Prevention of Dioxin Generation from PVC Plastic Use by Health Care Facilities

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The American Public Health Association,
Noting the conclusion in the 1994 Draft Dioxin Reassessment by the US Environmental Protection Agency that medical waste disposal is a major source of dioxin contamination;[1,2] and

Also realizing, as did APHA resolution #9304, "that virtually all chlorinated organic compounds that have been studied exhibit at least one of a wide range of serious toxic effects such as endocrine dysfunction, developmental impairment, birth defects, reproductive dysfunction and infertility, immunosuppression, and cancer, often at extremely low doses";[3] and

Recognizing that scientific and policy attention and concern have, for several years, been directed at the potential public health threat from dioxins, which, in addition to their carcinogenic effects, can disrupt the endocrine system;[4-7] and

Understanding that dioxins are created by the disposal of synthetic chlorinated organic compounds,[1,2] and that though the factors that determine dioxin formation during incineration are not fully understood, they are released into the environment during combustion of chlorinated plastic products;[1,2,8-10] and

Observing that chlorinated plastic products-predominantly polyvinyl chloride (PVC)-represent, on a tonnage basis, the largest and fastest growing class of synthetic chlorinated organic compounds;[11] and

Observing that the use of PVC products by the health care industry, which began after World War II and has grown rapidly, especially for single use or short-term use applications, accounts for most of the organically bound chlorine in medical waste;[12] and

Confirming that a prime ethical principle of health care providers is "First, to do no harm"; and

Understanding, as did APHA resolution #9304, "that the only feasible and prudent approach to eliminating the release and discharge of chlorinated organic chemicals and consequent exposure is to avoid the use of chlorine and its compounds in manufacturing processes";[3] and

Understanding that appropriate alternative products composed of nonchlorinated materials are currently available for many, but not all health care uses of

chlorinated plastics (e.g., blood bags);[8-10] and

Affirming that any substitution for a chlorinated plastic product must provide a less toxic alternative with concern paid to the full public health implications of the replacement, including infectious considerations; and

Observing that highly effective programs for the reduction of hospital waste generation have been initiated in the United States and that programs for the substitution of PVC are in place in some hospitals in Europe;[13-20] therefore

1. Urges all health care facilities to explore ways to reduce or eliminate their use of PVC plastics;
2. Calls upon health care professionals to encourage health care institutions with which they are associated to adopt policies that will lead toward the reduction and elimination of the use of PVC plastic products;
3. Suggests that health care facilities hire or assign professional staff to evaluate the potential for persistent toxic pollution associated with the life cycle of products the facility purchases;
4. Strongly urges medical suppliers to develop, produce, and bring to market appropriate, cost-competitive products that can replace those that contain PVC or other chlorinated plastics;
5. Encourages government oversight agencies and private accrediting bodies to incorporate, institutionally, the requirement that health care institutions have based programs for the reduction of toxic pollution in their certification standards; and
6. Encourages study and evaluation of alternative products and practices that will lead to the reduction and elimination of the use of PVC products and also encourages programs to provide technical assistance and training to health care facilities that seek help in the reduction of their reliance on chlorinated plastics.

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