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Putting Cancer out of Work

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Alliance for Cancer Prevention

A multi stakeholder group which includes representatives from NGO's, environmental and occupational health organisations, trade unions, public health advocates and civil society groups, to work together on cancer prevention.



Aims:

- To develop a *cancer prevention strategy* which addresses all potential and suspected environmental and occupational risk factors.
- To reduce *preventable cancer incidence* by lobbying for prevention policy and a reduction in occupational and environmental cancer related exposures.
- To establish a *visible entity* and a *strong voice* which can promote and advocate for cancer prevention in the UK and the EU.

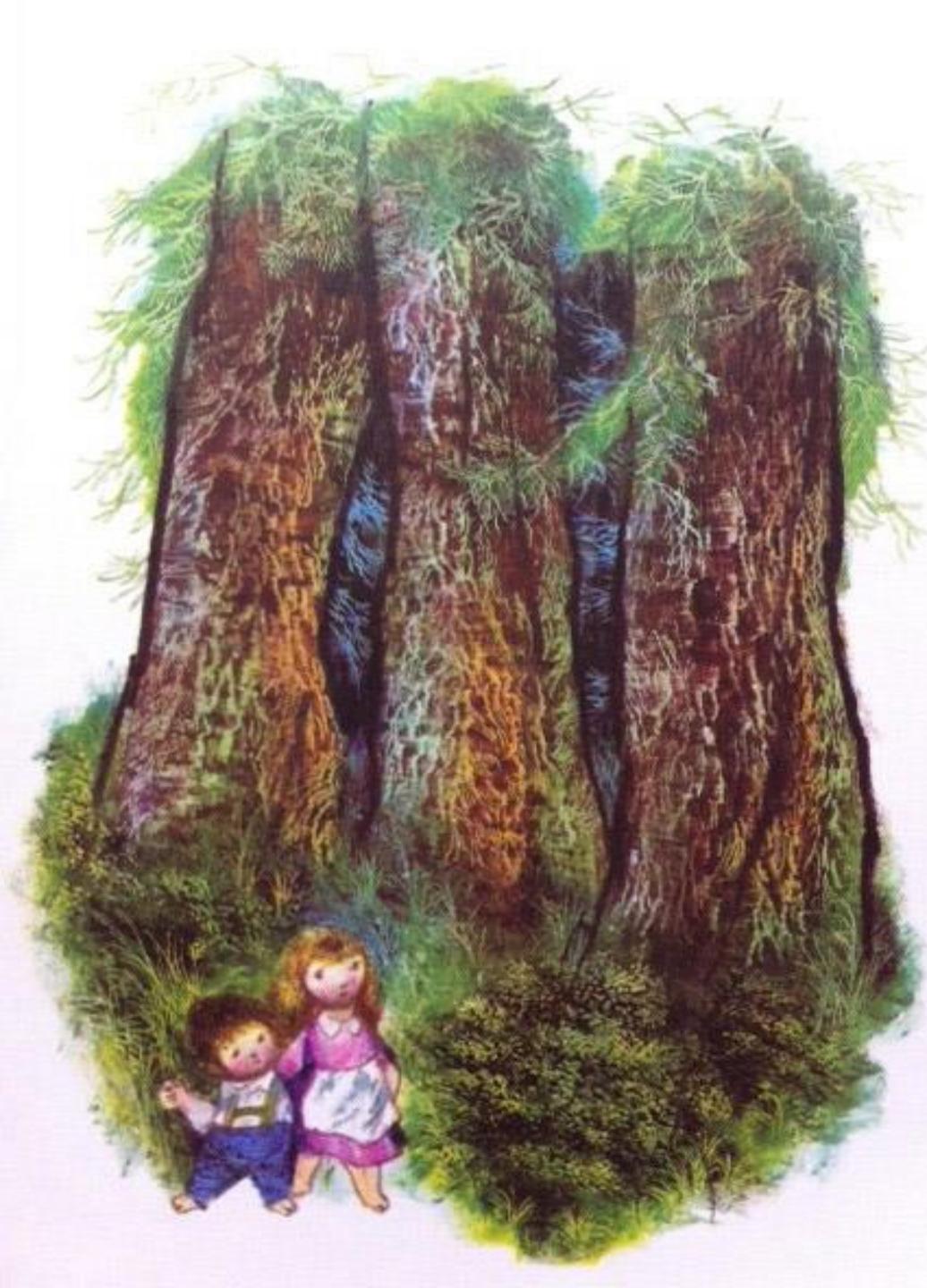


To have an alternate
voice on the cancer

To work collectively and strategically to ensure the environmental and occupational risk factors for cancer ie primary prevention get equal footing to treatment and care.

Objectives

- To work to ensure that the cancer charities *acknowledge* the environmental and occupational risk factors for preventable cancers.
- To show through constructive information that traditionally recognised risk factors *do not* explain the huge increases in cancer incidences.
- To devise *strategic approaches* to overcome the barriers to prevention including the 'evidence' based barrier.
- To be actively *involved* in all consultations on cancer prevention initiatives and legislation by the UK government and the EU.



Barriers to Prevention

- exploding the myths and fairy tales

Myth no: 1
Its all down to
lifestyle risk
factors i.e. its
your own fault



HEALTHY LIVING

