MEDICAL BREAKTHROUGHS
RESEARCH SUMMARY

TOPIC: INTUBATION CUBE: CLEVELAND CLINIC KEEPS MED STAFF SAFE
REPORT: **MB #4781**

BACKGROUND: In the United States, there are currently more than four million cases of COVID-19 and 150,000 deaths. COVID mainly spreads from person to person via respiratory droplets that are produced when a COVID positive patient sneezes, coughs, or talks. These droplets can then travel through the air and land on another person's mouth, nose, or eyes and travel into the body, primary into the lungs. Spread is mostly likely to occur when people are in close contact with one another, under six feet or closer, and have no respiratory protective equipment like facial masks that cover the mouth and nose.
(Source: https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Spread)

CURRENT RISKS: Most severe COVID patients require mechanical ventilation and intubation by a medical professional. COVID has been confirmed to spread through aerosolization from person to person and the viral extent of the airway is very high and very contagious which creates a serious problem and risk for those preforming the intubation. In a recently reported 138 confirmed COVID-19 cases, 41.3 percent were considered acquired infection from the hospital, and more than 70 percent of these patients were healthcare providers. Healthcare professionals must be geared up with personal protective equipment such as a N95 mask, face shield, goggles, fluid resistant gowns and gloves. To limit proximity, they are also performing under a time constraint.
(Sources: https://anesthesiology.pubs.asahq.org/article.aspx?articleid=2763451, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html, https://canadiem.org/recommendations-for-covid-19-intubation-an-infographic/)

NEW OPTIONS: Cleveland Clinic med staff and engineering team have developed an intubation cube to encase patients while clinicians preform intubation. With this tool, healthcare providers can work well to manipulate the airway of the COVID positive patient while still being protected from potential sputters, coughs, or simple exhalation of the patient. The tool is a clear transparent barrier that can be disposed of. Daniel Napierkowski, MD, President of Cleveland Clinic Marymount Hospital said, "So, it gives the opportunity to intubate the patients safely, protect the rest of the room so none of these particles are floating around and exposing the rest of the OR staff to the virus."
(Source: Daniel Napierkowski, MD, President of Cleveland Clinic Marymount Hospital)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com