Cross Contamination – Common "Bus-Routes" We Need to be Aware of...

Since the Ebola outbreak of 2013 in West Africa the World Health Organization, and medical scientists around the world, started looking a little closer at cross-contamination between patient and healthcare workers. The preliminary information pouring in is quite alarming. It is being discovered that the rate of cross-contamination during the removal of Personal Protective Equipment (PPE) is alarmingly high, sometimes exceeding as much as 80%. This is the same PPE that is designed to protect us from this cross contamination.

So the question is this: Is the problem in the design of Personal Protective Equipment that is being used around the world, or is the problem likely in the technique of the removal of such PPE? I think we ALL know the answer to that one. Now, I realize that we, as college educated medical professionals, sometimes get a little defensive when the quality of our technique of any skill that we perform in practice is being looked at closer than usual. Understand that the donning and doffing (putting on and removing) of Personal Protective Equipment is a skill like everything else, and sometimes this skill needs to be slightly fine-tuned to make it a little safer for us and our patients.

There was a small study performed in the Cleveland area that showed a remarkable demonstration of how easy cross contamination occurs when removing PPE. Dr. Myreen Tomas and Dr. Curtis Donskey of the Cleveland Virginia VA Medical Center performed this demonstration using 435 healthcare workers at 4 separate hospitals in the area. This included all healthcare workers who interact with patients and use PPE. They contaminated gloves and gowns with a fluorescent lotion. What they discovered was even when removal of PPE was correctly performed about one third of the providers became contaminated with the fluorescent lotion. The most common areas of contamination were the hands and necks.

This demonstration showed the importance of two things. The importance of fine-tuning our technique of PPE removal, and the critical importance of keeping the staff actively involved in continued education of even the little skills that we practice during patient encounters. Bacteria and viruses travel by any route they can. Think of them as passengers and our clothes, hands and equipment as the bus that they ride on to get from place to place. We happen to stop where they happen to be. They jump on and we move along to the next stop where they get off.

I hope you all enjoyed this BreathSounds Brief of information and learned a little something. Pass the information along to your colleagues. Be happy, be healthy, and above all... Be safe...