- › [Can cancer be prevented?](#)
- › [Smoking and tobacco](#)
- › [Alcohol](#)
- › [Diet and healthy eating](#)
- › [Obesity and weight](#)
- › [Exercise and activity](#)
- › [Sun and UV](#)
- › [HPV](#)
- › [Hormones](#)
- › [Harmful substances](#)
- › [Air pollution and radon](#)
- › [Chemicals in the workplace](#)
- › [Cancer controversies](#)
- › [Health in your community](#)

Harmful substances - chemicals, pollution and cancer

Every day, we are exposed to thousands of different chemicals, many of which are man-made. If you are worried that these chemicals may be harmful to your health, you are not alone. But are synthetic chemicals really as bad for you as some people believe? Can they cause cancer, or are such worries unfounded?

A small effect

For most people in the UK, harmful chemicals and pollution pose a very minor risk.

Some of these can indeed increase the risk of cancer, including [asbestos](#), and some [industrial chemicals](#). But they are in the minority and only cause a small proportion of all cancers.

Large organisations like the [World Health Organisation](#) (WHO) and the [International Agency for Research into Cancer](#) (IARC) have estimated that pollution and chemicals in our environment only account for about 3% of all cancers.

Most of these cases are in people who work in certain industries and are exposed to high levels of [chemicals in their jobs](#).

Lifestyle factors such as [smoking](#), [alcohol](#), [obesity](#), [unhealthy diets](#), [inactivity](#) and [heavy sun exposure](#) account for a much larger proportion of cancers.



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Questions about cancer?

Call our nurses on freephone 0808 800 4040 9am until 5pm Monday to Friday.



Or visit [CancerHelp UK](#)

