

Hygiene Standards in the Tattoo Parlour and Practices for Prevention of Infection

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Abstract

The tattoo studio and the procedures and operations of practicing tattooing may help to reduce the risk of infections associated with tattooing or, if improper, increase the risk. Thus, as a preventive measure, the tattoo studio should be optimized. All procedures should be carefully chosen to eliminate microbial contamination from the environment (from needles, machines, and other utilities) and also from persons. This chapter provides a detailed generic description of the organization of a safe tattoo procedure, i.e. guidance for professional tattooists on how to set up or reorganize their studio with the aim of the highest standard possible, which may satisfy customers' needs and make the procedure safe for the end consumer as well as the practitioner. These practices are necessary to meet upcoming official requirements in the future.

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Regardless of what anyone thinks about body modification, there are few negative aspects or even great risks associated with either a tattoo or

a piercing. This modification is part of a magical ritual practiced for thousands of years. No one can explain why, but it's just as natural for many indigenous people as sleeping, eating, or providing food for the day: a part of life. This practice has become similarly so in the West. Body modification is a way of life and an art form that has been of great importance for many people, and it is a natural way for us to express ourselves. The risks are not in the procedure itself, but in our behaviors. It is when we do not take the few risks that are involved seriously that tattooing can have unintended consequences.

Studio Routines and General Shop Flow

A tattoo studio is dependent on its flow and the planned venue, which are based on what you will use it for (fig. 1). You have an obligation as a practitioner to ensure that the premises meet the requirements of the decision-making authorities.

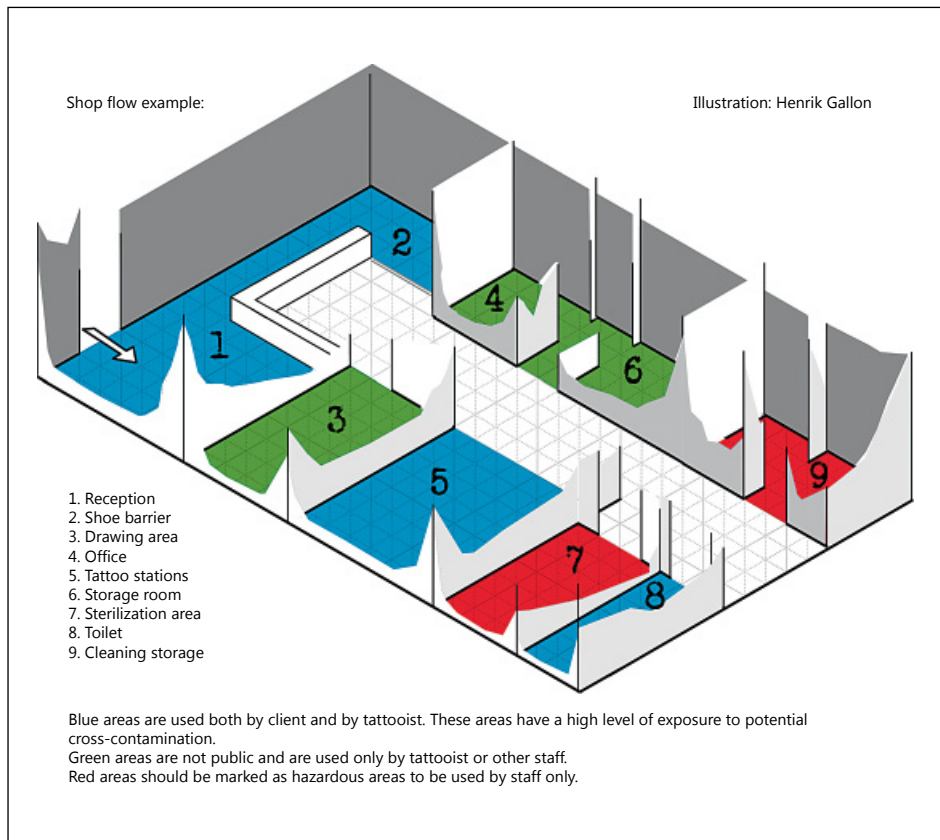


Fig. 1. Shop flow.

