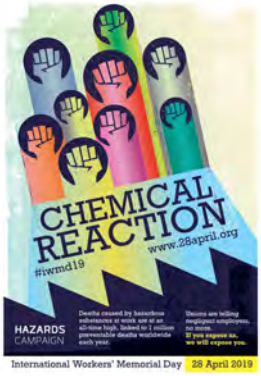


International Workers Memorial Day #IWMD19

#IWMD19 is our day when families of those killed by work, trade unionists, Hazards activists and communities come together to remember and to fight back. We honour the dead and their families but we want to stop deaths caused by work and almost every work death was preventable.

No-one should be killed due to going to work but millions are every year.
One million killed by dangerous substances every year

#IWMD19: Taking control to remove dangerous substances from work.

Chemicals are everywhere and the global chemical industry is set to grow four fold by 2060. But toxic workplace exposures already claim at least a million lives each year – around 30,000 at least in Britain. Unions worldwide are issuing a serious health warning to employers*: 'You expose us, we'll expose you'* All out! Show killer chemicals the door! "

The global union confederation, ITUC, emphasises a 'Zero cancer' approach, urging union safety reps to seek to eliminate or minimise exposure to carcinogens in the workplace. The ITUC body map of work cancers the carcinogens/jobs that cause them produced with *Hazards* magazine, ensures unions can identify and challenge preventable, potentially deadly exposures

It's important to know what we are up against as Sharon Burrow, head of ITUC says in All Out: '*Hired guns. Inept , cowardly or corrupt law enforcers. An unscrupulous rogue chasing profits at whatever the cost. Not a B movie but the global chemical industry, a runaway giant that sometimes behaves above the law, with deadly consequences. It can get away with this because it resorts to illegal or unethical practices to bury the evidence of health risks linked to its products. Whether it's accomplices are lawmakers or laboratories, corporate chemistry can and does get an undeserved clean bill of health for some of its best earners. It doesn't just load the dice, it uses gutter tactics to discredit or harass its opponent*'

Such as spying on anti-asbestos activists; relicensing Glyphosate by European Parliament in 2018 based on assessments lifted directly from industry documents, with Monsanto covering up its role in published research to make Glyphosate look safer. The petrochemical and mining industries financed 'independent' reports to cast doubt among regulators asked to tighten laws on cancer-causing diesel fumes. The number of work cancer research studies is in dramatic decline as the chemical industry is set to double in size by 2010 this will cause '*increasing exposures, concentrations and adverse health and environmental impacts if we continue to allow mismanagement of chemicals and waste worldwide*.' said Executive Director UN Environment.

Long latency periods between exposures and onset of work-related diseases mean many of today's deaths are the result of much lower levels of chemical consumption decades ago, yet we continue to introduce more chemicals, in greater volumes in more forms and combinations and the industry's attention is focused on applications not risk. 22,000 chemicals registered for use in Europe and safety checks on dangerous substances began in 2012. By Dec. 2018 completed checks on 94 substances showed nearly half were unsafe in their current commercial use. The European Chemicals Agency, ECHA ,found that of 21 substances evaluated in 2018, only 6% were sufficiently controlled. Chemical companies are ailing to provide important safety information on potentially serious health effects in nearly 3/4 cases checked by authorities in 2018. ETUI report Dec .2018 calculated work-cancers cost between 270 and 610 billion Euros a year across the EU. The human cost is one worker death every 30 seconds. Practically all cancers can be avoided by eliminating the exposures to carcinogenic agents, minimising exposures at related jobs , settings and procedures. Sharan Burrow makes clear: '*It is not happening because corporate chemistry has captured regulators, bribed scientists and attacked its critics*."

Toxic Substances affect us all, pollute the air, water and soil, get into out food, are handled and made by workers first . Workers are human canaries in toxic workplaces and it's up to us to sound the alarm, take action now for #IWMD19, for workers, for our children, our families, for our communities, our environment and our future,!

***"You expose us, we'll expose you'* All out! Show killer chemicals the door! "**

INTERNATIONAL WORKERS' MEMORIAL DAY
28 APRIL #IWMD

#IWMD19 Taking control to remove dangerous substances from work.

