workers are expected to make quick decisions with limited interventions of eliminating hazards. The CDC provides guidance that EMS workers coordinate with pre-hospital management to notify of suspected cases before arrival of a healthcare setting.

EMS workers need to wear appropriate PPE before entering a suspected or confirmed COVID-19 case scene[16]. The patients should be evaluated for potential respiratory infections, at first if possible, at a safe distance of at least 6 feet. The patient should be given a facemask to minimize exposure. If a nasal cannula is in effect, the facemask should be worn over for infection control. When transporting the patient, limit the number of those in the patient compartment and operate the HVAC system during aerosol-generating actions, away from pedestrian traffic. Once the patient has been transported, leave the rear doors of the vehicle open to allow air flow and clean the vehicle after a sufficient period of time, such as the time to complete the transfer of the patient to the healthcare facility and completion of documentation. The International Association of Fire Fighters (IAFF) provide guidance summarizing the above points and more, such as patient assessment, recommended PPE, EMS transport, cleaning EMS transport vehicles, reporting measures, and employer responsibilities[17]. Additional resources below expand to include healthcare professionals in general that may fill gaps in EMS preparedness and response.

International Association of Fire Fighters: https://www.iaff.org/wp-content/uploads/Coronavirus-Memo-V3.pdf and https://www.iaff.org/coronavirus/#resources

CDC Interim Guidance for EMS: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html

CDC Interim Infection Prevention and Control Recommendations: https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html

CDC Information for Healthcare Professionals: https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html

CDC Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19): https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html

For Trainers:

Trainers, workplace policy developers, and those in a position to impact workplace change can use the following resources to develop and implement training programs focused on protecting first responders to COVID-19 and other infectious diseases. The trainer should use the latest available information and guidance based on best available practices from reliable sources, such as the WHO and CDC. With the emergence of COVID-19, the situation is rapidly evolving as new information becomes available and guidelines or training should be updated to reflect those changes. The latest global information can be found at WHO, national guidelines at CDC, and research at National Institute of Health (NIH)[9,18,19].

The Occupational Safety and Health Administration (OSHA) provides guidance on preparing workplaces for COVID-19[20]. The OSHA guidelines provides employers on how to handle COVID-19 by addressing sick workers and how steps can be taken to reduce exposure. Issues addressed include absenteeism, developing an infection control and prevention plan, communicating safety and protection, PPE, administrative and engineering controls. While no specific OSHA standard exists for COVID-19, other OSHA standards do exist that address PPE, bloodborne pathogens, PPE, and employer responsibilities.

For increasing health and safety awareness for responders and workers who are at risk of COVID-19 exposure can use the National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) training tool and response online training[14]. The tool and training objectives are to explain basic facts, assess workplace risk, define key steps in worker protection and infection control, and methods to prevent and respond to COVID-19. Pathogen safety training can further prepare workers by improving knowledge on recognizing hazards on the job related to biosafety[21]

World Health Organization Updates: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen

CDC Latest Prevention: https://www.cdc.gov/coronavirus/2019-nCoV/index.html

NIH Research Updates: https://www.nih.gov/health-information/coronavirus

OSHA Guidance on Preparing Workplaces for COVID-19: https://www.osha.gov/Publications/OSHA3990.pdf

NIEHS WTP Training Tool and Resources: https://tools.niehs.nih.gov/wetp/index.cfm?id=2591#WTPResources

NIEHS WTP Pathogen Safety Data Guide and Training Module:
https://tools.niehs.nih.gov/wetp/index.cfm?id=2554

4.0 Conclusion

With the ongoing crisis to public health due to the COVID-19 pandemic, a need for prevention and response training for first responders is urgently needed. Evidence based and verified information from training can reduce disinformation circulating from informal sources. This reports' goal has been to provide resources for trainers, workplace policy developers, and those in a position to impact workplace safety and health to use to protect first responders to COVID-19 and other infectious diseases. The resources provided can benefit those using them to have the latest verifiable guidelines for best practices and training during this rapidly evolving response.

5.0 References

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