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# Occupational cancer

Hugh Robertson,

Senior Health and Safety Officer, TUC

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# How many cancers are caused by occupational exposure every year?

The most recent estimate published by the HSE is that around 13,500 new cases of cancer are caused by work every year with over 8,000 deaths

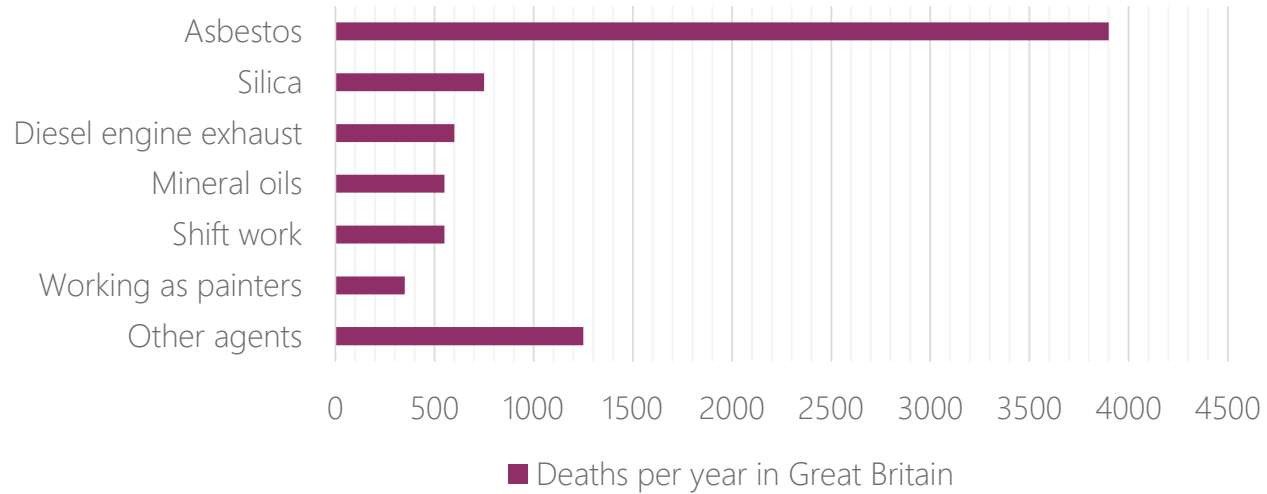
The TUC has estimated that the true level is more likely to be well over 20,000 cases a year.

# What causes workplace cancers?

- 3/4 of all cancers are caused by just 5 carcinogens. These are asbestos, shift work, mineral oils, the sun and silica
  - Asbestos 4216
  - Shift work 1957
  - Mineral oils 1722
  - Solar radiation 1541
  - Silica 907
  - Diesel exhaust 801
  - Tars 475
  - Painters\* 437
  - Dioxins 316
  - Second-hand tobacco smoke 284
  - Radon 209
  - Welders\* 175

\* Painters and welders may be exposed to a range of carcinogens so are listed as occupational group

# Lead causes of death from cancer



# Types of cancer

Cancer	Causes	Deaths
Lung	5,442	4,745
Non melanoma skin cancer	2,862	23
Breast	1,969	555
Mesothelioma	1,937	1,937
Bladder	550	245
Oesophagus	188	184
Stomach	157	108
Non-Hodgkin lymphoma	140	57
Sino-nasal	126	38

# Sectors

Construction has, proportionately, a far higher number of people who are diagnosed with occupational cancer, with the main causes being asbestos, the sun and silica. The HSE states that there are 3,500 cancer deaths and 5,500 cancer registrations each year from this industry.

In manufacturing the main cause of cancer is mineral oils which are responsible for almost half of the deaths from occupational cancer. Metal workers are most at risk, but so are printers and anyone else who works with the oils.

In the service sector the biggest cause of occupational cancer is shift-working, although asbestos and diesel exhaust are also a big problem.