A tattoo artist is also considered to be required to be well versed in all aspects of his or her craft, even if it does not include any requirements for the esthetic knowledge that the practitioner should have or not have. The look and the methods differ in various parts of the world, and primitive methods are still used. This also applies to the degree of knowledge on hygiene, and in many cultures, tattoos are still performed under very dirty conditions. However, these cultures cannot be blamed for the problems that we, in the West, experience; the eventual problems caused by remote cultures dedicated to body modification can be seen as socially negligible.

When we break the skin barrier, we commit ourselves to taking responsibility for some simple factors. We have, by penetrating the skin, made it possible for outside circumstances to damage the internal organs. The skin is the body's largest living organ, designed to a big degree to protect what is inside the body. We and whom we are working with while damaging the skin barrier must therefore make it our responsibility to ensure that the injury heals as quickly as possible and that the effect of the procedure is as small as possible. This is ensured through good practice, appropriate flow of the area, and a well-thought-out plan for after care; it doesn't have to be more complicated than that.

When it comes to the areas of the shop, it is good to have a clear idea of what each room is for and how it is used. The workstation must be planned so that it provides as little risk as possible and so that it is safe to work from. Creating a workable flow in the lounge, workroom, sterile room, and common areas is the easiest way to ensure a good and safe procedure.

There should also be a written standard for the shop for other duties on the premises used for the procedure. Cleanliness is of utmost importance to reduce the risk of cross-contamination, and all surfaces are of the same weight. Having knowledge of the management of materials and keeping the surfaces clean are critical to ensure the safety of the environment that you are working in.

It is also evident through the research done, e.g. that of the European Society of Tattoo and Pigment Research, that much of the problems that occur are actually caused by the customer in connection with healing. To prevent unwanted infections, a health declaration before the procedure is recommended when the customer's general condition may form the basis for many common problems. It is also important to have understandable after-care advice to give after treatment, when the most common incident is infection associated with healing. A good practice is to give this advice in written form.

Procedure

Use purpose-designed disposable gloves when handling contaminated items as well as during the actual tattoo session.

Good hand hygiene is extremely important. By washing our hands with soap and water, only the visible dirt comes off. Disinfection of the hands is more effective in reducing microorganisms and may therefore be appropriate to perform often, especially at jobs where the risk of infection is greater during daily treatment routines (tattooing). Hand sanitizer does not have to

be preceded by washing hands that are not visibly dirty. However, visibly dirty hands must first be cleaned with soap and water and then with hand sanitizer.

- Never touch the contaminated goods or the newly tattooed skin without gloves.
- Never touch anything that does not have to do with the session with contaminated gloves.

Of the utmost importance is that all that will be touched during the session must be wrapped in plastic so that the dirty (contaminated) plastic can be removed when the work is done. Some examples of what must be wrapped in plastic are tattoo machines, the bottle of water for washing the skin during the process, the power supply, and even the customer's chair (fig. 2, 3). There are more examples, but those we will mention in detail later in the text. After the session, all contaminated plastic should be thrown away, and the workspace, the customer's chair, and all equipment used should be thoroughly disinfected.

During the working process, the tattoo artist must always take off his or her gloves if he or she needs to touch something that is not protected with disposable plastic. For example, if the phone rings or if he or she needs to go to the bathroom, the contaminated gloves must first be thrown away before anything else is done. If this rule is broken for some reason, the mistakenly contaminated surface must immediately be disinfected.

Only sterilized goods should be used on each and every new customer. During the session, only disposable needles should be used on the customer. Disposable goods should be used as much as possible, unless it is inconsistent with environmental considerations.

Make sure that everyone working in the studio on a daily basis understands the risks and consequences of cross-contamination. Everybody working in a tattoo shop is a risk factor, so it's crucial that any person working in the shop environment has the required education regard-



Fig. 2. Set up.

ing blood pathogens and cross-contamination (fig. 4).

