PRECAUTIONARY PRINCIPLE

Precautionary Principle

"an ounce of prevention is worth a pound of cure"
"better safe than sorry"

The above are examples of the Precautionary Principle. The Precautionary Principle is a technique for making decisions in the face of uncertainty. **For healthcare workers the Precautionary Principle means that taking reasonable actions to reduce risk should not await scientific certainty.**

Healthcare workers in Ontario, Canada experienced the deadly consequences of ignoring this principle during the SARS epidemic of 2003. As healthcare administrators debated about infection control measures such as the use of airborne transmission precautions, the virus was spreading to hospital patients and healthcare workers.

When faced with the risks of SARS (infection, illness, death), reasonable actions such as airborne precautions should've been instituted. Instead, decision makers delayed making recommendations because they were not convinced that SARS was transmitted in the air.

Despite our tremendous advances in medicine, the bottom line is that the infection control procedures that were implemented, failed to protect workers. 72% of all people infected with SARS contracted the disease in a healthcare setting. The virus claimed the lives of two nurses and a physician. The official SARS Commission Report[1] concluded this situation was a clash between science and safety:

> "The point is not who is right and who is wrong about airborne transmission. The point is not science, but safety. Scientific knowledge changes constantly. Yesterday's scientific dogma is today's discarded fable. When it comes to worker safety in hospitals, we should not be driven by the scientific dogma of yesterday or even the scientific dogma of today. We should be driven by the precautionary principle that reasonable steps to reduce risk should not await scientific certainty."
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> "**If the Commission has one single take-home message it is the precautionary principle that safety comes first, that reasonable efforts to reduce risk need not await scientific proof**. Ontario needs to enshrine this principle and to enforce it throughout our entire health system."

Infection control should protect patients *and* healthcare workers from the hazards of the hospital environment. For more information on how VIGILAIR® can be a part of a hospital's healthcare worker safety program, see page 2 of this paper.

1. The SARS Commission. *Spring of Fear*. Commission to investigate the introduction and spread of SARS in Ontario 2006; Volume I.

Reasonable Actions versus Pandemic Uncertainty

The problem with preparing for pandemics is that nobody knows exactly how the disease will manifest in humans. Just as with SARS, H5N1 presents a great deal of uncertainty.[1] Should H5N1 acquire the ability to efficiently transmit human-to-human, traditional infection control practices may not prove effective:

> "…since the H5N1 virus is completely novel to humans, there is no preexisting immunity which is thought to play some role in asymptomatic carriers. **Therefore, H5N1 may spread less like a typical flu and more like SARS.**"[2]

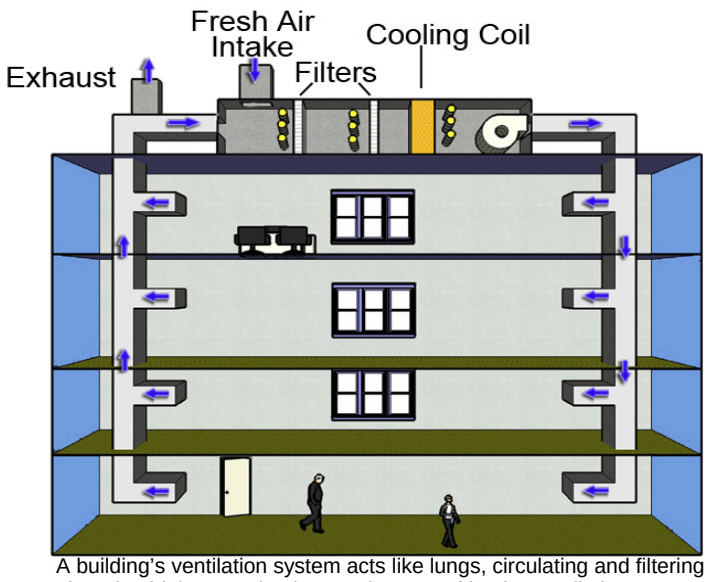
VIGILAIR® Systems, Inc provides hospitals with protection from airborne pathogens. Installed within the air handlers of a building, VIGILAIR® Systems utilize high efficiency filtration and ultraviolet germicidal irradiation (UVGI) to destroy and remove microorganisms before they are circulated back into patient care areas.

Why Your Pandemic Planning Should Include VIGILAIR®

VIGILAIR® is effective on a broad spectrum of microorganisms. Since nobody can predict the exact nature of the next outbreak, it is prudent to employ measures that deactivate viruses, bacteria and fungi.

VIGILAIR® utility. Some pandemic preparations such as N-95 respirators are shelved until the next crisis hits. VIGILAIR® provides continuous protection every day. UVGI is proven to reduce worker illness[3] by improving indoor air quality. Systems save energy by returning air conditioning coils to original operating efficiencies; most systems pay for themselves in less than two years.

VIGILAIR® complements existing infection control. UVGI is recommended as a supplemental infection control measure by the CDC, ASHRAE and the AIA. VIGILAIR® contributes as one component in a comprehensive infection control strategy.



A building's ventilation system acts like lungs, circulating and filtering air. Microbial contamination can be spread by the ventilation system throughout the building.

Summary

The SARS epidemic exposed significant gaps in healthcare worker safety. VIGILAIR® Systems can help reduce the risk posed by airborne infectious pathogens. For more information contact VIGILAIR® Systems toll free at (888) 401.8770 or find their web site at www.VIGILAIRsystems.com

1. World Health Organization. Epidemic and Pandemic Alert and Response- What About the Pandemic Risk? Accessed on-line February 2007. http://www.who.int/csr/disease/avian_influenza/avian_faqs/en/.
2. Toner E. CBN Report: Do Public Health and Infection Control Measures Work to Prevent the Spread of Flu? October 31, 2005 Clinicians' Biosecurity Network University of Pittsburgh Medical Center
3. Menzies D., et al. Effect of ultraviolet germicidal lights installed in office ventilation systems on workers' health and wellbeing: double-blind multiple crossover trial. Lancet 2003 Nov 29;362(9398):1785-91.