

Sterilizer Monitoring Program

The **Ontario Ministry of Health** has released a protocol under the **Infection Control Program** of the **Mandatory Health Programs and Services Guidelines** specific to any facility or persons offering services where there is a risk of exposure to blood or bodily fluid, such as, but not limited to: tattoo studios, body piercing, hairdressing, laser hair removal and various aesthetic services.

Sterility Testing Procedures (based on the Personal Services Setting (PSS) Protocol)

1. Obtain spore strip kit with *Geobacillus stearothermophilus* AND *Bacillus atrophaeus*. *
2. Place the clear plastic envelope labeled “CONTROL. DO NOT STERILIZE” OUTSIDE your sterilizer.
3. **Do NOT open blue packaging.** Remove one of the blue packages from the clear plastic envelope labeled “TEST STRIPS” and place it in the sterilizer (perhaps at the bottom right side). Take the second blue package from the same plastic envelope and place it in the sterilizer in a different location (perhaps in the front top left side).
4. Record information on sterilizer monitoring log (included in kit).
5. Fill out the required sections on the **Submission Form** and indicate your type of sterilizer on the clear envelope label.
6. Place the two sterilized strips back in their clear plastic labeled envelope. Take this envelope and the control envelope and place them in the pre-addressed manila envelope that came with the kit. Ship the strips within 48 hrs of sterilizing. **Make sure the Submission Form is complete and is sent with the spore strips.**
7. Once received by the laboratory, your strips are placed in an indicator broth and are incubated, 48 hours for *Geobacillus stearothermophilus* and 7 days for *Bacillus atrophaeus*. After the incubation period is over, a colour change indicates the success of the sterilizer to reach optimum temperature.
8. Results will then be faxed and/or mailed. Successful test results will include a proficiency sticker to affix to your certificate each month.
9. Clients with adverse results will be verbally notified immediately, as will your local health unit. Paperwork of adverse results will be faxed within 24 hours to both parties.
10. Adverse reporting will not incur an additional cost.

* *Geobacillus stearothermophilus* used to be known as *Bacillus stearothermophilus* and *Bacillus atrophaeus* was called *Bacillus subtilis*.

Why sterilize?

- Sterilization is the elimination of all transmissible agents (such as bacteria, fungi and viruses) from a surface or piece of equipment.
- This will reduce the risk of **blood-borne pathogens** including **Hepatitis B** and **C**, and **HIV**.
- Items that penetrate the skin such as needles, needle bars, probes, and scalpels are considered **critical items**, and require sterilization. **Disposable razors must be discarded** and are not acceptable to process for re-use.

Methods of Sterilization

- The **only** acceptable methods of sterilization are an **autoclave** (heat and steam under pressure) or a **dry heat** sterilizer.
- **Unapproved** sterilization equipment includes glass-bead sterilizers, UV sterilizers (ultraviolet), pressure cookers, boiling water and ovens.

High Risk Establishments

- must sterilize all re-usable items by autoclave or dry heat sterilizer between uses.
- must regularly service and monitor autoclaves or dry heat sterilizers .

Autoclave or Dry Heat Sterilizer Procedures

- Items in every load must be packaged to maintain sterility.
- Every load requires **temperature sensitive tape** which indicates by a colour change that the appropriate temperature has been reached.
- The sterilizer must be **monitored bi-weekly** with a commercially available preparation of heat resistant spores: *Geobacillus stearothermophilus* or *Bacillus atrophaeus*.
- Spore test results and the monitoring information for each load - date, items, temperature and/or pressure, cycle length and cycle completed results - must be kept in a logbook.

REFERENCES

- <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s3/index.html>
- <http://www.ene.gov.on.ca/envision/gp/4321e.htm>
- <http://www.nbdhu.on.ca/en/Personal%20Service%20Settings/Guidelines%20PSS.htm>
- http://www.noharm.org/library/docs/Non-Incineration_Medical_Waste_Treatment_Te_7.pdf
- http://www.safetyoffice.uwaterloo.ca/hspm/lab_equipment/autoclaves.htm
- <http://www.hawaii.edu/hivandaids/Prevention%20of%20Cross-Contamination%20in%20Tattooing.pdf>