A special standard regarding the hygiene procedure for the client is preferable. The client is NOT necessarily aware of the hazards of cross-contamination, so a document explaining the risks for the client in the shop can be helpful.

If there are any errors in the pre-procedure, start over. Never take a chance regarding the client's or your own safety.

How to Choose Materials When Designing the Workspace

The work area should be well thought out, as should material choices, as these will facilitate the daily hygiene work. The workspace should not be right next to the space where you clean the machines and tubes after the procedure. It should have its own place: not necessarily a separate room but separated from anything that can affect the hygiene work negatively.

- The table that is used as a surface to put the tattoo machines on while performing the tattoo must be of a material that is easy to



Fig. 3. Protection barrier.



Fig. 4. Cross-contamination.

wipe clean, such as glass or stainless steel. Wood should be avoided because it can be difficult to disinfect due to the fact that the wood grain can hide bacteria in the deeper structures.

- The customer's chair and bunk and the tattooist's chair must be easy to wrap and have a surface texture that, just like the tabletop, must be easy to wipe clean. These should be easy to dis-

infect, and not plain soft fabric-covered chairs or any other material that is impossible to disinfect if necessary.

- All storage of either single-use, sterile, or ultra-clean equipment should be in a dry, dust-free environment. This applies to all of the inks and fluids that are used during the procedure. Cabinets with doors are preferable for material storage (fig. 5).



Fig. 5. Material storage.

- The studio should have good ventilation.
- It is good to have a shoe limit so that the customer minimizes the risk of bringing dirt from the outside into the working area.
- The studio should have a well-separated area for cleaning and sterilizing the machines and goods. An area where you won't need to open a door to get there is preferable.

Preparation of the Work Area and the Machines

All preparation work is done with well-washed hands (soap and water) that are then cleaned with hand sanitizer. In addition, disposable gloves are used when it comes to the plastic wrapping procedure.

Work Preparation

The tattoo artist should first, before anything else, clean the table and chairs (all of the surfaces used during the session) by disinfecting them. Do not forget the clip cord and machinery.

Step two is to wrap everything with plastic that risks being touched during the work. What you need to understand here is that if you don't do this, sooner or later, cross-contamination

will be inevitable and will lead to bacteria spreading. Thus, the basic rule is that anything that may be touched during the session must have a protective barrier of the disposable kind that should be thrown away after each and every finished tattoo (fig. 2).

Some Specific Steps that Cannot Be Neglected

- The front of the electric transformer should be well covered with disposable plastic wrap. All water bottles or the equivalent should also be covered with plastic bags, leaving only the top of the plastic bag open for the bottle. We recommend that the tattoo artist use dropper bottles rather than spray bottles.
- The tabletop should be protected with plastic or a protective sheet made of paper and plastic. It is enough to cover the area used the most during the session.
- The part of the clip cord that is touched when changing machines or when you unplug the machines at the end of the session should be covered with a plastic bag. Remember that the cord can touch with the tattoo during the session, so the plastic bag designed for the cord should be at least 70–80 cm long.

