



CHEMTrust
Protecting humans and wildlife
from harmful chemicals

What do we know and what needs to be done?

Gwynne Lyons
Director of CHEM Trust

EU conference on Endocrine Disruptors, June 2012



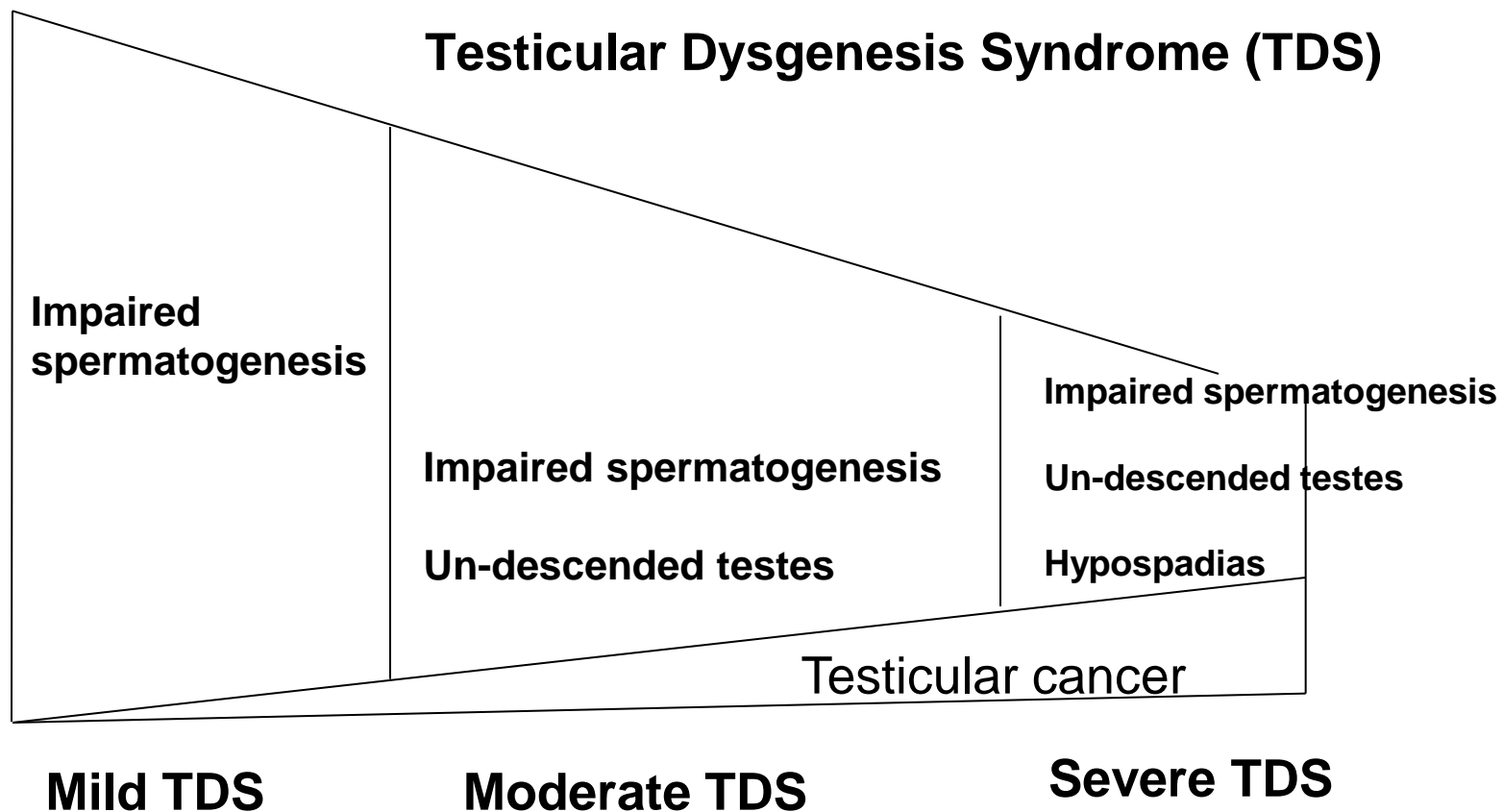
CHEMTrust

Protecting humans and wildlife
from harmful chemicals

- **Birth defects of the genitals.**
 - **Early puberty in girls.**
 - **Problems with reproduction.**
 - **Hormone related cancers.**
 - **Effects on brain development.**
 - **Obesity and diabetes.**
-
- **Good evidence for EDCs being at least partly to blame for increased rates of these diseases**



