

My Knowledge Training

Ultrasound Machine Care

Module Objectives

- Learner will understand proper US machine cleaning procedures
- Learner will be aware of proper machine handling and care to prevent damage
- Learner will understand appropriate procedures for hygiene and cleaning with regards to US guided IV placement



Phillips Sparq Ultrasound Machine

➤ 3 Machines (001, 003, 007)

➤ Live outside SRU 3

➤ Should be plugged in at all times when not in use

➤ Must be cleaned before and after each use

Rationale



Ultrasound Machines are critically important equipment for patient care



Ultrasound Machines are expensive (\$50,000-150,000!!!!)



Ultrasound Machines are prone to damage when not properly cared for



Machine Cleaning Procedures

- Per JCAHO machines must be cleaned appropriately before each use



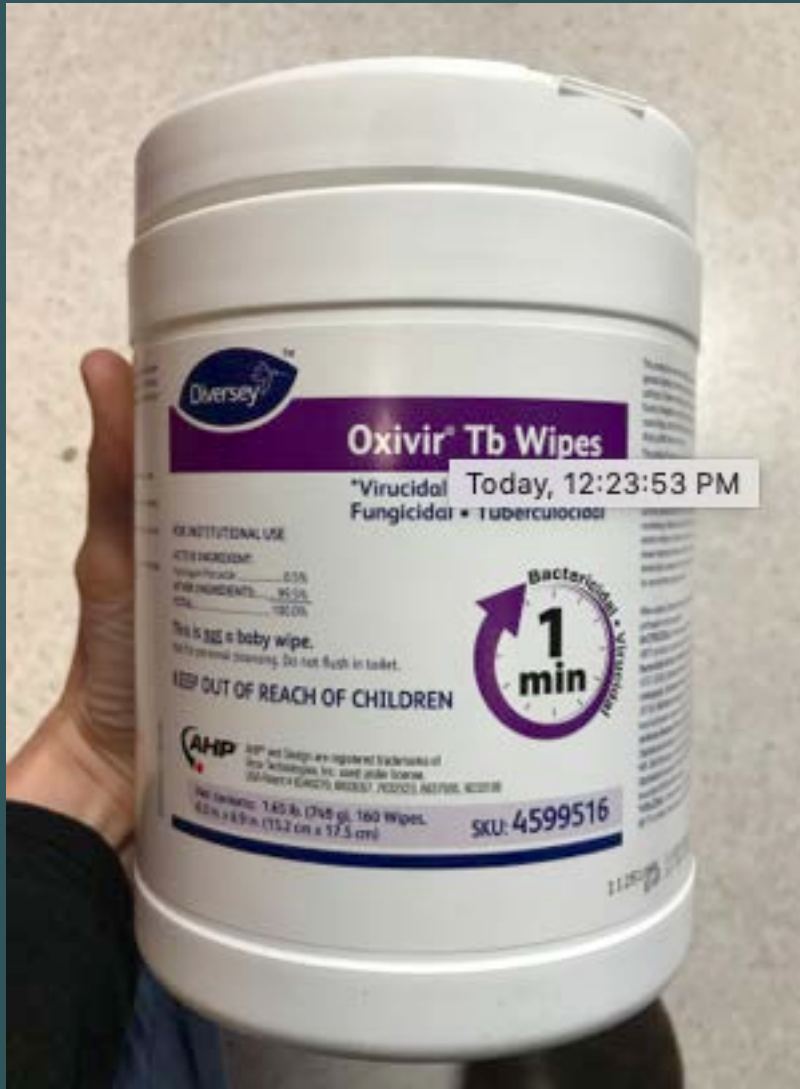
Machine Cleaning Procedures

- We mandate cleaning before and after use
- Our wipes have a 1 minute dwell time, so allow the probe to sit for 1 minute prior to using.



