

3 Most Commonly Used Methods of Sterilization in Dental Clinics

It is normal for medical facilities to use disinfectants to sterilize their tools, and dental clinics are no different. As a matter of fact, it is vital that dentists sterilize all of their equipment since they only work in patients' mouths.

The last thing you want is to end up getting sued or have your reputation ruined because a patient got a bacterial infection at your clinic. This is why dental clinics have strict guidelines regarding cleanliness to avoid any infections. Dental sterilization is simply the process of cleaning all the medical and surgical tools and getting rid of infected ones. Dentists, assistants, and hygienists are required to get dental sterilization and infection prevention training.

This training is an essential part of their education because it prepares them for their future in medical facilities. Every dental clinic must have an infection strategy in order to remain in control and to be able to prevent any risk of infections. There are many methods of serialization that are used in dental clinics, so keep reading to learn about the most common ones.

Picture 1 of 3 Most Commonly Used Methods of Sterilization in Dental Clinics

What is Dental Sterilization?

Before learning about the different methods of dental sterilization, you should first understand what dental sterilization is. Dental sterilization is a process used to get rid of microbes and bacteria on dental instruments. That being said, there are some tools that should be thrown away after one-time use while there are others that can be reused which is why they need to be disinfected. Since there are different kinds of bacteria in the human's mouth, disinfection is a must in order to prevent germs from being transferred from one person to another. This is why the tools must be cleaned to avoid any infections.

The sterilizing process is done using different methods, but these are the ones that are commonly used.

1. Dry Heat

Dry heat sterilization is the use of forced or static air to kill microbes. The use of high temperature and the prolonged process plays a huge role in disinfecting the tools. The high temperature required for this procedure should be between 300 and 375 Fahrenheit. The disinfection takes from 12 to 150 minutes but this mainly depends on the temperature and the instructions provided by the manufacturers. One of the biggest advantages of dry heat sterilization is that the tools don't rust or get damaged. Another advantage is that you can use the tools directly after they are sterilized because they don't need time to dry out as they are already dry but you have to wait for a short amount of time for them to cool down.

2. Autoclaves

Autoclaves are another method that many dentists use for disinfection. Autoclaves usually use steam, and there are two types that you can choose from; pre-vacuum and gravity displacement. The disinfection process doesn't take a long time as it takes from 4 to 30 minutes depending on the temperature used which is between 250 to 273 Fahrenheit. Before you use this method, you must check the manufacturers' instructions to learn if the instruments should be wrapped or unwrapped first. There are various types of Autoclaves machines and leadsonics that have information that can help you make an informed decision. Before you opt for one, make sure to check the specs and prices so you can find a machine that caters to your needs and fits your clinic's budget. Unlike the dry heat method, the instruments will take between 25 to 40 minutes to dry out. This machine kills bacteria by delivering heat using steam.

3. Unsaturated Chemical Vapor Sterilizers

Unsaturated chemical vapor sterilizers require the use of a mix of acetone, ketone, alcohol, formaldehyde, and water in order to produce the vapor required for sterilizing. The biggest factors needed to achieve disinfection are temperature, pressure, and time. It is essential that the pressure is at 20 and the temperature must reach 270 Fahrenheit. Last but not least, you should know that the disinfection usually takes about 20 to 40 minutes. Since water is barely used in this process, the tools won't experience any corrosion. However, you should make sure to dry the instruments before disinfection.

Picture 2 of 3 Most Commonly Used Methods of Sterilization in Dental Clinics

There are a few things that you need to look out for while sterilizing your equipment. You should never interrupt the disinfection cycle, pre-clean the tools, or overload the machine. You should make sure that your machine is well-maintained and you can ask a professional to check it every once in a while. Remember, a faulty machine can do more damage so always be on the lookout for any signs of tear. Disinfection is vital and you should invest in the right machine to guarantee that your instruments get the proper cleansing and are also protected from any corrosion.

You finished reading the article "**3 Most Commonly Used Methods of Sterilization in Dental Clinics**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.