CHEMTrust
Protecting humans and wildlife
from harmful chemicals



Taken from Skakkebaek et al, 2001

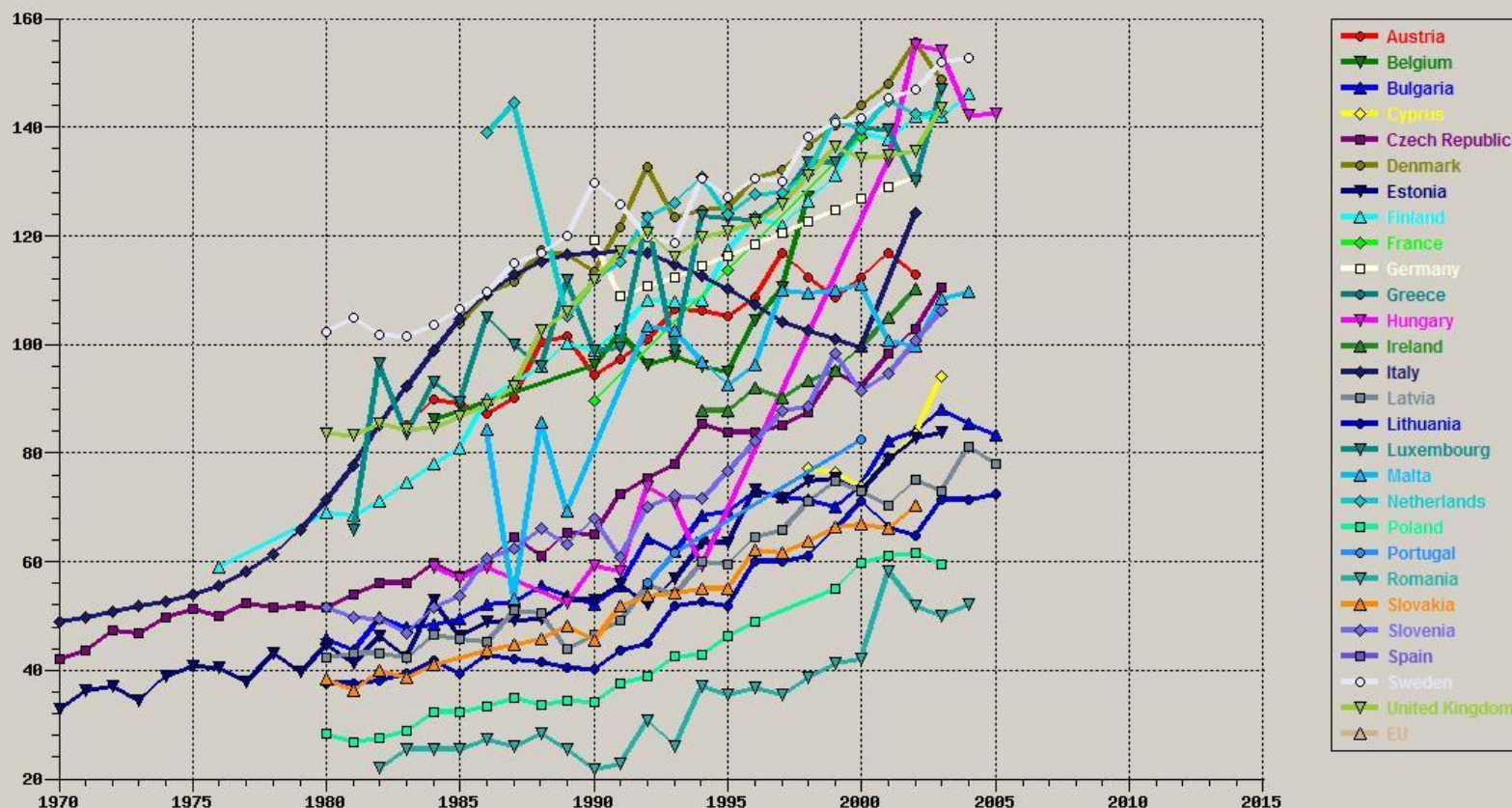


CHEMTrust

Protecting humans and wildlife
from harmful chemicals