World TB Day

24 March 2014



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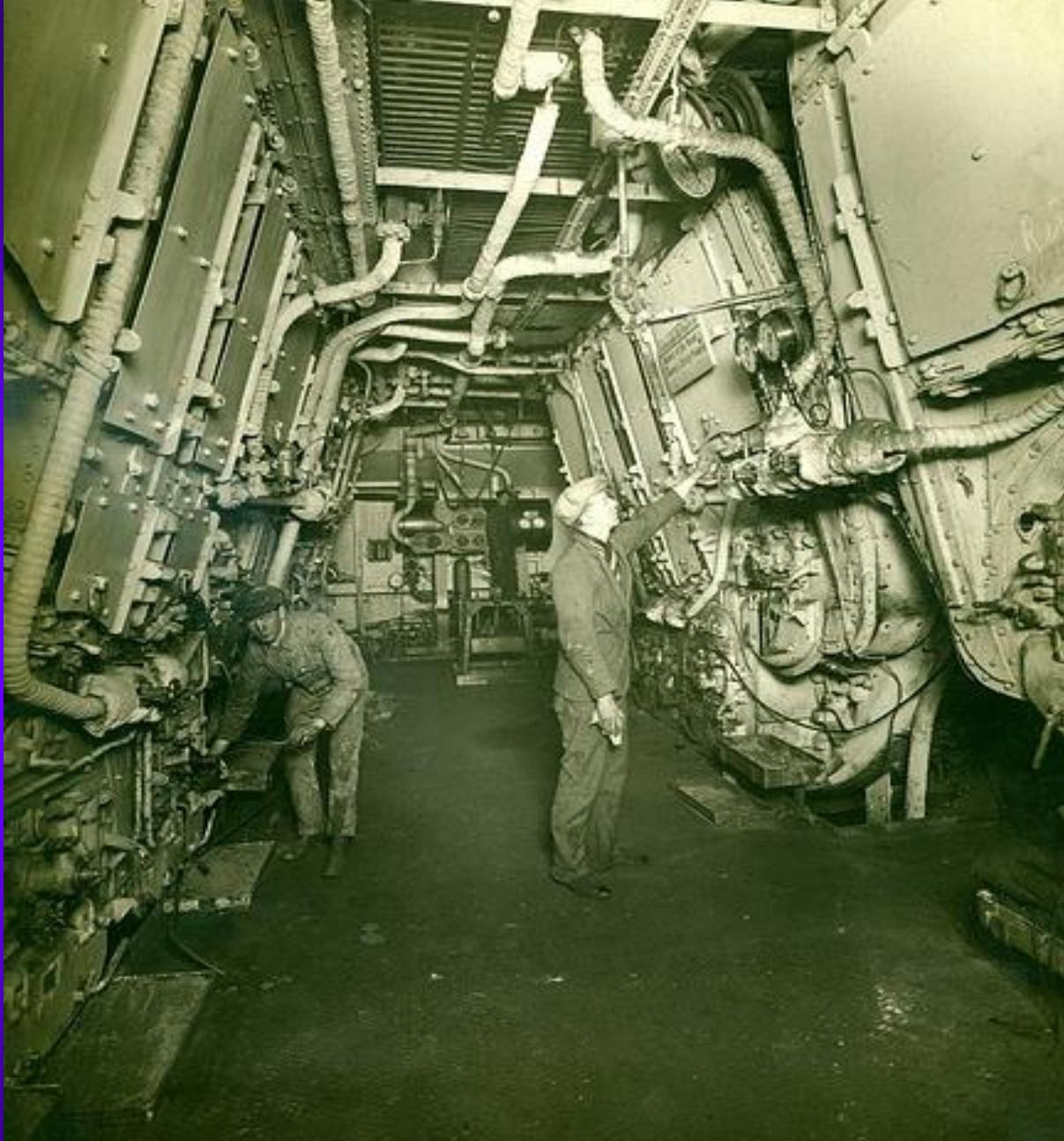
17-18 March 2011 / Asturias (Avilés, Gijón), Spain

International Conference on Environmental and Occupational Determinants of Cancer: Interventions for Primary Prevention



Worldwide, cancer is the second leading cause of death. In 2008, there were 7.6 million deaths from cancer, alongside 12.7 million new cases. Roughly 19 per cent of all cancers are estimated to be attributable to the environment, including work settings. Environmental and occupational interventions are therefore vital to reduce cancer incidence; and decreasing exposure to carcinogens can be cost-effective and contribute to the overall well-being of communities.

The first WHO international conference on the primary prevention of cancer through environmental and occupational interventions will take place 17-18 March, hosted by the Government of Spain and Government of the Principality of Asturias.



Boiler room after the conversion to oil burning, 1921.
RMS MAURETANIA 'Tyne & Wear Archives & Museums'

The couch potato



Too little exercise,
too much alcohol
and tobacco.