# Gender

Because men traditionally were more likely to work in engineering and construction more men get occupational cancer than women and for all but two of the main occupational cancers the rate amongst men is higher than that for women. The two exceptions are breast and cervical cancer. Although men can get breast cancer it is very rare. Cervical cancer can only affect women.

In the future the difference between men and women is likely to narrow as we have less job segregation on the grounds of gender.

Gender	cases	Deaths
Men	9,988	6,355
Woman	3,611	1,655



# Future Burden

Exposure is not just “historical”, it is just as much an issue today.

The biggest exposures are probably asbestos, shift work, diesel, silica, but also problems with wood dust, tars, radon etc. Many of these are areas where exposure is increasing.

Also unknown risks in new industries, for example there is probably huge exposure in recycling. There is also growing evidence on exposure risks in nanotechnology.

What we do today will have a major impact, but it will not be seen for perhaps 20 or even 40 years.

# The Law

Risk assessment approach. The law states that all carcinogens must be removed or substituted where possible.

Where a carcinogen is used, adequate control means bringing the exposure down to within the workplace exposure limit (WEL); assuming that a WEL exists.

Law requires employers to report cases of occupational cancer.

New European exposure limits for 13 chemicals announced in May, most of them already have UK limits so little impact.

*However having laws and being effective are very different things.*

# The problems with the law

WELs perpetuate the myth that there can be a safe limit for exposure to a carcinogen! Where a WEL exists then employers believe that they can operate up to that limit.

Often exposure limits are too high and many people are exposed to several carcinogens which increases risk.

Most workers do not know what they are exposed to and evidence on carcinogens can be hard to come by so many suspected carcinogens are ignored in the workplace.

Employers say they cannot control some carcinogens e.g. solar radiation, silica and diesel exhaust.

HSE advice on carcinogens is often very poor, or, in the case of shift work, out of date.

Reporting is almost non-existent as it is difficult to prove an exposure caused an individual cancer. There is no enforcement, especially where exposure is below a WEL.

# Example of Silica

In the case of silica halving the maximum exposure rate would reduce the number of cancers by 202 over the next 20 years, regulation alone is only of limited value as it was estimated that only about 30% of employers complied with the current regulations.

Were the limit to be reduced and enforcement increased so that 90% of workplaces complied, the number of cancers prevented would be a staggering 745 over the same period.

The USA has just reduced their exposure limit to half that of the UK.

# Example of Asbestos

Separate laws on asbestos based on “managing it safely” – leads to hundreds of thousands of exposures a year.

- 6,000,000 tonnes was imported
- Still found in 500,000 workplaces
- Often hidden or forgotten
- No requirement on employers to remove it
- Virtually no workplace is going to have any maintenance work done on it
- HSE estimates 1,300,000 tradespeople at risk of exposure
- Only 30% of tradespeople surveyed by HSE knew correct measures for working with asbestos

# TUC view on carcinogens

The aim of trade unions is that there should be no workplace exposure to anything that causes cancer.

We believe that the existing law is totally inadequate and unenforced. No employer should be able to use any known or suspected carcinogen unless they can show that there is no alternative or substitute and that proper control measures are in place.

We are currently campaigning for:

- The eradication of asbestos in the workplace.
- Reduced exposure limits for silica and dust.
- New guidance on shift work.
- Greater enforcement on diesel exhaust.
- Protection for outside workers.

# Conclusions

Need a clear message from HSE – there is no safe limit for carcinogens!

Need new, stronger, regulations on carcinogens and mutagens backed up by enforcement.

Prioritise the main killers in workplace now (asbestos, shift work, diesel, silica) with major campaigns from the HSE.

New lower standards needed on issues like dust.

Must not forget new risks like nano fibres.

**BUT**

Aim is to remove **all** exposure to carcinogens from the workplace.

The logo consists of the letters 'TUC' in a bold, sans-serif font. Each letter is rendered with a 3D effect, appearing to be made of a translucent material with a white-to-purple gradient. The letters are slightly offset from each other, creating a sense of depth and movement. The 'T' is on the left, 'U' is in the middle, and 'C' is on the right.

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