

Technical Information

Reasons for Nosocomial infections Is the sterilization process responsible?

| 730-031-EN | | V04 |
|---------------|------------|-----|
| Created | 22.10.2002 | UK |
| Changed | 02.09.2021 | KP |
| Checked | 02.09.2021 | UK |
| Released | 02.09.2021 | UK |
| File no : 0 0 | | |

The reasons for nosocomial infections are manifold as everybody in infection control knows. They could be caused by:

- Infection already before hospitalization
- a bad immune system of the patient
- Infection by inhalation before, during or after operation
- Infection by any type of contacts
- Infection by bad handling of the goods sterilized used by the surgeon or operation nurses during operation
- and a lot of other reasons besides nosocomial infection by non-sterile products.

It is assumed that only between 2% and 5 % of nosocomial infections are coming from non-sterile instrumentation and this heavily depends on how good CSSD has carried out these procedures in the past and how complex the instruments are.

Clear figures about this subject are impossible to get. The only way to get good figures is to make random tests of goods being sterilized for operations and testing them for sterility.

In general it is not a problem to sterilize simple solid instrumentation and porous loads. Only minimal invasive instruments, hollow devices and tubing systems are fairly critical and depending on the amount of operations where these instruments are used differences may be observed.

Quantitative data is only available if hospitals in charge are documenting this source of nosocomial infection, if they know where the infection is coming from.

Please ask the hospital if they have data about nosocomial infections. It is almost unlikely to see severe changes if the percentage-rate of sterilization treatment is fairly low.

In Germany the nosocomial infection rate in hospitals is about 3,6 % causing about 20,000 killed people annually. This means that, if the reasons for 2 % of those cases are non-sterile reprocessed goods in hospitals, you have saved the life of 400 people.