Healthy living test
(CRUK)

No questions on
work or
environmental
exposures

Cancers linked to Occupational and Environmental exposures

• Bladder	lung	ovarian
• bone	lymph (hodgkin's & non hodgkin's)	pancreatic
• brain		prostrate
• breast	larynx	rectal
• colon		skin
• kidney	mesothelioma	soft tissue
• laryngeal	multiple myeloma	sarcoma
• leukaemia	nasal &	stomach
• liver & biliary	nasopharynx	testicular
	oesophagus	thyroid
	other CNS	

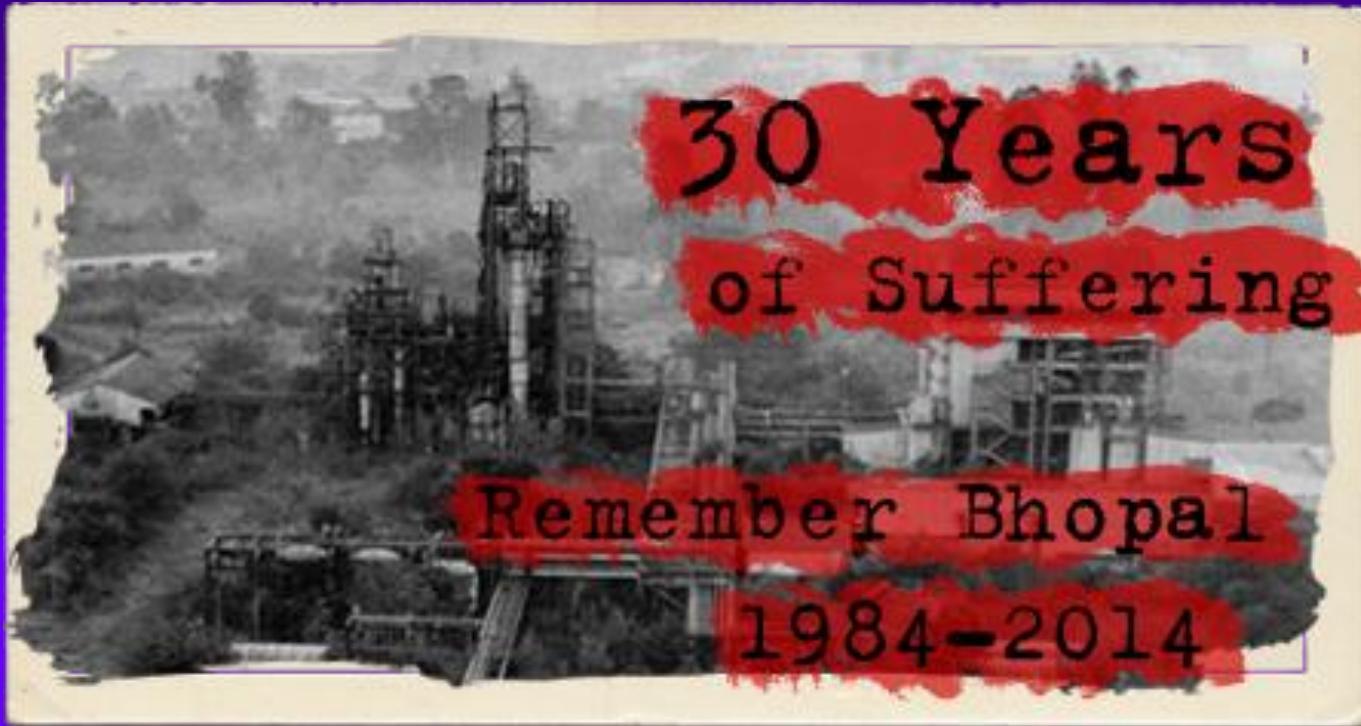
Not just a disease of old age

- In the UK childhood cancer rates have increased by 40% since the late 1960's.
- Childhood cancers (who have none of the 'lifestyle risk factors associated with adult cancers such as smoking) in industrialised countries increasing by 3% every 3 yrs and 1 in 500 children develop a cancer before the age of 15 and before the age of 6 years for almost half of them, and evidence suggests pre-birth exposures can dictate future cancers.