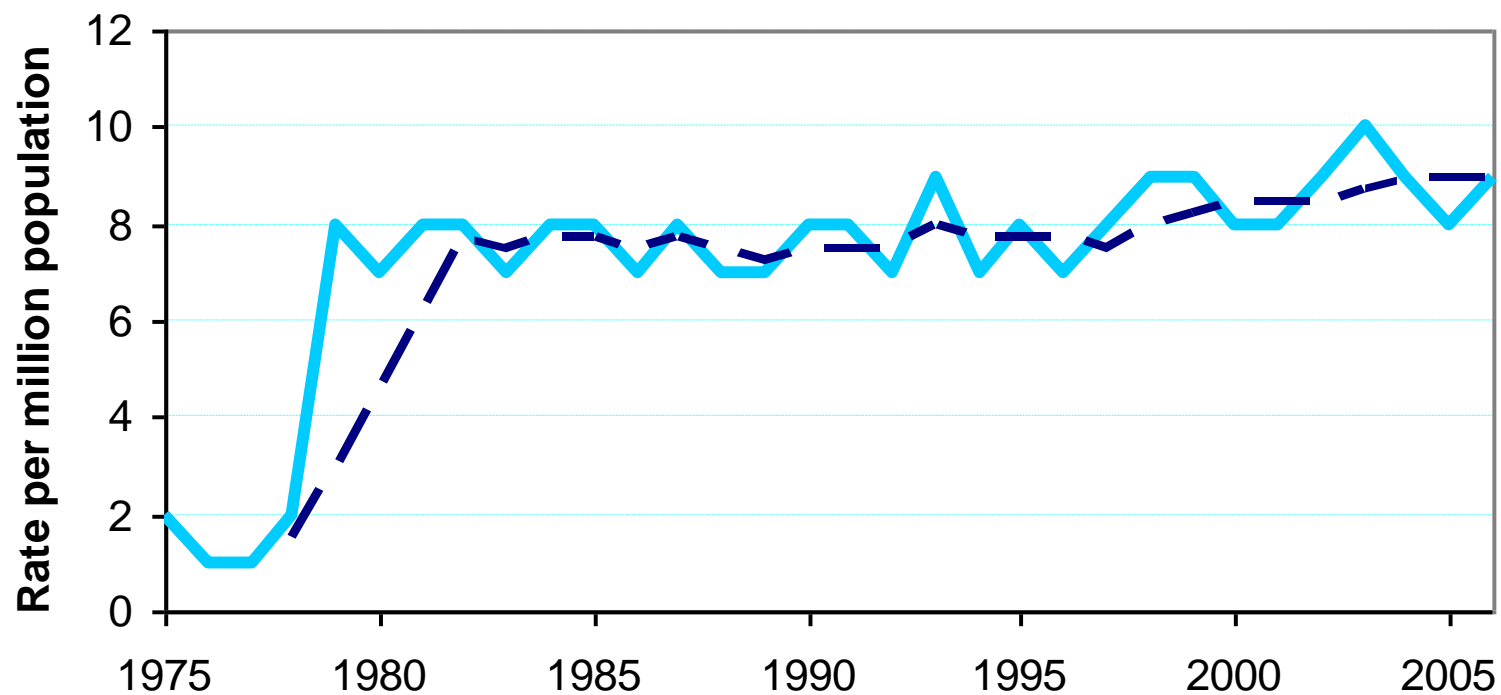
Breast cancer increase in EU

Female breast cancer incidence per 100000



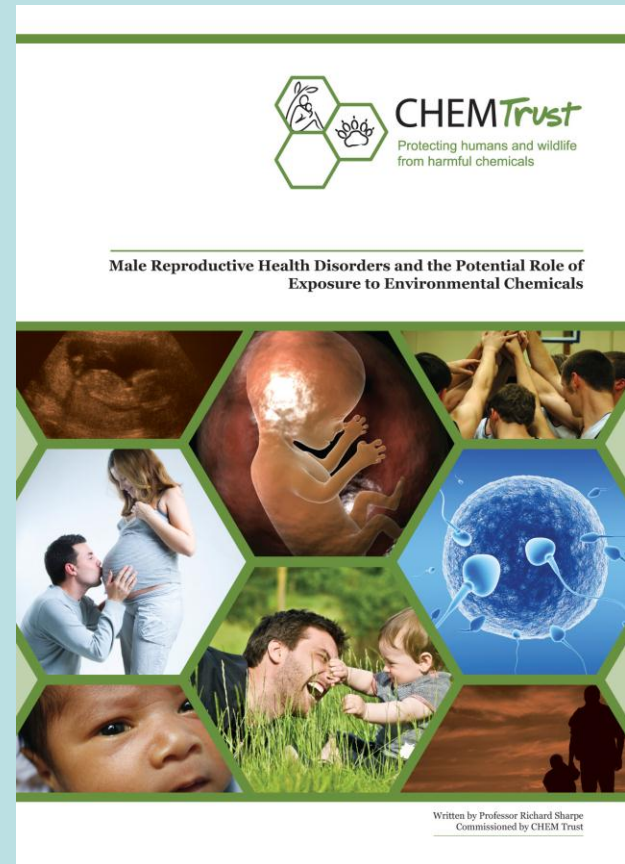
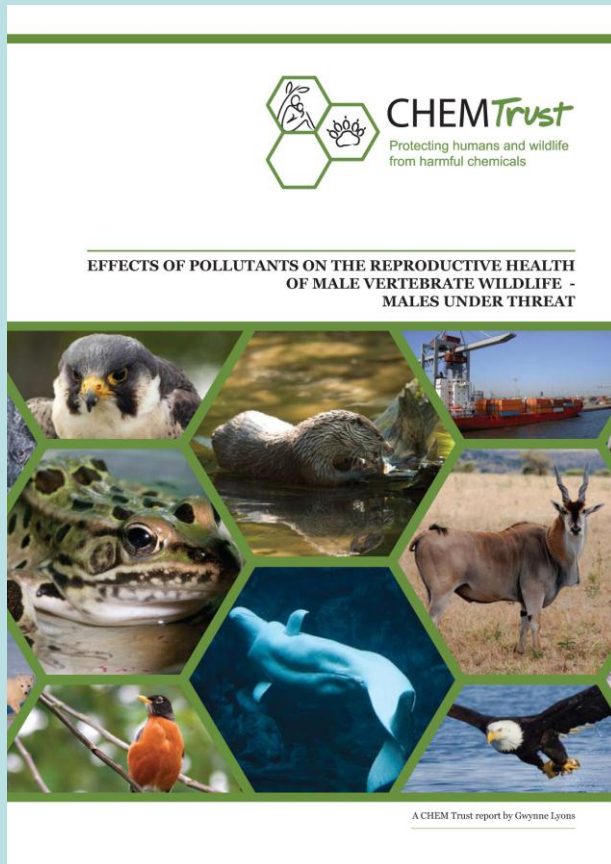
Source: WHO/Europe, European HFA Database, June 2007