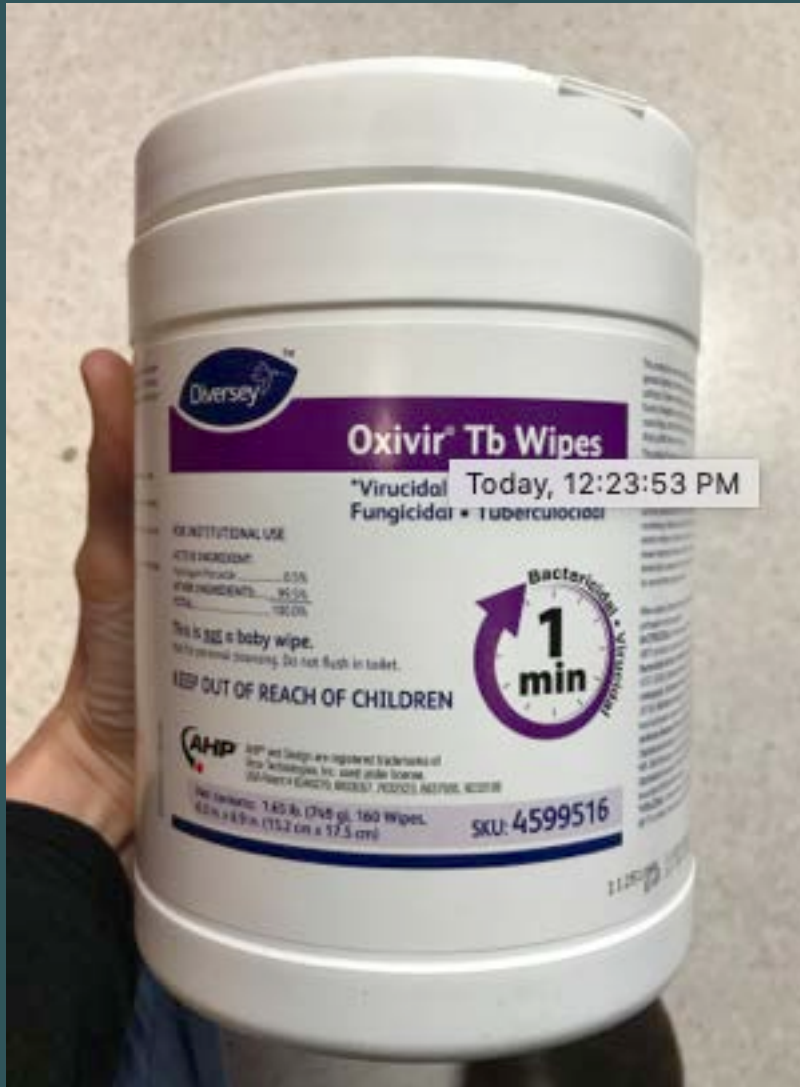
Machine Cleaning Procedures

- Use of incorrect sanitizing wipes/solutions can cause damage touch screen and ruin the membranes of the US probes