We're Living Longer Than Previous Generations But Not Healthier. Science 2.0 Dec 2010.

http://www.science20.com/news_articles/were_living_longer_previous_generations_not_healthier

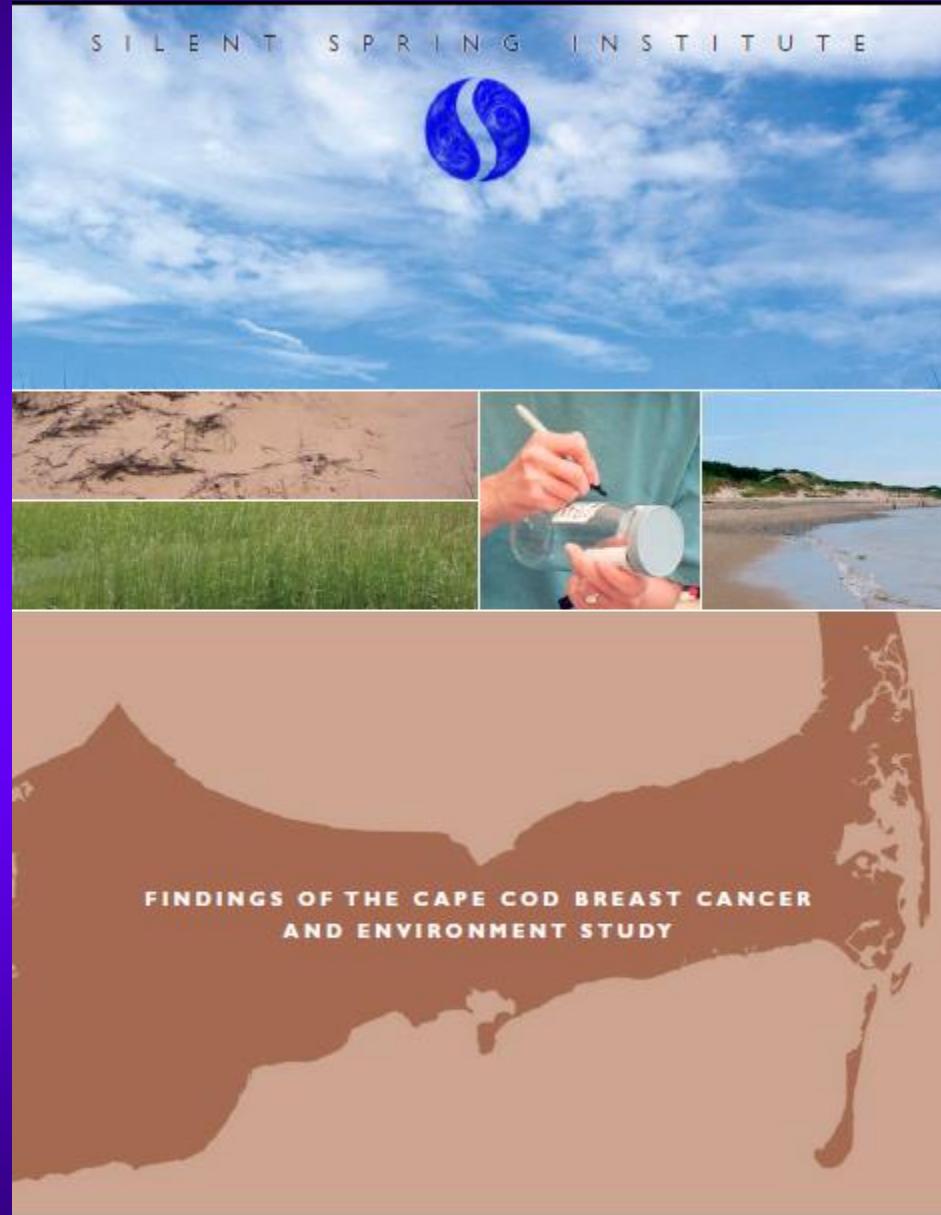
58 IARC study shows increasing cancer rates in children in Europe. IARC 10/12/04. <http://www.iarc.fr/en/media-centre/pr/2004/pr155.html> ancers.



