

Cleaning vs. Hygiene



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Did you know that 80% of all common infections are spread through the environment? This means that cold and flu viruses are found in the air, water, food and fomites. What are fomites? They are inanimate objects like desktops, doorknobs, keys, remote controls, and toilet seats, which are involved in disease transmission.

Life in the 21st Century has changed from the life our parents and grandparents once knew. With so many new diseases and viruses like MRSA, H1N1 and the bird flu, homeowners are more concerned than ever about the health and safety of their families. In addition, since homeowners are concerned, residential cleaning companies such as mine, must be concerned too.

What are the Facts?

Dr. Charles P. Gerba, also known as “Dr. Germ”, is a nationally recognized environmental microbiologist and Professor at the University of Arizona. Professor Gerba actively conducts research on the role of fomites in cross contamination, new methods for detection of pathogens, and microbial risk assessment. According to his research, Dr. Gerba has found the following alarming statistics:

- **40% - 90% of adults with a cold have the virus on their hands.**
- **20% of the objects handled by a person with a cold have the virus on them.**
- **Cold and flu virus can survive up to 72 hours on surfaces.**
- **Every 60 seconds, a working adult in an office touches as many as 30 objects.**
- **An adult brings his fingers to his face 16.5 times per hour (5 to nose, 8 to mouth and 2.5 to eyes).**

Since the cold and flu virus can survive on surfaces for up to **72 hours**, most people who have it on their hands will bring the virus home. Once home they spread it around on doorknobs, telephone handsets, remote controls, light switches and more. In addition, just think; we have not even talked about the germs children bring home! It is no wonder my customers are so concerned about how clean and hygienic their home is.

Cleaning vs. Hygiene-

Cleaning vs. Hygiene - to sort out the debate, we must define cleaning and hygiene. Cleaning is defined as the "removal of unwanted matter". Hygiene is "reducing the risk of infection". As a cleaning company owner, I am concerned about both cleaning *and* hygiene, not only for my customers' health, but for the

health of myself and my employees'.

Disinfectants vs. Sanitizers-

When cleaning for health and hygiene, it is important to understand what types of cleaning chemicals are most effective and safe for use. To kill germs and viruses, you should use a sanitizer or disinfectant. But with so many choices available, how do you know what to use?

If you just need to remove soil, you should use an all-purpose cleaner. If it is a surface that needs to be disinfected or sanitized, first clean the surface, and then apply the disinfectant or sanitizer, giving the recommended dwell time so the cleaning agent can work effectively.

Before making your choice, you must understand the difference between a disinfectant and a sanitizer. A sanitizer is a chemical that reduces the number of microorganisms to a safe level. It does not need to remove 100% of all organisms to be effective. Sanitizers are required to kill 99.999% of the infectious organism present within 30 seconds. The EPA states that sanitizers are "used to reduce, but not necessarily eliminate, microorganisms from the inanimate environment to levels considered safe as determined by public health codes or regulations," so in homes, a sanitizer should be acceptable.

A disinfectant is a chemical that destroys all organisms listed on its label. The organisms it kills are disease causing bacteria and pathogens, and it may or may not kill viruses and fungi. From a legal standpoint (EPA guidelines), disinfectants must reduce the level of pathogenic bacteria by 99.999% during a time frame of greater than 5 minutes but less than 10 minutes.

The EPA categorizes products into toxicity categories, so you should look for the following "signal words" on the labels:

Category I = DANGER (Most toxic)

Category II = WARNING

Category III = CAUTION

Category IV = No signal word required, but "CAUTION" may be used if desired

If using a disinfectant in your residence, there is little need for Category I or II products. Stick to lower toxicity rated disinfectants. It is also important to know that young people (age 18 and younger) are more sensitive to disinfectant-related illnesses according to a report published in Environmental Health Perspectives (www.ehponline.org).

A Word About Bleach

Bleach is an effective home disinfectant. However, the dangers of using bleach for cleaning probably outweigh the advantages. Most people are aware that mixing bleach with ammonia causes toxic gas.

However, not everyone is aware that urine contains ammonia. Therefore, if you are using bleach to clean up pet urine stains or urine on a toilet and the surrounding floor, you are creating a toxic situation. Mixing bleach with acid also causes toxic gas. A commonly used acid contained in house cleaners is vinegar. Cleaning with both bleach and vinegar could be a recipe for disaster. Since you must use extreme caution when using bleach, you are better off **not** using it at all.

Touch Points

As mentioned in the beginning of this article, people spread most germs by depositing them onto fomites. Since this is the case, there is no need to disinfect every square inch of your home when there are typically only a few areas called "touch points" that spread the germs. So know these touch points, and at least clean these areas first.

The Future of Cleaning

In the future, it is likely that cleaning for health and hygiene will be the "norm" rather than the exception. When choosing cleaning agents, keep in mind your particular need, the type of surfaces you are cleaning and whether the surfaces need to be just "cleaned" or "cleaned for health and hygiene."

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