Greening Your Practice
Holistic Primary Care
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In an effort to practice environmentally responsible health care, a logical step is the notion of "green cleaning." On October 10, 2003, the Hospitals for a Healthy Environment Program* hosted a teleconference lead by Steven Ashkin of the Ashkin Group, a consulting firm focused on creating healthy, high-performing indoor environments through "greening" the cleaning process and products. (www.AshkinGroup.com)

The mission of the Ashkin Group is to green the cleaning industry. Steven Ashkin's goal is to reduce health and environmental impact of cleaning, while maintaining cost and performance. 6% of Environmental Services workers are injured on the job and 20% of the injuries are eye and skin burns. While disinfectants are a necessity to maintain infection control and cleanliness in health care settings, the problem is picking the right disinfectant. We want to avoid those that are persistent in the environment, wherever possible, while complying with regulatory standards. We are so scared of germs that we tend to disinfect low-risk areas and use products that are stronger than necessary. How many times have you seen people use straight bleach?

So how do we get started?

1. Top Management Support - We've heard it before. Successful programs start with strong leadership. Important questions need asking such as whom does the cleaning? Is it in-house or contracted? Are there unions? Are the cleaners trained for health care specifically? This is also where we can do some awareness raising. This may be a new idea to many practice administrators, but it falls in line with a commitment to the environment and public health. Very often, getting the place cleaned is not on the top of the list and seems daunting, but many health care providers are changing their practices as they recognize that toxicity reduction isn't just limited to laboratories!
2. Green Cleaning Team - The best decisions are made when invested parties are included. Concept, facility walk through, product evaluation and implementation should be a joint effort among administrator or office manager, physician, infection control, nursing and the management of those responsible for cleaning. Different departments offer varying and important perspectives.
3. Raise Awareness – Environmental Services/Housekeeping needs their fair share! Just like we have to start talking about garbage without shame and embarrassment, we have to talk about cleaning! What materials we use to clean and disinfect are a shared responsibility. Infection Control is serious business. How many of us have heard about someone going into a health care facility and catching something else while they are there! We want to feel confident that we are cleaning and disinfecting our work areas appropriately, while providing the appropriate tools for our cleaning staff. We also want to clean our work-spaces based on science, not on perceived risk.

4. Define Standards of Cleaning by Area – Just as regulators provide guidance in how to properly disinfect our reusable medical equipment, we have guidelines for properly designating and cleaning our patient care areas. We can designate the areas within our work place as a) critical, b) semi critical and c) noncritical care areas, depending on the level of risk of infection..** In a hospital setting, 45 to 65% are low risk areas (noncritical areas), 25 – 45% are semi critical (medium risk) areas and 10% are critical areas or high risk areas. Examples of high-risk areas are emergency room, labor and delivery, morgue and surgery. Semi critical areas are public restrooms, nursery, clinics or treatment areas, physical therapy and rehab. Low risk areas are exterior maintenance, administrative areas, patient registration and waiting areas, facility maintenance areas and hallways. The semi critical care areas require negotiation with infection control and can vary from one practice to another.
5. Use the Appropriate Product - Certain chemicals are appropriate for certain areas. As per the Center for Disease Control and Prevention, critical areas must use an intermediary grade disinfectant that is that is hepacidal or tuberculocidal, meaning, kills both germs. If a solution can kill TB, it will also kill HBV. This usually is a Phenol based product and a certain number of approved Quaternary Ammonium Compounds. Intermediary Disinfectants should only be used in critical or high-risk areas, as Phenols are persistent in the environment.

   As per the OSHA blood borne pathogen standard (www.osha.gov) body fluids spills must be cleaned with an intermediary grade disinfectant. OSHA defines body fluids as blood, semen, cervical solutions and other fluids from the treatment areas such as cerebrospinal fluid, amniotic fluid, peritoneal fluid and so on. Excluded fluids include urine, feces, saliva and sputum, unless visibly contaminated with blood. In general, Green Seal Certified Products should be used. (www.greenseal.org.) You can also contact your regular cleaning chemical provider.

   Chlorine/Sodium Hypochlorite – Effective against TB and HBV. Corrosive to eyes and skin, damages floor finishes, carpets, clothing etc. Also a respiratory irritant and has considerable environmental concerns. Mercury is released into the environment during the manufacture of bleach products.

   Phenol-Based Products – Effective against TB and HBV. Chemical is corrosive to eyes and skin and damaging to floor finishes and other surfaces. Gives off a strong pungent odor and acts as a respiratory irritant. Environmental concerns include an estrogen mimic and environmental persistence.

   Quaternary Ammonium – Some, but not all, are considered Intermediary Grade Disinfectants (check with the manufacturer of the product.). While less toxic than Phenols, are corrosive to eye, skin and surface areas. Toxic to aquatic life.

   Peroxide – EPA sanitizer, not a disinfectant. Superior to health and environment compared to phenols and quaternary ammonium-based products.

Low volatile organic compounds should be chosen, to improve air quality. We should use concentrates wherever possible, ensure that staff are educating on proper dilution (no straight bleach please!) and that floor finishes are metal free. Vacuums should meet CRI's Green Label Program. www.carpet-rug.com.

6. Staff Inservice - Housekeeping staff must be trained so that the appropriate chemical and process is carried out in the appropriate area. Especially for those semicritical care areas, the key to compliance is good training. Ensure that material safety data sheets are obtained for all products and placed in a notebook available to staff around the clock. Educate all users on proper chemical use. Read the directions! Appropriate storage of chemicals is a crucial piece in the quality-cleaning puzzle.

7. Pilot – Steve Ashkin made a great point when he talked about risk taking. If we call it a pilot, it's okay to fail. Try it out in a few rooms or in a certain suite. Start a little at a time. It doesn't have to be perfect the first time! But first, what is our baseline? What products are we using, what is their cost, where are they being used, how often and what kind of education has been provided to the cleaning staff? A cost analysis comparing the proposed chemicals and processes is crucial for economic viability demonstration. Start small and monitor areas for compliance and efficacy. Is staff complaining of itchy or watery eyes with the use of certain chemicals? Proper training and oversight of housekeeping workers is required to implement proper protocol.
8. Monitor – Rounds should be conducted periodically to ensure proper protocol is adhered to and that all new staff is educated on new policy. Make sure to provide feedback to housekeepers and front-line staff so all recognizes the benefits to the less toxic cleaning products. Our commitment to the safety of our patients, employees and the environment demonstrates our commitment to public health.

Need help? Steve Ashkin is available for consult at 1/812-332-7950 or SteveAshkin@AshkinGroup.com or contact me at jhbrown@bethisraelny.org.

* Hospitals for a Healthy Environment (www.h2e-online.org) is a joint program between the Environmental Protection Agency and the American Hospital Association. By becoming a member, physician groups, health care facilities or other organizations can partake in these informative teleconferences to learn more about important programs from mercury reduction to green cleaning. Check out the website for more information.

** For guidance on cleaning in a health care setting, go to www.astm.org. Click on "Standards" and then "Individual Standards." For designation or keyword type in "E1971." Choose All standards and search. ASTME1971-89 provides a Standard Guide for Stewardship for Cleaning Commercial and Institutional Buildings.