



# EDC substitution

- examples from the healthcare sector

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# "Stockholm County Council will decrease its environmental impact caused by hazardous chemicals"

- Nice chemical products
  - Not cause allergy or hazardous to aquatic life
- Nice articles and consumables
  - No foreign substance exposure to patients or employees
  - Contribute to a toxic free circular economy



# Phasing out PVC

- Formal decision by county council board in 1997
- Focus on
  - Flooring
  - Tubing
  - Office equipment
  - Information boards used in public transport areas

## Main reasons in 2016

- Release of problematic substances during production
- Uncertainty around alternative plasticizers  
"the precautionary principle"
- Recycling?

# Our most valuable tool -Procurement



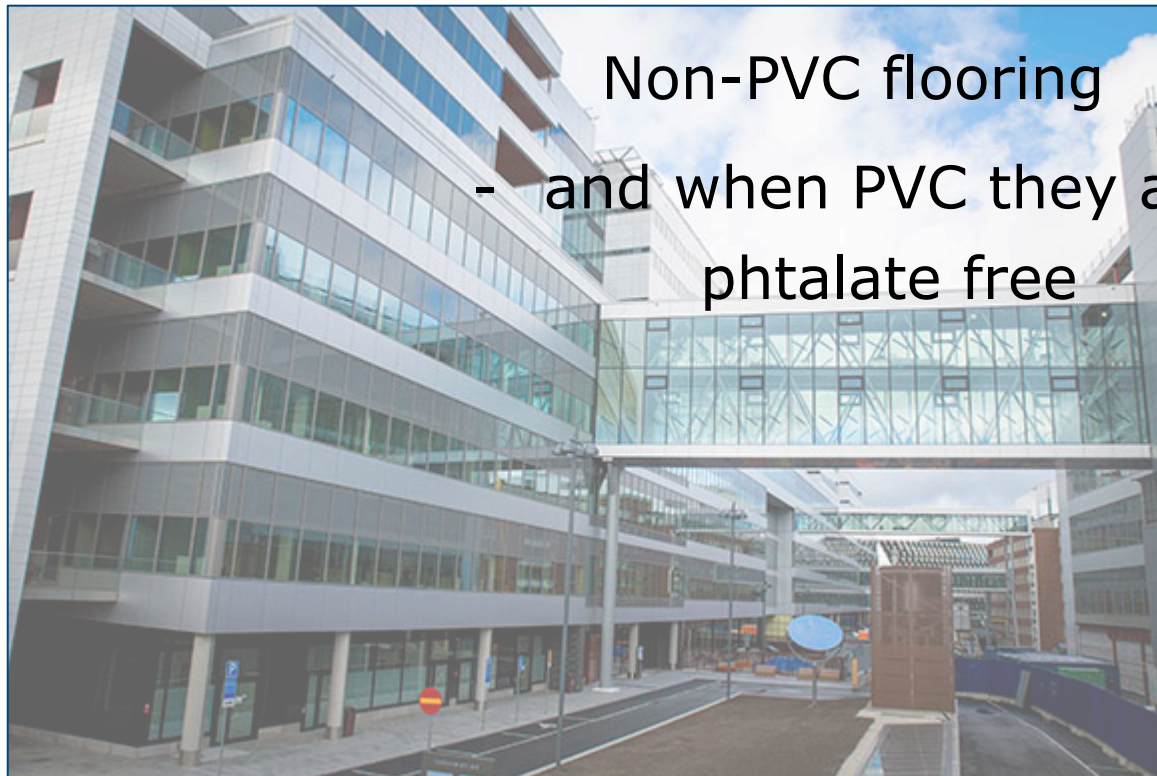
# Successful examples of substitution of EDCs

- Examination gloves
- Flooring
- When PVC remains; **phthalates are replaced** by alternatives





# How to build a toxic free hospital



Non-PVC flooring  
- and when PVC they are  
phtalate free

# How safe are the alternatives?

## ➤ **Most common alternatives**

- COMGHA
- DINCH
- DEHT
- DEHA
- TOTM

## ➤ **Swetox**

Evaluation of data for 6 alternative plasticizers

# Are the alternatives more expensive?

Product	Year	Price vinyl product	Price PVC free product	Price today PVC free product	Difference
Examination gloves (nitrile)	2003	0,23	1	0,21	± 0 %
Straight suction catheters	2007	1,05	2,45	1,95	+ 100 %
Urinary catheters	2003	10,50	13,00	10,50	± 0 %



# Success factors

1. Large volumes (several public operators with same demands)
2. Regular evaluation of function of alternative products
3. Dialogue with suppliers and manufacturers as part of the procurement process
4. Transparent procedure; clear message path



# Phase-out list

Which properties do we seek to avoid?

Very toxic, allergenic, carcinogenic, mutagenic, toxic to reproduction, endocrine disruptors and environmental hazards

Stockholm County Council's phase-out list for chemicals hazardous to the environment and human health 2012–2016

Valid with effect from 2908.2012