**Age standardised incidence rates, breast cancer,
in males, GB, 1975-2006
(with 4-year moving average)**



Reports available:

www.chemtrust.org.uk





CHEMTrust

Protecting humans and wildlife
from harmful chemicals

Thankfully now we have EU laws that explicitly refer to chemicals with ED properties

- **Battle on how to define criteria for what is a chemical with ED properties that may cause adverse effects.**
- **Agencies from the UK and Germany (which between them host a large part of the EU chemicals industry) have proposed criteria that would catch only a few chemicals.**
- **Some MSs want to restrict criteria to sex hormone and thyroid disruptors.**



CHEMTrust
Protecting humans and wildlife
from harmful chemicals

Separate science from undue pressure.

- **Advisory C'tees being made aware that if they find a chemical might cause harm, industry will replace it with a similar chemical, about which little is known.**
- **Revolving doors between regulators and industry - well founded concerns about subtle biases?**
EP postponed approval of EFSA's 2012 budget + adopted resolution denouncing EFSA conflicts of interest.
- **Legal actions that industry can threaten against regulators, - take up scarce resources to defend.**



CHEMTrust
Protecting humans and wildlife
from harmful chemicals

Chicago Tribune

[www.http://media.apps.chicagotribune.com/flames/index.html](http://media.apps.chicagotribune.com/flames/index.html)

**Allege the brominated flame retardants industries formed a bogus public interest group,
“Citizens for Fire Safety”.**



CHEMTrust
Protecting humans and wildlife
from harmful chemicals

- **EU politicians have agreed the need to find alternatives to chemicals with ED properties that may cause adverse effect.**
- **Representatives of some MSs must not undermine this political imperative by attempting to overly restrict what is meant by the term ED properties.**



CHEMTrust

Protecting humans and wildlife
from harmful chemicals

The criteria

- **Requiring a high wall of proof for ED MoA will lead to paralysis by analysis and legal challenges by industry.**
- **Should not be limited to EATS but must be able to include other hormone systems.**
- **Need to review testing required – and to develop new OECD tests**



CHEMTrust

Protecting humans and wildlife
from harmful chemicals

Criteria must be able to adapt to advances in knowledge

- **Include a ‘safety-net’ criterion**
- **“or other evidence for endocrine disrupting properties sufficient for predicting the chemical may cause adverse effects or probable serious effects.”**



CHEMTrust

Protecting humans and wildlife
from harmful chemicals

Giving industry a clear steer to replace chemicals with ED properties will:-

- **Make it cheaper for industry in the long run.**
- **Enable EU industry to take a growing share of world market for safer substitutes.**
- **Deliver health gains for the public.**
- **Reduce spending on health services.**



CHEMTrust

Protecting humans and wildlife
from harmful chemicals

Thank you for listening

Gwynne Lyons
Director of CHEM Trust

HEREDITY

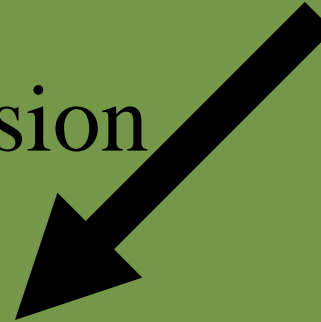
**Contaminants interfere
with gene expression**



GENES

ENVIRONMENT

Output of gene expression



PHENOTYPE:
What we become

