

## **PVC products: It is high time to phase them out completely**

**Alternatives to PVC already exist for almost all applications. Legal requirements must be put into place.**

Despite its negative impact on public health and the environment, PVC is still widely used in the production of medical products.

DEHP, which is used as a softening agent in PVC, has proven to be especially harmful to certain patient groups. Consequently, PVC and safer alternatives are a main topic at the first European Healthcare Congress for Sustainable Products and Practices, which will take place between the 6th and 8th of October in Vienna. "CleanMed Europe" ([www.cleanmed.org](http://www.cleanmed.org)) is being organised by the Viennese Institute for Sustainable Health Care in partnership with the Wiener Krankenanstaltenverbund (Vienna Hospital Association) and the international organisation Health Care Without Harm ([www.noharm.org](http://www.noharm.org)).

"It is high time to enforce existing legal requirements and to start the final phase out of PVC production", says Professor Bruno Klausbruckner, environmental director of the Vienna Hospital Association. "To increase the demand for PVC-free medical products quickly a joint international action is required", adds Manfred Muehlberger, director of the Institute for Sustainable Healthcare. If a comparable number of products of PVC-free products is marketed and sold, in most cases their price is no higher than those containing PVC. An overview of the numerous high-quality non-PVC alternative materials will be presented by Mark Rossi from Health Care Without Harm USA at CleanMed Europe. Anne Maria Vass will present the experiences with the PVC phase out policy at Stockholm's Karolinska university hospital.

Other examples from Austria will be examined as well. The public hospitals in Vienna were able to reduce the PVC waste to less than a quarter. And the pediatric department Glanzing at the Wilhelminen hospital runs what is probably the first PVC-free Neonatology unit worldwide.

DEHP is especially dangerous to the health of premature infants. Its harmful impact is far greater than in adults. Thus the use of DEHP in baby toys has been prohibited throughout the European Union for many years. DEHP is not firmly bound into the PVC matrix and therefore leaks out easily from tubes, bags or other items and is transported into the human body when used for artificial ventilation or parenteral or enteral nutrition. DEHP may cause liver, skin and cardiovascular diseases and may also harm male fertility.

Although PVC is produced in closed production lines, monomeric vinyl chloride, which is a highly carcinogenic substance, is constantly emitted into the environment. The waste disposal of PVC is very dangerous: Toxic lead is still used as stabiliser and accumulates in slag and fly-ash when incinerated. PVC accounts for most of the hydrochloric acid generated in incinerators and contributes to the formation of highly toxic dioxins and furanes.

In case of fire PVC used in buildings leads to a higher smoke density. This is especially dangerous in hospitals where it makes the already complex and risky evacuation of buildings even more difficult.