We work and live in a toxic soup of chemicals we know little about, and exposure to them can cause serious short and long term effects on our health, from before conception to old age, from skin irritation, dermatitis and asthma, to cancer, heart/lung disease, neurological damage and birth defects.

Wherever we work, we are all exposed to substances at work. Those we know about and those that are hidden. Many of them are harmful on their own, some are made worse in combination with others, and there is very little known about the cocktail of chemicals effects. Some are harmful in large amounts, some like endocrine disrupters are active and harmful at parts per trillion- a drop in an Olympic swimming pool. Substances may come into work with Material Safety Data Sheets (MSDS), warning signs and exposure limits, or those that arise during the work, and don't; plus those that end up in the final products we make including plastic bottles, toys, cosmetics and beauty products, packaging which leach out; substances that are hidden in the fabric of the buildings (asbestos); substances in furniture, carpets, in clothing including PPE (flame retardants, plasticisers, formaldehyde, waterproofing, plastic micro-fibres), in cleaning materials (Endocrine Disrupting Chemicals, (EDCs), fragrances, bleach, quaternary ammonium compounds, bio-cides) and even in thermal till receipts(EDCs). Workers on the way to work and outdoor workers are also exposed to air polluted from petrol and diesel vehicles, particles from tyres, construction, agriculture and pesticides from other work activities; and this pol-luted air also becomes indoor air in schools, hospitals and other workers' workplaces. A toxic soup, a cocktail of chemicals indeed.

Dangerous substances get into our bodies by absorption through our skin, inhalation or breathing in, and ingestion or eating. Dan-gerous substances can be present at work as solids, liquids, gases, as dust particles – particulate matter -fumes, aerosols, mists and coatings on till receipts, tin cans, drink containers, and as organisms like fungi, bacteria and viruses often in the air conditioning and ventilation systems.

Substances can be grouped by their effects on our bodies: irritants, allergens, respiratory or skin sensitisers, pesticides, biocides, infectious agents like bacteria viruses and fungi; or MERCs: Mutagens—cause changes in the DNA, genetic material that controls cells- Endocrine Disrupting Chemicals - act like hormones and subvert body processes in minute quantities—reproductive toxins that can harm eggs, sperm and fertility, and also cause birth defects and pregnancy problems.

Take Control to begin removing dangerous substances from work

Use the Law on specific chemicals and substances the Control of Substances Hazardous to Health, COSHH, Regulations, **Control of Lead at Work and Control of Asbestos at Works Regulations**

Identify dangerous substances at work—Remember to look at all areas of work, don't ignore cleaning or any outsourced work, like transport, or work done by temporary workers; look at those substances brought in with MSDS and those arising during the course of the work; microbes in ventilation system; off-gassing chemicals from furniture, carpets, flame retardants, and in the fabric of the building. Ask employers for lists of ALL substances you may be exposed to at work, ask for air and other sampling results– and keep asking until you get them!

Use the ITUC /Hazards Cancer Body Map to identify any carcinogens at work

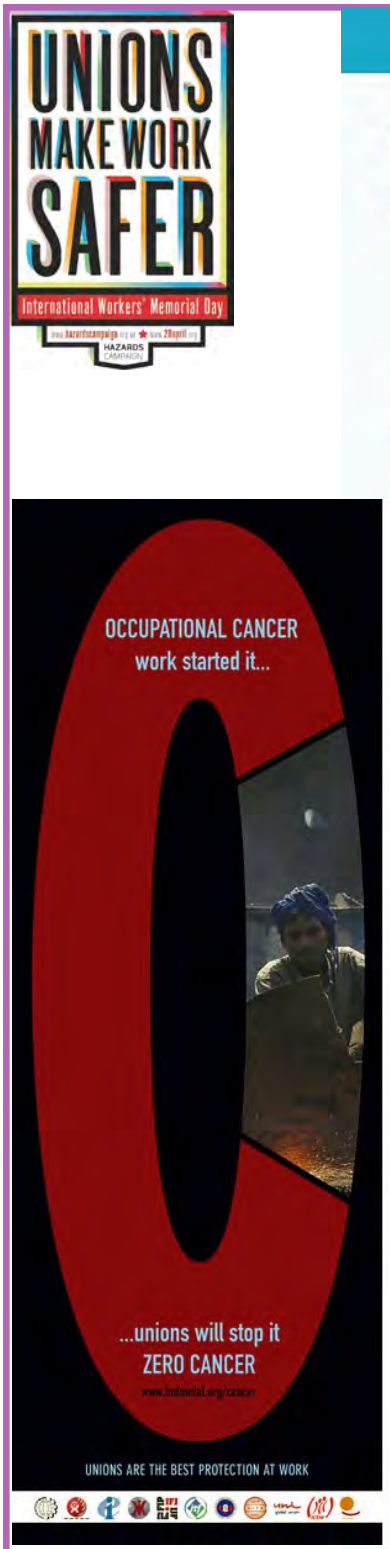
Ensure Risk and COSHH assessments are carried out on all jobs and processes , that safety reps are involved and ensure risk assessments are sex./gender sensitive

