AORN

POSITION STATEMENT

Environmental Responsibility

PREAMBLE

Health care facilities generate in excess of two million tons, or four billion pounds, of general waste annually.[1] Approximately 85% of this general waste is noninfectious, with a large portion being generated in the operating room.[2] Used sterilizing, disinfecting, and cleaning agents are products that contribute to the waste stream. Inpatient facilities spend more than five billion dollars a year on energy, more than any other type of building per square foot of space. Energy demands are increasing to support new and existing technology.[3] Water used for sterilizing, heating, cooling, and hand sanitization contributes to excessive consumption of the natural resource. The volume of waste generated through energy and water consumption has a profound impact on consumers and health care providers and significantly affects the environment and the global economy. Nurses, a large single group of health care providers, are in a position to positively promote ecological environmental responsibility. Protection of the environment has been a concern of the nursing profession since the 1800s; Florence Nightingale once stated, "No amount of medical knowledge will lessen the accountability of nurses to do what nurses do, that is, manage the environment to promote positive life processes."[4] Nurses have an ethical responsibility to actively protect the environment, promote and participate in resource conservation, and seek to understand the political, economic, and public health components of environmental health.[5]

There are multiple environmentally responsible initiatives the perioperative nurse can initiate. These include, but are not limited to,

- initiating potentially infectious and noninfectious tissue and waste management programs following local, state, and federal regulations by
    - meticulous segregation of potentially infectious and noninfectious waste;
    - correct disposal of chemicals, tissue, hazardous materials, and infectious waste; and
    - consideration and initiation of incineration alternatives;
- practicing recycling;
- conserving resources such as
    - electricity,
    - natural gas,
    - water,
    - paper, and
    - plastic;
- initiating supply conservation and management practices by
    - opening only necessary supplies, equipment, medical devices, and implants;
    - supply management, to include purchase and selection of environmentally friendly products, equipment, and devices;
    - proactive maintenance, repair, and refurbishing of instruments and equipment; and

  - reprocessing of single use devices according to US Food and Drug Administration guidelines;
- construction for efficiency and conservation following green building codes.[6,7]

For more information on strategies to promote environmental responsibility, consult the "AORN guidance statement: Environmental responsibility."[8]

POSITION STATEMENT

AORN believes the perioperative registered nurse should serve as a steward of the environment by being knowledgeable about environmental issues affecting perioperative practice and by actively promoting and participating in resource conservation.

Resource conservation includes, but is not limited to, preservation of natural resources; waste and hazardous agent management; recycling; reprocessing of single-use devices according to local, state, and federal regulations; repair/restoration/refurbishment of appropriate medical devices and instruments; and supply conservation and management. Regardless of initiatives undertaken, consideration must be given to the overall environmental impact of practice and purchasing decisions.

GLOSSARY

General waste. Potentially infectious and noninfectious waste combined.

Green building codes. Codes used during the design of buildings requiring the buildings to be energy efficient and water conserving, have low environmental impact, and have high indoor air quality, among other things.

Potentially infectious waste. The definition of potentially infectious waste varies from state to state, but for the purposes of this document, potentially infectious waste is waste that is capable of producing infectious diseases (eg, blood, body fluids, sharps).[9]

Noninfectious waste. Materials with no inherent hazard or infectious potential (eg, packaging materials, paper).[10]

Waste stream. Flow of discarded materials and fluids that eventually return to the land, water system, or air.

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