

## Cleaning of Laundry and Trash Chutes

To the editor:

Our hospital recently completed an extensive reconstruction program, in which laundry and trash chutes were installed.

Our Infection Control Committee would very much appreciate any information you can offer regarding the cleaning of the interior of the aforementioned chutes.

Sincerely,  
Jacqueline M. Winstead, R.N.  
Infection Surveillance Coord.  
St. John's Episcopal Hospital  
Brooklyn, New York

Dear Ms. Winstead:

There are several possible ways to do such cleaning. The most effective (and probably the most dangerous) method is to lower a very small person on a "bosun's chair" from top to bottom through the chute(s) to provide the direct physical cleaning with a properly diluted disinfectant-detergent (I'd suggest application using a "pistol-grip" sprayer) and clean rags. This method is not generally considered to be practical.

So, I've recommended what is probably a much more practical system: using a wand with a stationary or rotating brush on its end and incorporating in the wand a detergent cartridge (which can be turned on and off). The hose should be screwed onto a

hose bibb at a clinical sink or hopper closest to the chute(s) on each floor. Starting with the top floor, a person cleaning the chute leans into it and washes it down from that floor to the next floor, brushing all surfaces with the stream of warm water and detergent. After doing this for sufficient time to soap down the walls, then warm tap water should be used to wash off the detergent. Then, the person should move down, floor-by-floor, repeating the same procedure. Finally, a large bag of tightly packed, clean-linen scraps can be pulled down with a rope from the top to the bottom to remove all detergent residues or pieces of soil that have not been removed with the high-pressure washing described above. Obviously, a chute must be locked out of use when a cleaning procedure is underway, to prevent injuries to the cleaning person.

If your institution has the misfortune of having a high-velocity-vacuum-chute system, that system can be cleaned by passing tightly fitted, disinfectant-soaked bags through it several times. No matter what the type of chute, if all linens are bagged there will seldom be a need for cleaning of chutes.

I hope that these comments answer your questions. If not, or if we can attempt to be of further service at any time, please let us know.

Sincerely yours,  
George F. Mallison  
Bacterial Diseases Division  
Center for Infectious Diseases

After reading this letter, my initial response was to explain how to clean the laundry and trash chutes. However, I believe the problem is somewhat more complex.

First of all, I question why chutes, especially trash chutes, were even proposed. To date, there is no authentic recommendation as to how to clean these monstrosities. Most people agree that cleaning is simply impossible. This should have been an important consideration of the planning committee, which should have an infection control practitioner as a representative. "An ounce of prevention," certainly pertains to this type of situation.

No matter, the situation does exist and must be dealt with. Again, preventive measures are the answer. The following points may be helpful in developing guidelines for the maintenance of these chutes.

### Laundry chutes:

1. All laundry should be bagged and closed securely before being placed in the laundry chute. The hamper must not be completely filled in order for it to close securely.
2. Laundry that is soiled with patients' excretions or secretions should be folded to confine and contain. If the laundry is soiled to the extent that confinement and containment is not possible, the soiled laundry should be initially placed into a water soluble bag, closed securely and then placed into a cloth laundry hamper and closed securely. (All plastic laundry bags must be con-

tained within a cloth hamper because of the possibility of bursting on impact.)

3. Contaminated laundry may be sent to the laundry via the laundry chute as long as it is confined and contained in the water soluble bag plus the cloth hamper that has been properly labeled.

If the above procedure is used, there is no immediate need for cleaning the laundry chutes because they will not have been soiled. As for how often to clean, most regulatory agencies recommend cleaning on a regular basis, thus leaving the interpretation to the individual health care agency. The emphasis should be placed on the confinement and containment, then there is no major problem. Remember—when the principles of confinement and containment have been adhered to, the problem ceases to be. Some people recommend that a person, properly attired with gown, gloves, and mask be lowered into the chute to scrub the interior, while others recommend that the cleaning be done only at the entrances and exits to these chutes. Pouring a disinfectant down through the chute is not effective because of the absence of mechanical action to remove the bacteria. Whatever the choice, the procedure becomes complicated, so it is extremely important to avoid contamination by confinement and containment.

#### Trash chutes:

The principles of cleaning the trash chutes are very similar to the laundry chutes; containment and confinement to prevent contamination.

1. All needles and syringes and soiled

dressings should be considered contaminated and bagged separately for appropriate ultimate disposal.

2. Obvious patient excretions or secretions should not be discarded via the trash chute due to possible spillage.
3. The cleaning of trash chutes should be similar to that of laundry chutes. However, the cleaning of trash chutes is sometimes more difficult. Many hospitals have decided to discontinue the use of trash chutes because of the difficulty of cleaning.

If any of our readers have developed any innovative methods of cleaning these ill-conceived chutes, please share your ideas with us. Infection control practitioners must stay on this type of situation and become involved in planning so that hospital structures will be built that will decrease the risk of contamination, not contribute to it.

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## Dose of Contamination Questioned

To the editor:

The article "Bacteriologic studies on electrical hospital thermometers" in the July/August 1981 issue of *Infection Control* brings to mind several questions. The authors did not quantify the dose of contamination. It has been a well established principle in infectious disease literature that the dose of the infectious agent is paramount in order to assess the relative risk of infection. Maki et al have

illustrated this concept of dose relationship in determining the risk of sepsis due to I.V. catheters.

In the specific body cavity addressed by the authors, the oral cavity, the dose/relationship may be particularly important since the mouth has been shown to be quite resistant to colonization when doses far in excess of what would be expected to be found in probe covers were used in a study by Laforce et al and did not lead to colonization.

The mouth is a highly contaminated non-sterile body cavity. As infection control practitioners, we should be very realistic in infection control recommendations and evaluations in order to maintain our credibility—especially now when our medical colleagues and hospital administrators are closely scrutinizing our recommendations and demanding more scientific studies of efficacy for these recommendations. Food, especially uncooked fruit and vegetables (NEJM, Feb. 1981, Please don't eat the salads.), contains millions of bacteria. If probe covers need to be sterilized, what about eating utensils, medicine cups, toothbrushes, toothpaste, etc.?

Findings such as this electronic thermometer study may serve to divert efforts and time of infection control practitioners to areas in which the potential risk has not been adequately defined.

Sincerely,  
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Robert J. Shannon, M.S.P.H., R.S.  
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## ERRATUM

"Effective and Creative Surveillance and Reporting of Surgical Wound Infections" by Allen B. Kaiser, M.D. was inadvertently omitted from the cover and table of contents of the January/February 1982 issue of *INFECTION CONTROL* (Volume 3/Number 1). The article appeared on pages 41-43.