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## Healthcare without Harm? A PVC-Free Hospital

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Poster Presentation P46

**HEALTHCARE WITHOUT HARM? A PVC-FREE HOSPITAL**

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Hospitals are institutions dedicated to providing healthcare. However, some hospital practices may pose health risks. Many hospitals use medical materials made from polyvinyl chloride (PVC), such as nasogastric and intravenous tubing and bags. These materials contain a chemical called Di(2-ethyl-hexyl)phthalate, or DEHP, which makes the plastic flexible. In addition, PVC production and incineration release dioxin into the atmosphere, affecting public air quality and health. A literature review was conducted to analyze the safety of DEHP and dioxin in humans and the cost of adopting a PVC-free purchasing policy. Clinical research revealed that DEHP is correlated with reproductive disorders and dioxin is correlated with cancer and reproductive disorders. In addition, an analysis of PVC purchasing patterns determined that some PVC devices might be more expensive than alternative devices. By reducing the usage of PVC medical devices, the risk of cancer and reproductive disorders can be avoided. Therefore, a PVC purchasing plan is a viable option to reduce material costs and improve patient and public health.