Cancer cases triple around Bhopal site
More info <http://www.bhopal.org/>

Cape Cod and
elevated rates of
Breast Cancer due to
pesticide spraying and
ground Water
contamination.

www.silentspring.org





High rates of cancer from feeding on
debris from Canada's smelter mines

Myth no: 2
The dose makes the
poison

The Scientific “Jurassic”

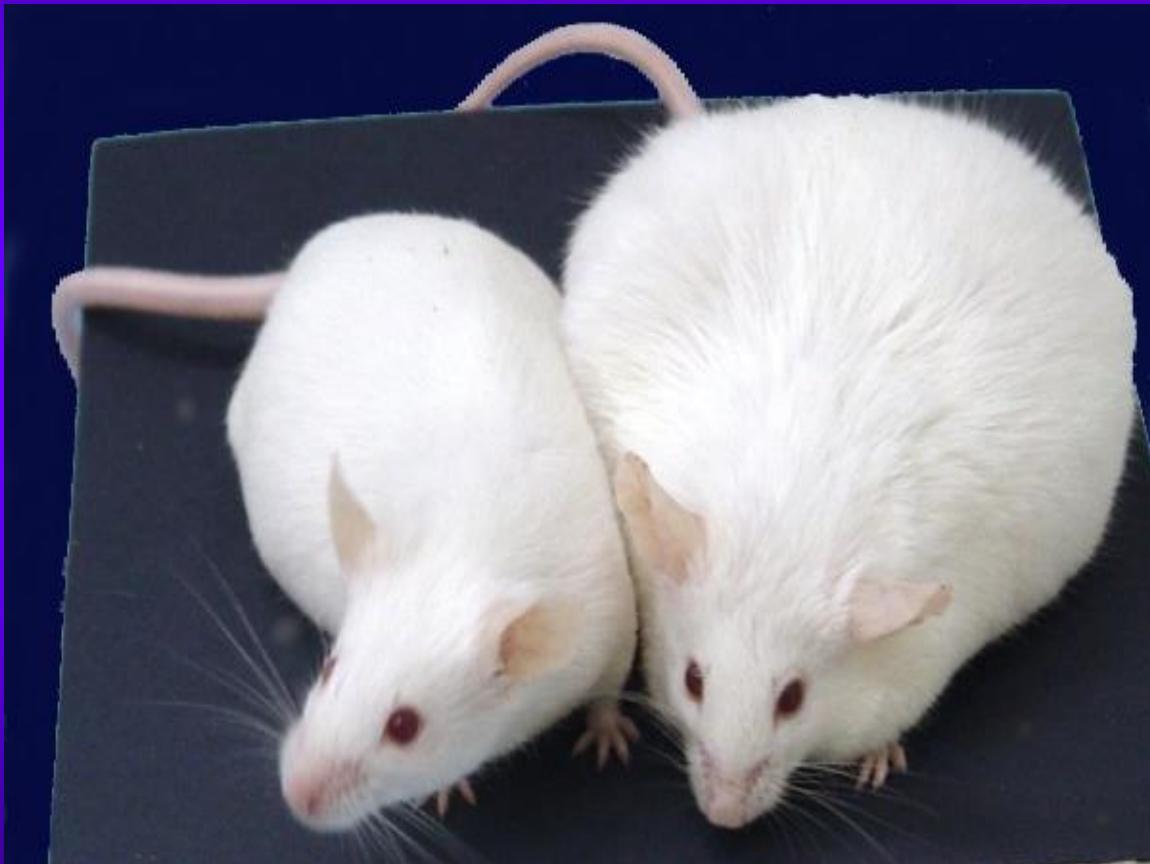


Old... a disease that is linked to genes is a disease under hereditary control.

New... a disease linked to genes is one vulnerable to environmental and occupational causes.

Scientific Jurassic is a phrase coined by J. P Myers
Environmental Health Sciences <http://www.ehsciences.org/> & Our Stolen Future

Does the dose make the poison?



**Same strain of mice
Same caloric intake
Same activity levels**

1 part per billion
DES (Oestrogen
mimic) in the
womb

Yet 100 ppb
causes weight
loss

Environmental Obesogens



- Organotins, EDC's Bisphenol A, POP's, chemicals in plastics, food packaging, pesticides and cosmetics can trigger dramatic increases in body fat.