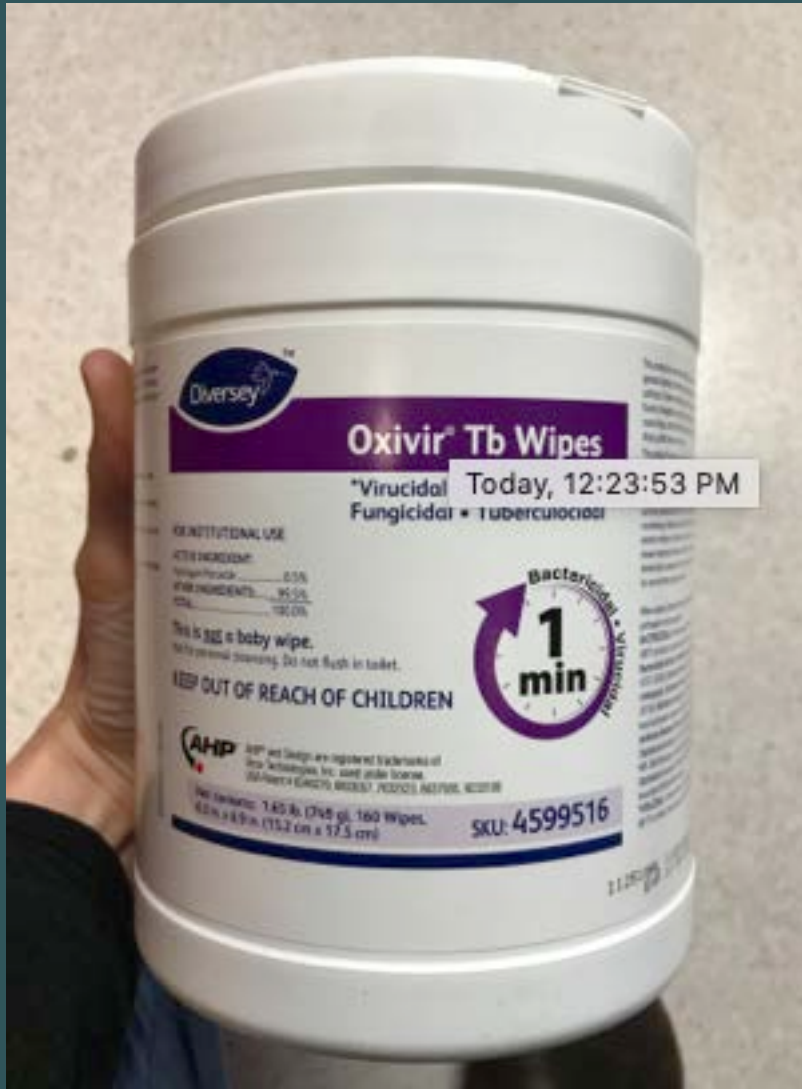
Machine Cleaning Procedures

- USE Oxivir Tb wipes for machine cleaning
 - These can be found on the Machine or in the storage closet between Ipod between rooms 5 & 7