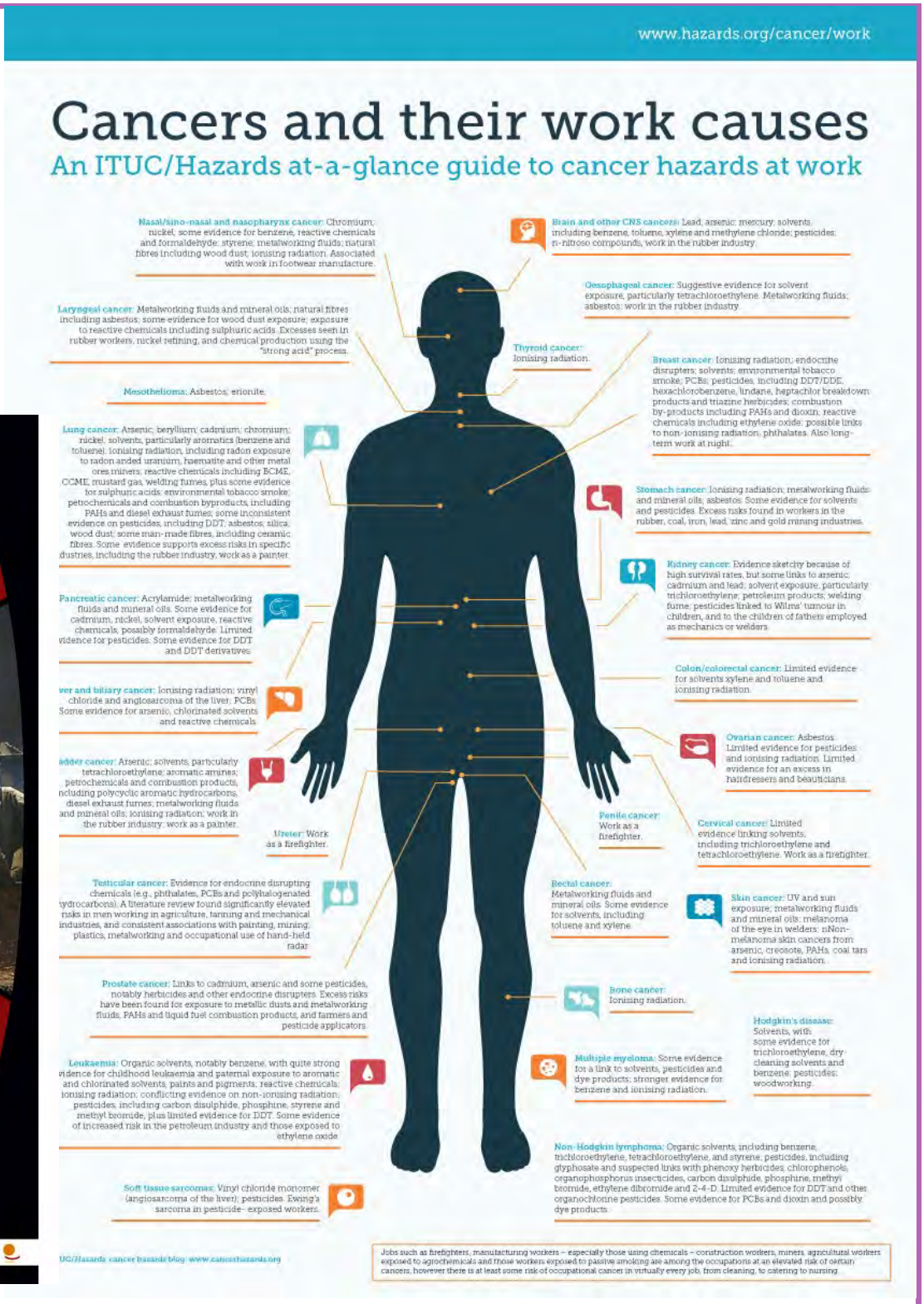
Do some DIY research—use an inspection to ask workers about effects on their health related to work, do some Body Mapping or Hazards Mapping; remember to include all workers on all shifts, ensure men and women are asked about health effects