Safe from harm?



- 250 chemicals have been identified which interfere with oestrogen (www.silentspring.org)
- International Agency for Research on Cancer (IARC) has identified 415 known or probable carcinogens.

Environmental and occupational causes of cancer: A call to act on what we know. Richard Clapp. Oct 2007

Main groups of carcinogens at work

- Metals
 - Arsenic, beryllium, cadmium, chromium, cobalt, lead, nickel,
- Pesticides, herbicides, drugs
- Asbestos, silica, refractory ceramic fibres, dusts
- Radiation (solar, ionising, non-ionising)
- PAHs (also coal-tar pitch products)
 - Vehicle exhausts, mineral oils, tobacco smoke, combustion products, creosotes
- Solvents and *chlor* compounds
- Chlorination by- products
- Various chemicals
 - Aromatic amines, benzene, formaldehyde, nitrosamines, PCBs, endocrine disruptors
- Shiftwork ('long-term night work')

Opportunities for prevention?

Unexpected finding about chemicals & substances in products we originally thought were safe

+

Revolution in the way we think about the links between exposures and human health

= Great opportunities for prevention

Percentage increase of breast cancer risk for women working

- 42% among those highly exposed working across all occupations and industries.
- 36% for those who had worked in farming.
- 73% for women working in the metal working sector.
- 228% for those working in bars, casinos and racetracks.
- 235% for working in the food canning industry.
- 268% working in the automotive plastics manufacturing sector.

Before Menopause

- The risk for developing breast cancer increased more than 400% for women working in the automotive plastics industry.
- And more than 500% higher for those working in the food canning.

Brophy, J & Keith, M. et al. Breast cancer risk in relation to occupations with exposure to carcinogens and endocrine disruptors: a Canadian case-control study. *Environmental Health* 2012, 11:87

Plastics Workers picture from New Solutions.



Myth no: 3
One more £ will help us
beat cancer

National Cancer Research Institute

In 2002 the NCRI spent less than 2% (£6.3m) on prevention of all cancers.

In 2011 this had risen to a heady 3.4% (£17.1m).



The cost of cancer

- Occupational factors ~ excess of 40,000 cancers each year and cost up to £59bn. Burying the Evidence. Hazards Magazine.
<http://www.hazards.org/cancer/hsecriticism.htm>
- To the NHS (hospice costs, costs to family and patient, losses in productivity covering cancer survivors and cancer deaths (both paid & unpaid work) is a conservative £18.33bn/yr.

(2008 figure) The Cost of Cancer. Policy Exchange. Research note. Feb 2010. Featherstone and Whitham.
<http://www.policyexchange.org.uk/publications/category/item/the-cost-of-cancer>



Myth no 5:- The chemicals we are exposed to are properly tested and within safety levels

REACH

- REACH - Registration, Evaluation & Authorisation of Chemicals - 30,000 substances on the EU market above 1 tonne per year
- Very limited information available on hazards and risks to human health and the environment
- Current regulatory system has been very slow to produce results less than 200 substances assessed properly over past 30 years – some 100,000 on the market and new ones added.

How strong is the evidence ?

There are three classes of carcinogens normally recognised by IARC –International Agency for Research on Cancer - based on the strength and nature of evidence that they cause cancer:

- Group 1 where the evidence is strongest –sufficient to say that a factor causes cancer in humans
- Group 2A where it is strong enough to say that this substance probably causes cancer with strong evidence for cancer in animals but inadequate evidence in humans and
- Group 2B where the evidence is more limited for animals and not sufficient for humans.

In practice substances start as Group 3 – unclassified and then become Group 2 before becoming Group 1 as evidence builds up. It is **exceptional** for a substance to fall in the rankings.