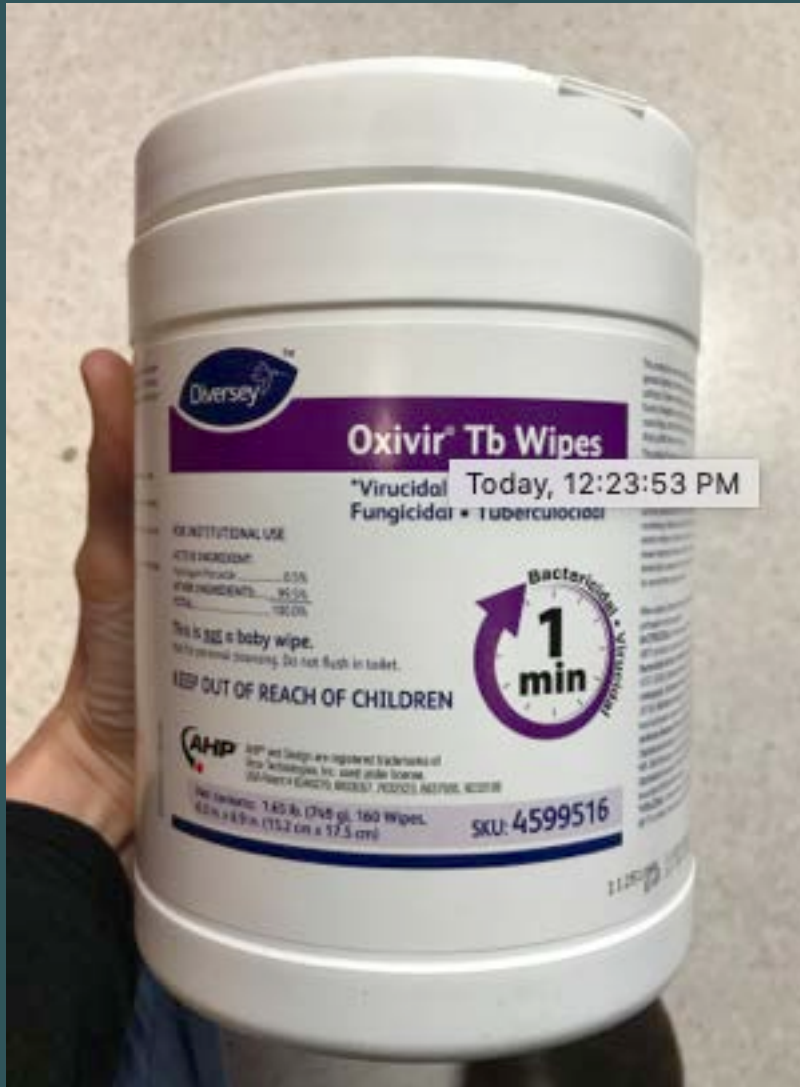
Machine Cleaning Procedures

- Prior to wiping use a towel to remove any gel or blood/body fluids



Machine Cleaning Procedures

- Prior to wiping the screen be sure to put the machine in sleep mode to keep from hitting all the buttons



Machine Cleaning Procedures

- Wipe all surfaces of the machine/probes with a cloth and allow the machine to sit for 1 minute prior to use to allow adequate disinfection.



Proper Machine Handling – Cord Damage

- Make sure all cords are free from the wheels/getting caught
- Damage to the wiring in the cords is the very common/costly
- Running over the cords means we have to buy a new probe



Proper Machine Handling

- Ultrasound probe should either be in your hand or in a holster – they break when dropped and are very expensive to replace
- Replacement probes may cost upwards of \$10,000 each!!!!

Machine Handling – Cord Damage



Hook Cords into the Clips to keep them out of the way of wheels

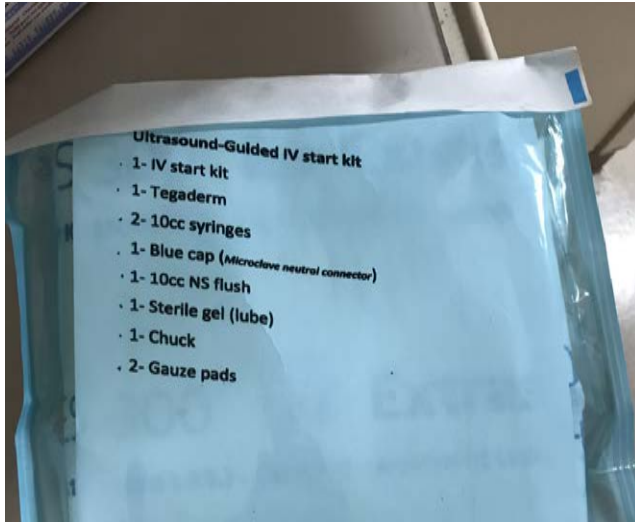


Keep the machine in the highest position when moving to keep cords off the floor

Proper Machine Handling

- Do not leave sharps or open gel containers on the machines!
- Leave nothing in the upper tray.





US Guided IV Placement

- For your convenience US IV kits are stocked in a cart beneath the endocavitary probe cabinet at the entrance to Ipod

US Guided IV Placement

- Also in this cart you will find longer IV catheters. These work much better for US placement (because veins are deeper)
- Please use them!!!





Ultrasound Guided IV Placement

- Probe must be covered with a barrier to prevent gross contamination with blood and bodily fluids (visible blood/fluid)
- Please use a tegaderm or other sterile probe cover for this purpose
- Apply a thin layer of between the probe and the tegaderm
- Use sterile gel over the tegaderm

