



What is the Sustainable Hospitals Program?

A Program of the Lowell Center for Sustainable Production • Department of Work Environment, University of Massachusetts Lowell

Background

The Sustainable Hospitals Program (SHP) was initiated at the University of Massachusetts Lowell in 1998 to provide technical support to the healthcare industry for selecting products and practices that reduce occupational and environmental hazards. Based within the Lowell Center for Sustainable Production, the SHP effort was established in response to the observation that pollution prevention solutions could inadvertently introduce new occupational safety and health problems, and vice versa. (This is sometimes referred to as “risk shifting”, when a solution in one area causes problems in another. For example, selecting vinyl gloves to replace latex gloves reduces an occupational hazard yet increases an environmental concern). Since occupational and environmental hazards arise from the same sources, comprehensive solutions require an integrated approach. Therefore the SHP focuses on integrating pollution prevention (P²) and occupational safety and health (OSH) in order to facilitate sound, sustainable practices.

Why healthcare and hospitals?

The healthcare industry significantly impacts the environment through waste, emissions, and consumption of materials and energy. In the United States alone, there are nearly 6000 hospitals within which many workers routinely experience biological, chemical, physical, musculoskeletal, psychosocial and other safety hazards. The goal of the SHP’s work is to develop and foster an integrated pollution prevention and occupational safety and health (P²OSH) strategy that helps hospitals evaluate and select materials and practices that are favorable for both the environment and the workers.

On a very practical level, SHP also seeks to provide easily accessible, useful information to healthcare providers about products and practices. Many managers report that they were willing to evaluate new products or practices, but do not have the resources or expertise to find alternatives. To fill this gap, the SHP established a website (www.sustainablehospitals.org) to collect and disseminate information about alternative products and practices. Topics covered in the website include: Environmentally Preferable Purchasing (EPP), Laboratory Practices, Microfiber Mopping, Mercury, Glutaraldehyde, Fixatives, Latex & Medical Gloves, Vinyl, Radiation Shields and Safety Sharps Devices.

What are key components of SHP?

- A very visible component of the SHP is its website, www.sustainablehospitals.org, which provides product listings and technical bulletins to help healthcare practitioners identify and evaluate more benign products and practices. Topics include mercury, glutaraldehyde, laboratory fixatives, latex, medical gloves, vinyl, radiation shields, safety sharps devices, mopping, laboratory practices and environmentally preferable purchasing (EPP). The SHP website includes over two dozen fact sheets and bulletins on these topics to help facilities reduce occupational and environmental hazards.
- One of the SHP’s most active and exciting projects relates to reducing sharps injuries in healthcare settings outside of the hospital. Project SHARRP (Safe Homecare and Risk Reduction for Providers) is a 4-year research project funded by the National Institute for Occupational Safety and Health

(NIOSH) for prevention of needlestick injuries and blood exposures among home healthcare practitioners. In partnership with industry, labor and state government, our research is elucidating working conditions which put home healthcare practitioners at risk of injuries, providing home healthcare agencies with efficient systems for tracking and analyzing injury patterns, and designing ways to help home healthcare providers work safely and productively while continuing to deliver the best quality care.

- SHP also provides technical support and conducts on-site research to help facilities implement new products and practices, using sound science to make informed choices. SHP staff provide information or referrals on questions about healthcare pollution prevention and occupational safety and health topics. A useful tool for healthcare facilities developed by the SHP is the Pollution Prevention and Occupational Safety and Health (P²OSH) model. The P²OSH model facilitates a systematic evaluation of alternatives, so that one can assess and ensure that new products or practices don't inadvertently introduce new risks or unintended consequences.

Who are the people behind the SHP?

The Sustainable Hospitals Program is comprised of faculty, staff and students of the Department of Work Environment. The SHP provides a key opportunity for students to do capstone projects and doctoral dissertations on timely and pressing problems in the healthcare industry. Our graduates are well-placed in hospitals, universities, government agencies and in industry.



Margaret Quinn, Sc.D., CIH
Professor, Dept. of Work Environment
and Program Director



Catherine Galligan, MS, Project Manager (left)
Pia Markkanen, Sc.D., Research Faculty (right)



Susan Sama, Sc.D., RN
Research Faculty

For more information

Please visit our website at www.sustainablehospitals.org or contact Catherine Galligan, Project Manager (Catherine_Galligan@uml.edu)