Myth no 4: We have no
vested interest in a
cancer forever future



Public Health
England



CANCER
RESEARCH
UK



Health and Safety
Executive

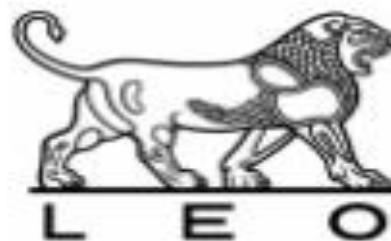
cancer • campaigning • group

cancer•campaigning•group

Coalition of 57 small and large cancer related charities campaign for improved cancer policy and services in the areas of prevention; care and treatment; patient involvement and choice; and research. Speak with one unified voice.



Bristol-Myers Squibb



Cash Cancer, Oil & War



- Global Pharma market will be worth \$1.1 trillion by 2014 (PharmaTimes April 2010)
- Of the top 10 most expensive drugs, all except 1 are cancer drugs. Pres to AACR10: Thomas J. Smith
How much can we afford to pay for new drugs, and how do we make those decisions?
- CRUK made £8m from the #nomakeupselfie

Cancer Research UK

- Responses from CRUK in the last 15 yrs on links between cancer and occ and enviro exposures have ranged from: no evidence to no compelling evidence.
- When PR's from CRUK were examined support was shown for research linking cancer to 'lifestyle' and welcoming new drugs.
- Research linking occupational and environmental causes are questioned in terms of validity.

HEALTHY LIVING

- ▶ [Can cancer be prevented?](#)
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Cancer controversies

Research has shown that our lifestyles affect our risk of getting cancer. More than four in ten cancers could be prevented through healthier lifestyle choices, such as [being a non-smoker](#), drinking [less alcohol](#), eating a [healthy balanced diet](#), [being active](#), keeping a [healthy weight](#) and being [SunSmart](#). Not only can these things help cut the risk of cancer, importantly they're all within our own control.

But people are often more concerned about things in their environment, particularly the trappings of modern life, from mobile phones and power lines, to stress and deodorants. This section will tell you more about these topics.



Read about the evidence in specific areas:

- [Air travel](#)
- [Pesticides](#)
- [Cancer clusters](#)
- [Plastic bottles and films](#)
- [Cosmetics](#)
- [Power lines](#)
- [Deodorants](#)
- [Shift work](#)
- [Hair dyes](#)
- [Stress](#)
- [Medical X-rays](#)
- ['Superfoods'](#)
- [Mobile phones](#)
- [Talcum powder](#)

A sense of perspective

The evidence linking these things to cancer varies greatly. For example, there is no good evidence that deodorants cause cancer but there is greater debate over the potential risks of power lines.

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Support us

Questions about cancer?

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Or visit [CancerHelp UK](#).

Find out more

CRUK and EDCs

- **“Correcting for other things.** Many EDC studies have not taken other things into account that can affect a person's cancer risk. There are a number of things, including people's age, whether they smoke or not, how much alcohol they drink and whether they maintain a healthy weight and eat a healthy diet that can influence people's risk of developing cancer. It is important that researchers look at these when interpreting the findings from a study.”

Myth no 6

The HSE is good for me!

Makes the UK the
'safest places to work in
the world'

HSE dithering, in denial and delaying on workplace cancer

It seems increasingly clear that HSE cannot be expected to meet these expectations.

- We need to know **where** the carcinogens are at work
- We need measures in place to **replace** them, with **enforcement** to make sure this is being done.
- For the currently exposed – we need to know how exposed they are and make sure that **surveillance** is done.
- **Compensation** should be available to those who get cancer through their work
- We need to be part of a process by which new substances are **classified and tracked** if they enter materials used at work (the purpose of REACH).

What needs to be done ? – but
the question should be - *what is
HSE doing ?*



“Health is a fundamental human right indispensable for the exercise of other human rights. The right to prevention in relation to epidemic, occupational and other diseases has been addressed in the International Covenant on Economic, Social and Cultural rights amongst others.



How to bring about change?

- Collective working
- New cancer plan
- Enforce H&S regs

For more info

- www.allianceforcancerprevention.org.uk
- <http://www.chemhat.org>
- www.hazards.org
- www.hazardscampaign.org.uk

