

Props for COVID-19 In-situ Simulations

1. **The Aerosolized Sneezer:**

(Please note this prop is in early stages of development and pressed into action because of time. So as is there's quite a bit of fluid leakage that happens at the back of the manikin's head and onto the stretcher)

Utilizing Bernoulli's Principle this prop incorporates a high gas flow and a fluid source. The gas source is from the wall outlet so you need high pressure hoses (air or O2) to a check valve for controlling flow of gas. I used a spring-loaded check valve reclaimed from a Bird ventilator, but you can find something at the hardware store (Canadian Tire, Home Depot, etc.) From my check valve I attached an O2 nipple to connect suction tubing (2 for a greater length). From the suction tubing add a "T" connector. This is where the fluid source comes in at a 90-degree angle. The fluid source is from an IV bag with IV tubing and a disposable pressure infuser, so fluid can be primed up to the point of the "T" connector. From the remaining port of the "T" connector, attach a large bore flexible tubing about 7" long. This will be the output of the aerosolized spray.

For the spray to come out of the manikin's nose, remove the manikin's face and find a direct path to the inside of a nare. You will need to cut a passage into the manikin to incorporate the prop. To hide the tubing with the gas and liquid source, lay a blue pad underneath them and then cover with another blue pad. This doubles as camouflage and absorbs the extra fluid from the leaking. Open and close the valve to create the wet sneeze. Re-prime the line with fluid so it's at the point of the "T" connector.

I would not cut into my manikin if its still under warranty. I did it on a Laerdal ALS manikin and a 15 year old SimMan. Post manikin cut for the prop insertion, you are still able bag mask ventilate the manikin. The path of least resistance is still to the "lungs"

2. Glo Germ: available on Amazon
3. 2 of the same wigs
4. 2 of the same tee shirts