

GREEN CLEANING: Greening Healthcare



A healthy medical facility is one that is designed and maintained to protect the health of building occupants as well as the environment.

Speaking to Britain 's House of Commons in 1943, Winston Churchill said “We shape our buildings, and afterwards, our buildings shape us.”

Many of us, especially in the cleaning industry, can readily understand what Churchill was implying —our indoor environment has a tremendous impact on our lives. We are now more aware today than ever before that the chemicals and products we use to clean and maintain our facilities can affect our health, morale, productivity, and the education of our children.

This is particularly evident in healthcare settings. The look, appearance, cleanliness, and the overall health of these facilities can have a tremendous physical and emotional impact on patients, visitors, and staff. People are very attentive to what they see and want the best for themselves, an ill friend, or a family member. We seek clues in the ways a facility is maintained to determine or reassure us that this is a competent institution with a caring and attentive staff.

Poor conditions can also harm a healthcare provider 's working performance. Caring for the sick can be physically and emotionally fatiguing as well as stressful. This can cause caregivers to make mistakes, burnout, become negative, and have other psychological and physiological behavioral afflictions. A facility that is not well-designed, well-maintained, or healthy only exacerbates these problems.

Healthcare facilities are now being designed with a more pleasant and attractive atmosphere, such as adding more windows and natural light. According to Jain Malkin, president of the healthcare design firm Jain Malkin Group, San Diego, California, “just seeing the sky or feeling the sun on your skin [in a healthcare facility] can literally make you feel better...our surroundings affect our well-being.”

Another step hospitals and medical facilities are taking to make their indoor environment healthier and less stressful is reducing noise levels, a pervasive problem in some hospitals. Pagers, alarms, hallway conversation, public address systems, moving of medical equipment, as well as the use of cleaning equipment such as vacuum cleaners, floor machines, and carpet extractors,

all raise tension levels and increase stress. Tests at some hospitals have even found noise levels to be more than 95 dB at various times during the day — loud enough to cause hearing loss after prolonged periods —disrupting normal thinking, comprehension, and sleep.

In addition to adding more natural light and reducing sound levels, many medical facilities are also reevaluating their cleaning chemicals, tools, equipment, and systems. These facilities are discovering that by using more environmentally preferable cleaning chemicals and products as well as employing Green cleaning systems helps to protect their indoor air quality, emits fewer dangerous gases such as volatile organic compounds (VOCs) into the air, and is safer for custodial workers, patients, visitors, the medical staff, and the environment.

Green: It is More Than Just Chemicals

Green Cleaning is rather simple: cleaning to protect health without harming the environment.

A more thorough definition is found in Executive Order 13101, issued by former President Bill Clinton in 1998, which instructed U.S. agencies to begin using environmentally preferable cleaning products. It states that Green Cleaning is “the use of products and services that reduce the health and environmental impacts [of cleaning] compared to similar products and services used for the same purpose.”

Although it is the hottest trend in the professional cleaning industry today, employing environmentally preferable cleaning products to clean facilities is certainly not new. Certain cities, such as Santa Monica, California, have been requiring the use of Green cleaning products in their city-owned buildings as far back as 1999. Many cities, states, as well as the U.S. federal government are in the process of transferring to environmentally preferable cleaning products or have been recently only using these products.

However, there is some confusion as to how to implement Green Cleaning. This is because Green Cleaning is more than just using environmentally preferable cleaning chemicals. To perform it properly, Green Cleaning involves utilizing an entire spectrum of cleaning- related tools, products, equipment, as well as chemicals. Here are some critical elements of Green Cleaning:

High-Quality Matting Systems

As much as 85 percent of a medical facility 's soil is “walked in ” through building entries. A major component of Green Cleaning is source reduction —stopping the soiling at the door. High-quality, 12 to 15 feet long mats placed inside and outside all entries can help. These mats, which “store ” a large percentage of soil, prevent further damage to the indoor environment. “Storing ” means the soil is trapped within the matting system, waiting to be removed with vacuuming or cleaning.

High-Filtration Vacuum Cleaners

Many medical facilities use traditional upright vacuum cleaners that have large cloth bags to collect dirt, dust, and soils. This type of vacuum cleaner has been used since the early 1900s. Unfortunately, these machines often have poor exhaust systems and with normal wear and tear, the bag releases impurities into the air. However, selecting a “greener ” vacuum cleaner is

much easier today because the Carpet and Rug Institute now has a Green Label certification program, which tests vacuum cleaners for efficiency, emissions, and carpet appearance after use. Selecting a Green Label machine ensures a healthier indoor environment.

Hard Surface Floor Machines

A great concern in most medical facilities is floors. Not only must hard floors be kept clean and dry to help prevent the spread of disease and for safety reasons, but most medical facilities want a high-gloss “wet look”. This look reassures patients and visitors that the institution is well-managed and of high caliber, a concern mentioned earlier. However, buffers and high-speed burnishers, when operated, release dust and particulates into the air. The top surface of the floor is essentially “ground away” to help remove scuffmarks and restore the shine.. In the U.S., healthcare facilities should look for machines that have “passive vacuum systems” with skirts or shrouds at the machine’s base. This helps trap impurities, which are then vacuumed up by the machine, preventing them from becoming airborne.

Carpet Extractors

Older carpet extractors are common in many facilities. These machines can use as much as four gallons of water per minute, which can result in a variety of problems. If the carpets take longer than 24 hours to dry, mold and mildew can develop—a potentially very serious health risk in a medical facility. Additionally, these machines use large amounts of cleaning chemicals. A major component of Green Cleaning is to use as little chemical, Green or not, necessary to still satisfactorily perform the cleaning task. New low-moisture extractors are now being introduced, which are healthier for the environment. These machines use as little as 8/10 of a gallon of water per minute and considerably less chemical. Some of these machines put a greater emphasis on agitation to help loosen and remove soil from carpet instead of using as much chemical, water, and high pressure.

Cleaning Chemicals

As with vacuum cleaners, it is much easier to determine if a cleaning chemical is indeed Green. In the U.S., products that have been certified by Green Seal® ,a third-party, independent testing agency, are proven to use safer ingredients, made from renewable sources, are as effective, if not better than, traditional cleaning chemicals, and cost competitive. A similar independent certification program, which is actually older than Green Seal, shares the same testing criteria. Not as well known as Green Seal is Canada’s Environmental Choice Program™ (ECP). Products certified by ECP carry the same credentials as Green Seal and both programs have reciprocal agreements, honoring each other’s testing in most cases.

A healthy medical facility is one that is designed and maintained to protect the health of building occupants as well as the environment. Processes, such as Green Cleaning as well as environmentally preferable cleaning chemicals, tools, and equipment, can improve indoor air quality, conserve chemical use, and help minimize cleaning’s impact on the indoor environment. And, studies now prove that these improvements can pay for themselves monetarily as well as in greater physical and psychological comfort for building occupants. In so doing, these medical facilities help shape those who use them by improving the productivity and positive attitude of medical staff, allowing for better care of patients and families.

Mike Sawchuk is the vice president and general manager of Enviro-Solutions, Peterborough, Canada. Enviro-Solutions is a leading manufacturer of Green Cleaning chemicals. He can be reached via the company Web site by visiting, www.enviro-solution.com.

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