Joining the Green Revolution

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For the last three months we have been exploring the topic of infection control for cleaning and restoration contractors. The breadth of the subject is so great that even four installments presented in Cleaning & Restoration magazine only scratch the surface of this important issue. In addition, not only is it a large subject area, but one that is constantly changing. It is this combination of information and constant evolution in our approach to the matter that leads me to use the analogy of a portrait of family photos to explain the dynamics of infection control.

In the earlier installments I equated general information to infection control with the famous photo of a farmer with a pitchfork known as American Gothic. We built on that theme by adding pictures of a baby taking a bath (personal hygiene), Cinderella (custodial practices), Doc Brown of the Back To The Future movies (selection of chemicals), a worker with a hard hat (specialized construction practices), and a washer woman with a scrub board (content cleaning).

Emergency Preparedness

One reason that a portrait of family photos works so well is because it is a static representation of the constant juggling between the various aspects of infection control that is similar to the way we juggle relationships between extended family members. And, just as each family member is unique but related, so too is each area of infection control such as emergency response procedures. However, unlike some other segments of the restoration industry, having practices in place that control infections during an outbreak may have a direct impact on company employees as well as our customers. This is especially true in the case of a major epidemic which swiftly rockets through the public such as SARS (Severe Acute Respiratory Syndrome), bird flu (Avian Influenza), MRSA (Methicillin-resistant Staphylococcus aureus), or noroviruses (strains of the Norwalk family of viruses).

While it is important not to obsess about potential health risks, some pre-planning in an age of global transportation is prudent. People moving halfway across the world in a day’s time does not allow outbreaks of infectious diseases to run their course on a limited number of people during months-long caravan trips or sea voyages. (See the history books or search the Web for documentation of epidemics on ships that arrived in port with only a handful of people on board.)

Still, when you bring up the subject of a company preparing a specialized response to outbreaks, you get a lot of people rolling their eyes and giving you that condescending smile that means “kook.” Amazingly, the general public does not think an epidemic can actually occur — even after SARS in Toronto a few years ago and much more aggressive publicity from the Centers for Disease Control and Prevention and The Department of Homeland Security in regards to this issue. For many restoration contractors, people who talk too much about epidemics are shunned. That is why I have chosen a picture of Uncle Fester from the Adams Family to represent this portion of the
infection control industry. He is like the embarrassing photo of the crazy uncle many families try to hide in the closet.

**Seasonal Influenza Outbreaks**

The lack of interest in the emergency preparedness part of infection control is curious given that we have “practice runs” most years with ordinary seasonal influenza. Every year in the United States, five to 20 percent of the population contract influenza illnesses with an estimated 36,000 deaths. But rather than do the difficult, but basic work of infection control, seasonal influenza has largely been addressed through efforts to vaccinate up to 300 million “high risk” individuals in developed world countries. While such efforts are definitely helpful, they do little to actually reduce the aerosol transmission of the influenza virus.

Segregation of ill individuals and a basic attack on the three modes of transmission of influenza (direct contact with secretions, short-term restricted areas of droplets larger than 10 microns through sneezing, and aerosol transmission of droplets smaller than five microns) has been proven through numerous studies to be effective in halting flu epidemics. Restoration contractors who cannot enforce basic cleaning and infection control practices in their own businesses during flu season lack credibility when they approach potential clients about assisting them with specialized cleaning.

The importance of cleaning as a major response to an increase in seasonal respiratory infections is borne out by the science. Droplets small enough to travel through aerosol transmission can stay suspended in the air for more than an hour! As such, they can be spread long distances and through ductwork. That is why infection control procedures during flu season involve the containment and prompt removal of gross contamination, as well as treatment of horizontal surfaces with a cleaner/disinfectant. In severe cases, the use of a fog disinfectant can also be very helpful.