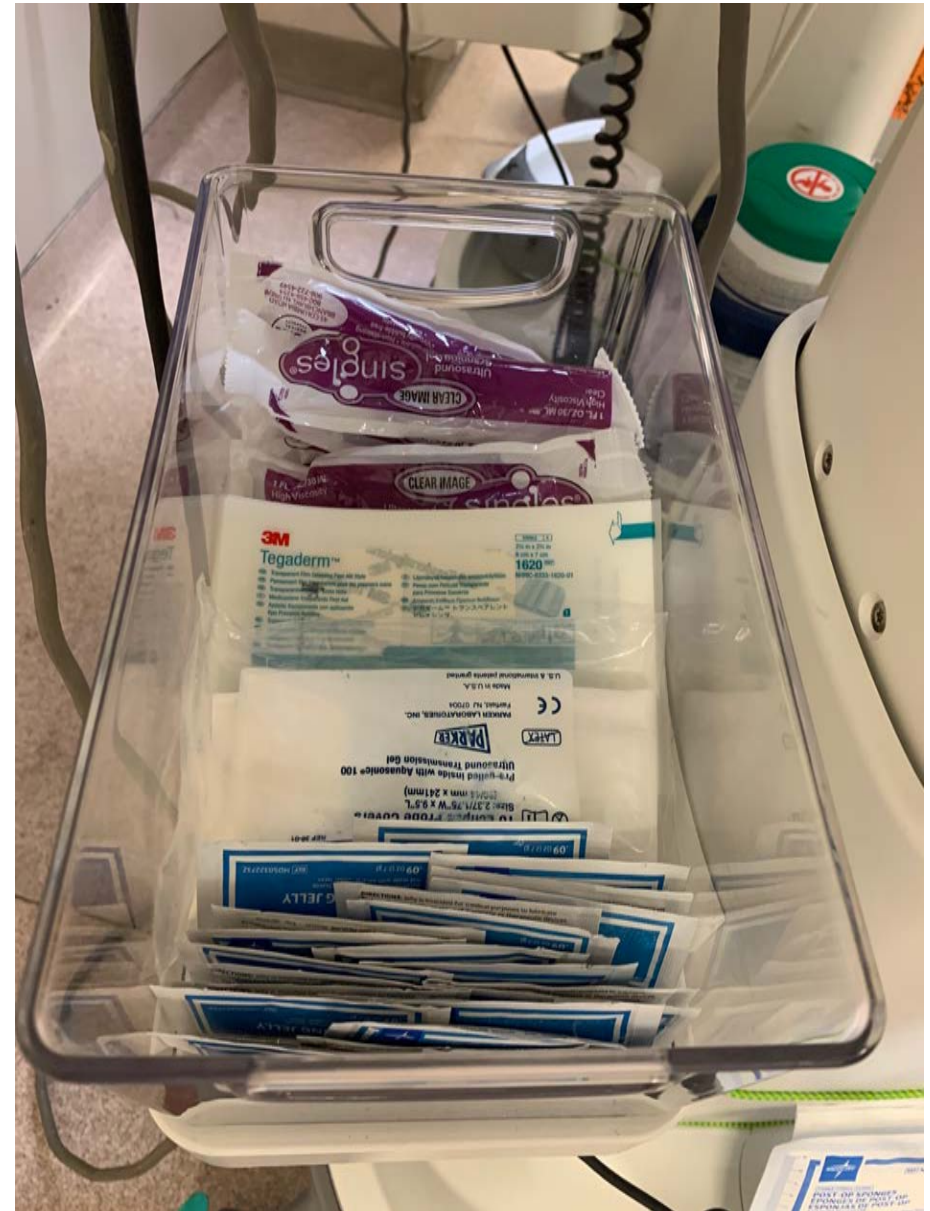


Ultrasound Guided IV Placement

- Tegaderms must be **COMPLETELY REMOVED** prior to cleaning the probe
- Wiping a tegaderm can cause it to adhere to the probe thus damaging it

Re-Stocking Carts

- Handy Supplies are kept in plastic bins at the back of each machine
- Leave the machine ready for the next person by re-stocking when necessary



Ultrasound Guided IV Placement

If the US Probe becomes grossly contaminated it requires high level disinfection.

This can be done with the Trophon (Triage Area) as per standard endo-cavitary probe cleaning procedure.

Additional Resources

- <http://blog.5minsono.com/diva3/> - 5 Minute Sonography
- <https://resusnurse.com/2018/09/12/022-how-to-start-a-nurse-ultrasound-iv-access-training-program-w-bret-nelson-md/>