Look at mechanism of exposure—absorption, inhalation and ingestion—and the form of the substances The best way to reduce the risks connected with dangerous substances is to remove the need to use those substances, redesign the job, enclose it, change the form, e.g. from powder to solid..

If substances are harmful to health then follow the COSHH Hierarchy of control - eliminate, substitute something safer, pre-vent exposure by collective engineering controls, and only as a last resort use Personal Protective Clothing, see later.

The safest exposure to dangerous substances is zero: No Hazard: No Risk and use Toxics Use Reduction techniques.





Put Cancer out of Work! Identify all the known and suspected carcinogens workers are exposed to.

Check the substances/jobs in your workplaces against the types of cancer , download and use the Body Map above.

Then use COSHH Regulations to get your employer to eliminate exposure and prevent the risk of cancer.

Prioritise MERCs first, then all the other dangerous substances - we want to get rid of, prevent exposure to, all substances that harm our health – we go to work not to die or be made ill. For specific carcinogens: TUC: Diesel, Exhaust in the Workplace a TU Guide Hazards Diesel Hazards Cancer pages: TUC Asbestos Eradication Toxics Use Reduction

Use TU Safety Reps function and duties to the full

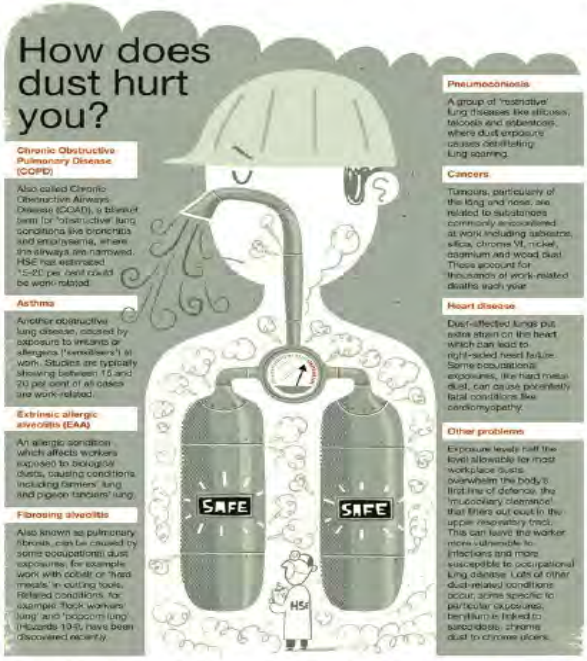
Air Pollution— All in a days work

It is accepted that there is a Public Health emergency: around 40,000 deaths in the UK a year due to external air pollution, much from vehicle traffic, that exceeds World Health Organisation air quality standards on a daily basis for Nitrogen oxides, NOx, Particles—10 micron diameter or PM10 and 2.5 microns and below ,PM2.5. But there is also an on-going Occupational Health emergency due to a cocktail of chemicals, dusts, fumes and dangerous substances in workplace air that workers have to breathe day in and day out. The Hazards Campaign estimates this kills at least 30,000 a year with heart and lung diseases and cancers including breast cancer, and makes millions ill with respiratory and other conditions from asthma to COPD, can cause dementia, obesity, diabetes, prevent lung development, cause premature birth, increase ageing and other illnesses effects. Outdoor workers are exposed to external air pollution, mostly from petrol and diesel vehicle exhaust emissions, and road dust. Indoor workers may also breathe that air—indoor air comes from outside and may or may not be 'cleaned up' by ventilation systems—and in some cases it may be worse than the outdoor air as it is trapped and has additional chemicals from work activities added to it. All workers may be exposed to external air pollution on their way to and from work, & some work with vehicles, repairing or driving them and are specifically exposed.