**Emergency Response**

Companies offering their services on an emergency response basis to other organizations need to keep their priorities straight:

1. Protect yourself and your crew.
2. Protect the building occupants.

For the first priority we encourage managers and crew leaders to “plus-up” their decision-making and go beyond the minimum when protecting the crew members. The consequences of failing to take this approach were graphically demonstrated in a number of public health policy reviews of the Toronto SARS experience. Serious illnesses and needless deaths of medical personnel were attributed to hospital administrators who listened to in-house staff members rather than contractors and safety professionals when making decisions about the type of respiratory protection that should be utilized. Nurses and orderlies who had direct contact with SARS patients were provided with surgical masks instead of the N-95 filtering face-piece as recommended by the safety professionals. The recommendations for fit testing of the respiratory protection were also ignored.

Here in the United States there is a regulatory rationale for a plus-up approach that is known as OSHA’s General Duty Clause. Section 5(a)(1) of the OSHA Act requires employers to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm. Employers can be cited for violating the General Duty Clause if there is a recognized hazard and they do not take reasonable steps to prevent or abate the hazard.

Cleaning and restoration contractors can honor their second priority to keep building occupants safe through both services and knowledge. While specialized cleaning can be very important, educating your clients about the basics of infection control in critical situations can be just as valuable.

**What to do With Sick Employees**

In the case of flu outbreaks, one of the toughest decisions for an employer is what to do with ill workers. Despite being a difficult policy for many companies to implement, action control experts all agree that if a worker is ill, he/she should not go to work. If the individual is not making good decisions on his own and arrives for work ill, he should be sent home. If he becomes ill on the job, they should do the following:

- Cover mouth and nose with a tissue or hands when coughing or sneezing
- Put used tissues in a waste basket
- Clean hands with soap and water or an alcohol-based hand gel immediately after coughing or sneezing
- Avoid close contact with coworkers
- Go home as soon as possible

**Evaluation and Segregation of At-Risk Populations**

Whenever the topic of involuntary segregation of an individual from the rest of society is brought up, people get nervous and think that it is “Big Brother” government out of control. But since individuals and family members are not going to be responsible guardians of the public good, someone has to step in. The recent case of an individual flying a long distance when he knew that he had a particularly virulent strain of antibiotic resistant tuberculosis put hundreds of his fellow passengers at serious risk. His subsequent involuntary confinement may not be pleasant to think about,
but it is important for workers and the public alike.

Still, some situations are less of a moral dilemma and more a matter of adjusting policy so that we're not doing things just because that's the way we did it in the past. Remember this about hospital infections: they kill more than 100,000 Americans each year and add $5-7 billion to the nation's healthcare costs. Many studies over the past decade have shown that nearly all such nosocomial infections are preventable. The evidence is so overwhelming that Medicaid administrators recently announced that the government insurance would no longer reimburse hospitals for the cost of treating many of the most common hospital acquired infections.

This aggressive approach is way behind the curve as other countries such as Denmark, Finland, and the Netherlands have managed to suppress the spread of MRSA infections almost entirely. They have accomplished this through a logical process of identifying, isolating and treating patients who may be harboring MRSA bacteria. Recently, this European approach was tested by the Department of Veterans Affairs. That agency implemented a MRSA control program that reduced infection in one surgical unit by 70 percent. The low cost program administered a nasal swab to every patient upon admission and another nasal swab upon discharge. Patients identified as carriers of MRSA were isolated from other patients and treated. The success of the treatment was verified through a second nasal swab test prior to discharge. When coupled with strict hygiene guidelines and a written infection prevention and control policy, the dramatic results were achieved.

So the fact is that infection control is possible. Cleaning and restoration contractors can play a big role in this growing field by providing both services and knowledge to their existing clients.

Michael A. Pinto, CSP, CMP, currently serves as chief executive officer of Wonder Makers Environmental, Inc. Pinto has authored three books including Fungal Contamination: A Comprehensive Guide for Remediation, over 120 technical articles, as well as 18 commercial training programs. He can be reached at map@wondermakers.com.

Editor’s Note: This is the final installment of a multi-part series. Part 1 appeared in the January 2008 issue of Cleaning & Restoration, part 2 appeared in the February issue and part 3 appeared in the March issue.