

In focus: Hospitality Management

How cleaning contributes to hygiene and health in hospitals

In hardly any other area are cleaning and disinfection as important as in hospitals. Cleanliness is the prerequisite for hygiene, because dirt and dust form a breeding ground for microorganisms such as bacteria or viruses. Comprehensive cleaning and disinfection measures are essential to prevent the spread of germs and to ensure the patient's recovery and health.

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Focus on floor cleaning

Avoiding and removing dirt is often the key to cleanliness and hygiene. In order to reduce dirt entering a hospital, it is worth using sweepers in the outside area and large dirt-trapping mats in the entrance area. In order to vacuum them regularly, vacuum cleaners with HEPA filters should be used. They have such a fine filtration that as few pathogens as possible get into the environment. This also prevents many viruses from spreading because they cling to other particles and are filtered together with them.



A key aspect of cleaning in hospitals is the cleanliness of the floors. Images: Karcher

According to the recommendation of the German Robert Koch Institute, the floors in entrance and lounge areas and corridors do not have to be disinfected, but thoroughly wiped and cleaned to remove dust. Depending on the size of the surfaces, quiet scrubbing machines with very good suction are suitable for this. This allows for the surfaces to be

cleaned more quickly and, above all, more thoroughly than by manual wiping.

In large operating theaters, the floor surfaces in the corridors must also be disinfected. If a scrubbing machine is used, the machine itself must be in perfect hygienic condition. The disinfectant is dosed into the tank according to the manufacturer's instructions and can be kept for one working day. Then it needs to be disposed of and the tanks for dirty and fresh water cleaned and refilled the next day. Due to the limited space in the operating room itself, mops and disinfectants are more suitable for disinfecting the floor.

Patient's room: combating the spread of germs

In order to prevent germs from finding their way from one patient room to the next, certain cleaning procedures must be followed. First of all, the four-color system provides orientation for the use of different cloths and the associated buckets for different purposes. Red cloths are intended for cleaning toilets, yellow for the rest of the sanitary area, blue for surfaces and green mostly for disinfection. In order to protect the user, he should always pay attention to his personal protective equipment and wear gloves. The central point in surface cleaning is that cleaning textiles are changed often enough and not dipped back into the cleaning liquid.

The 8-sided cloth folding method and working with pre-prepared cleaning cloths are therefore very suitable for use in hospitals. The cleaning cloth is folded in half twice, making a total of eight sides. A precisely defined quantity of folded cloths is soaked in a bucket with a specified quantity of cleaning agent. They absorb the liquid and are then ready for use. Every surface can be wiped with a fresh side - once every side has been used, the cloth is discarded and a new one used. In addition, a new cloth is used

for each room. Only the surfaces in the patient room that pose a high risk of infection due to frequent hand and skin contact need to be disinfected.

In order to clean floors in a result-oriented manner and to avoid the risk of slipping, a distinction is made between loose and adhering dirt. Loose dirt can easily be wiped away with wiping cloths attached with velcro, only stubborn dirt has to be removed with a wet mop. The wiping cloth change method is now standard in order to avoid the transmission of microorganisms from room to room.

A trip to the kitchen: Clean food

Hospital kitchens are challenged twice when it comes to hygiene – because food preparation per se is a clean issue, all the more so in a sensitive environment. When cleaning large tilting frying pans, for example, high-pressure cleaners are required, with which the water pressure and volume can be regulated using the high-pressure gun. This makes it possible to work with the right combination in each case without the dirt splashing back and, to a certain extent, accommodating the user. In addition, as with all electrical fittings, work must be carried out carefully with reduced pressure in order not to damage the sensitive electrical system.



Steam and vacuum cleaners are well suited to ensure good cleaning in hospital kitchens.

Hygiene for machines and kitchen utensils can be achieved with steam cleaners. The steam emerges from the nozzle in very fine droplets at a temperature of 100 degrees Celsius and a pressure of three to four bar; the acceleration is around 170 kilometers per hour. Therefore, the steam gets into all cracks or rubber folds where brushes or cloths have difficulty reaching. In this way, the edge areas of the front panels of dishwashers, the on/off switch on the

cooker or corrugated surfaces can be cleaned hygienically and thoroughly.

Freezers can be de-iced in significantly less time by applying the steam between the ice and the inner wall. Professional steam vacuum cleaners also offer the option of using chemicals for pre-treatment in case of heavy soiling and sucking up the dirt liquid again. They also have self-rinsing programs for the suction hose and pipe to remove dirt residue.

Food contact surfaces should only be disinfected when the surfaces have been treated and are optically clean. In the kitchen area, it is important to rinse with clear drinking water after the exposure time to prevent residues of disinfectants or cleaning agents from remaining on the surfaces.

POSSIBLE SOURCES OF ERROR

The soap error

If disinfectant gets on a surface that has cleaning agent residues based on anionic surfactants on it, the cationic surfactant of the disinfectant can combine with the anionic surfactant of the cleaning agent. This creates a water-insoluble giant molecule. This soap error can counteract the effect of the disinfectant. It can usually be recognized by the fact that the surface is sticky. It is advisable to rinse surfaces thoroughly with clear drinking water to remove any cleaning agent residue. Then it can be disinfected again. If the surface is very sticky, a solvent-based cleaning agent should be used.

The protein error

If there is protein contamination on the surface, the disinfectant concentrates on the protein contamination and not on inactivating the viruses or killing the bacteria and other microorganisms. As a result, the performance of the disinfectant is no longer guaranteed. For this reason, the thorough cleaning of surfaces beforehand is very important.

Under time pressure: the operating rooms

There are usually only a few minutes between operations to disinfect the operating theatres. The cleaning teams are on call here, since the processes usually cannot be implemented according to plan due to longer operations or emergencies. First, blood and other dirt is removed, then everything is disinfected - from walls and floors to surgical lights and surfaces to the wheels of the stools. This involves working with disinfectant and rinsing. A thorough cleaning takes place from time to time when an operating room can be closed for a while.



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