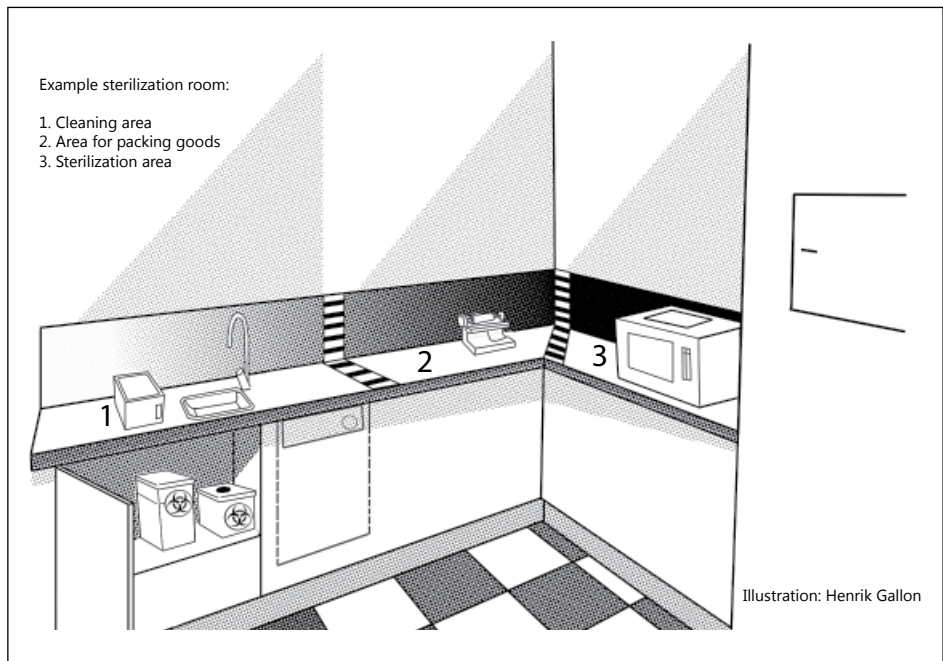


Fig. 6. Sterile room.

- Use only disposable ink caps. The ink cap holder should also be covered with a plastic bag.
- Each tattoo machine must also be covered with a well-suited plastic bag. This is vital due to the fact that the machine is hard to clean because of its nooks and crannies. It is also impossible not to touch the machine when you replace it with another machine, so the protective barrier is as important as everything else that we emphasize here.
- Vaseline is to be taken out of the jar with a disposable tongue depressor or the tattooist's hand, of course protected with a disposable glove.
- Only disposable plastic cups should be used to wash out or dilute the ink during the session and should be thrown away after each and every customer. The tattooist should never refill an ink cap during the procedure; use a new one

if a refill is needed to avoid cross-contamination of the bottle.

- Only disposable razors should be used for preparation of the skin's surface.
- The chair or the bunk that the customer sits or lies on must also be covered properly. The parts of the tattooist's chair that will be touched during the session must also be covered (e.g. the height-adjusting lever).

Machine Preparation

Start by cleaning the machines. Very important is that the machines are washed and cleaned with disinfectant after the session with the previous customer and before the set up for the new customer.

The new set up with needles, grips, and tubes must be placed in an area made only for this purpose. It would be appropriate to do so on a sheet

of glass that can be cleaned with disinfectant regularly. This specific area cannot be near the sink where the dismantling of equipment is done or near the sink where you clean and sterilize the contaminated grips and tubes.

Needles, grips, and tubes are to be stored in sterile bags or put into the autoclave just before use.

When the needle, grip, and tube are to be mounted on a tattoo machine, only disposable gloves should be used. Rubber bands and the 'nipple' (to hold the end of the needle in place) must be disposable; otherwise, they can be contaminated if used more than once. The last thing before using the machines: put a suitable plastic bag over each machine. A must!

Regarding sterilization equipment in the shop, it is of major importance that the practitioner is well aware that the equipment needs to be maintained and serviced. The responsible parties also need to know the difference between different types of autoclaves and procedures. The regulations for this equipment look different throughout Europe, but harmonization of the rules is desirable. In-house sterilization is the best way to control and maintain sterile conditions, but this also calls for a great deal of responsibility for the practitioner, who needs to have a strict plan for how the routines should be followed and how to minimize the risk of cross-contamination (fig. 6).

Recommended Reading

- 1 The National Board of Health and Welfare. <http://www.socialstyrelsen.se/english> (accessed January 15, 2015).
- 2 Swedish Work Environment Authority. <http://www.av.se/inenglish> (accessed January 15, 2015).
- 3 Swedish Medical Products Agency. <http://www.lakemedelsverket.se/english/> (accessed January 15, 2015).
- 4 Public Health Agency of Sweden. <http://www.folkhalsomyndigheten.se/> (accessed January 15, 2015).

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