



2019 August TOPIC # 7 – Compromising instrument sterility.

So your cleaned instruments are to be dried, packaged and loaded for sterilization. You are expecting to deliver a sterile item to your patient. What can go wrong? Addressing the points below assist with maintaining sterility.

1. **The packaging environment** – is it clean or located directly next to the sinks where splash is occurring? Look at the area about a metre around the sink(s) where you are scrubbing and rinsing – this is how far out splash droplets fall. If you are packaging or drying instruments in this zone then splash will contaminate them. Although you insist that they are to be sterilised, it is undesirable that even dead bacteria are released into patient tissue (dead bacteria can release products that can cause adverse reactions).

Solution – ensure that the sink is not being used while the items are being manually dried as well as covering each rinsed cleaned item prior to drying. I suggest a lidded container to slip each rinsed item into.

2. **Are your sterilised packs cooling in the splash zone?** This may result in contaminated packs. Some processing areas are just too small to cool loads in and lead to exposure to splash. With awareness of the need for the cooling area to being clean and dry, cooling does not take place near wet areas because of risk of contamination.

Solution – if necessary, remove trays of packs from the steriliser to cool in another area to reduce the risk of contamination if there is no bench space any further than a metre or more to cool them on. A partial solution is to cover the tray with a large domed plastic container

3. **Are you leaving your packs to cool for too long?** This increases the risk of contamination from the environment ie dust, moisture etc.

The load is to be removed from the steriliser as soon as the cycle is complete. Do not use the steriliser to cool items in for two reasons. 1. The radiant heat of the chamber extends the cooling time and the potential for exposure to contamination. 2. This increases the risk of mixing up processed with unprocessed loads.

Solution – while the load is cooling, check the results then put the load away as soon as the packs are cool (around 10 minutes). Staying close to the load means one person is responsible for its correct cooling, monitoring and storage.

4. **Are your sterile storage cupboards and drawers or containers left open?** This exposes pack contents to contamination. Or do staff touch packs while searching for the correct item?

It is often assumed that an item in a pack is sterile but if that pack is exposed to dust, moisture or damage etc. including by dirty hands, then the risk of using a non sterile item is present. Are there gaps in your storage cupboard doors?

Solution – ensure all staff know how critical correct storage is. Explain that if items are exposed to dust or dirty hands then the contents may be contaminated.

Keep the processing area clean and dry after use. Include wiping the splashback & drying the sinks and taps each time

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