Hazards Magazine Diesel Special in Hazards 144 October to December 2018 : "*We warned over 30 years ago that diesel fumes were deadly, with millions at risk at work every day. If the authorities had listened then, today's diesel exhaust driven public health catastrophe could have been averted. In a Hazards exclusive, we reveal the criminal acts that left a working generation exposed and cost tens of thousands their lives.*" Fuming: A dirty industry game that means thousands more will die Diesel out Prevention fact sheet : A guide to cleaning the air at work Die diesel die Poster Die diesel die poster .

TUCAN, Trade Union Clean Air Network charter of demands and aims to which 13 national trade unions have signed up. Contact janet@gmhazards,org.uk for more information posters and stickers.

Size does matter when it come to what you are inhaling from the air



Dust Up Hazards Magazine Poster http://www.hazards.org/gallery/dustup.htm
If you want to breathe easy be a nuisance on dust http://www.hazards.org/dust/dust.htm

Size Matters: Particles are a particular hazard

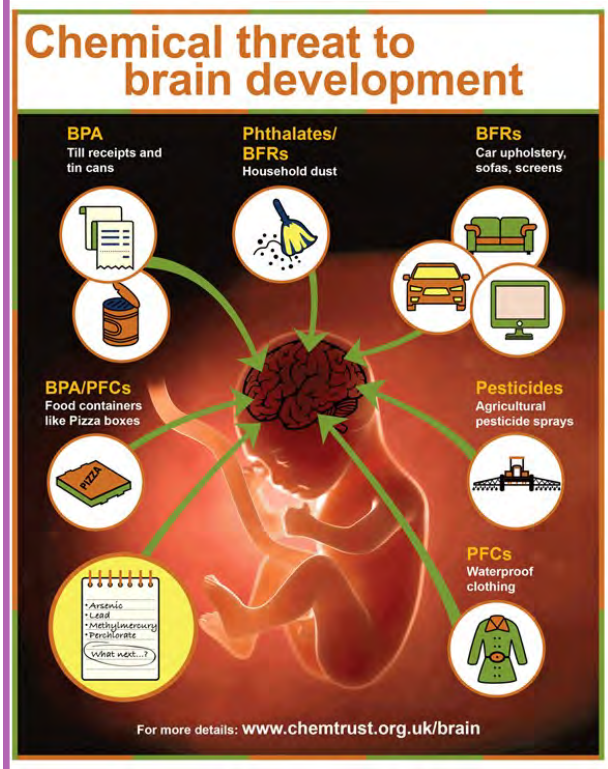
DUST: Never just a 'nuisance' depends on substance/size of particulate matter (PM)
Inhalable Dust = 100 microns & less – breathed into body via nose/mouth Over 10 microns (PM10) can damage nose/throat/guts - filtered out, swallowed
Thoracic dust = 10microns & below, gets into lungs
Respirable dust = 5 microns (PM5) and below, gets deep into lungs
World Health Organisation say: **PM2.5 microns & less** absorbed into blood crosses blood brain barrier, carcinogen, **NO SAFE LEVEL OF PM2.5s AND BELOW**
0.3 microns are absorbed through skin
WELs- Work Environment Limits about 500, measured in mg/cubic metre, not safe levels
I micron = 1 thousandth of millimetre, 1 millionth of metre. PM10 = particle matter with diameter of 10 microns.
Nanometre = 1 billionth of a metre smaller than a virus, size of DNA strand . Nanoparticles of carbon/any material far more hazardous than normal carbon/other dust

The safest exposure to all substances you do not know are perfectly safe, is zero

The chemical soup we work in also makes up the chemical soup we live in. The chemical cocktail effect where substances have a greater harmful effect when they are mixed together, and the fact that we know so little about the effects of most chemicals, alone or in combination, and that few have even been fully tested to establish safe levels of exposure for all workers/people, means that it is sensible risk assessment practice to avoid exposure if at all possible. This approach is backed up by the Control of Substances Hazardous to Health Regulations, & basic Human Rights, we must use it and campaign for stronger restriction on toxic substances.

Chemicals of specific concern are those that can have effects on our genetic material— the DNA in our cells that controls how they work– it can cause mutations which may lead to cancer and other bad effects such as affecting how and when genes are expressed. When substances affect the DNA in our eggs and sperm, then harms can be passed on to future generations, or cause birth problems, developmental issues in the foetus in the uterus and in childhood. The most vulnerable person in any workplace is a pregnant women's developing foetus. If that foetus is female, then she and the eggs she is already developing might be affected by exposure to chemicals and pass the effects on to the next generation - potentially three generations of women exposed to substances at work may be adversely affected.

EDCs have very harmful effects on our health at very low levels which may be impossible to detect. EDCs can cause effects in quantities as small as parts per trillions of air or water. Endocrine disrupting chemicals are a particular work and environmental health problem as they are now found almost everywhere and their effects are extremely serious especially for children, with babies being born pre-polluted.



Persistent organic pollutants, POPs, are organic compounds that are resistant to environmental degradation through chemical, biological, and photolytic processes. Because of their persistence, POPs bioaccumulate with potential adverse impacts on human health and the environment..

All workers are potentially exposed to substances that may harm them, at work, and these are frequently not be properly controlled to prevent risks to health. While our own 'lifestyles' and 'choices' are blamed for much or our ill-health, it is increasingly clear that substances in external air pollution and the air at work to which we are exposed, can also cause the huge range of ill-health issues blamed on lifestyles—cancers, obesity, diabetes, lung and other disease, cognitive impairment, dementia, depression, psychosis, premature birth and developmental issues.

The solution lies in identifying all the substances in our workplaces and then preventing their use and our exposure by eliminating the worst -- the MERCS at least- reducing amounts of all harmful substances used at work. This requires education and organisation at work, and campaigning for stronger laws and their enforcement at national and international levels, the banning of the worst substances for use altogether We must get dangerous substances from getting into work and into our bodies, into products, into waste, into recycling, into our homes and our families' bodies and into the whole environment. #IWMD19: ***"You expose us, we'll expose you' All out! Show killer chemicals the door! "***

Workers' rights and toxic exposures (HRC 2018) by Human Rights Special Rapporteur Baskut Tuncak

This report makes workers' rights not to be exposed to toxic substances at work a human right. **Baskut Tuncak** States that: Hazardous chemicals must be identified, eliminated, substituted with safer substances, controlled at source and personal protective equipment used only as a last resort . He makes 15 recommendations :

Principle 1: States have a duty to protect the human rights of all workers through the prevention of exposure to toxic substances.

Principle 2: Business enterprises have a responsibility to prevent occupational exposures to toxic substances. after applying the hierarchy, business enterprises must mitigate the impacts of exposure on health.

Principle 3: Hazard elimination is paramount in preventing occupational exposures. States should include the hierarchy of hazard controls in legislation to prevent to the extent possible exposure of workers to toxic substances

Principle 4: Workers have the right not to be exposed to toxic substances without their prior informed consent.

Principle 5: Duties and responsibilities to prevent the exposure of workers to toxic substances extend beyond borders

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Principle 6: States must prevent third parties from distorting scientific evidence or manipulating processes to perpetuate exposure.

Principle 7: Protecting workers from exposure to toxic substances protects their families, their communities and the environment.

Principle 8: Every worker has the right to know, including to know their rights.

Principle 9 :Health and safety information about toxic substances must never be confidential.

Principle 10 :The right to safe and healthy work is inseparable from freedom of association, the right to organize and the right to collective bargaining.

Principle 11: Workers, representatives of workers, whistle-blowers and rights defenders must all be protected from reprisal and the threat of reprisal

Principle 12 : Governments should criminalize allowing workers to be exposed to substances that are known or should be known to be hazardous.

Principle 13: Workers, their families and their communities must have immediate access to an appropriate and effective remedy, which should be available from the time of exposure

Principle 14: Workers or their families should not bear the burden of proving the cause of their illness or disability to access an effective remedy

Principle 15 : States should assert jurisdiction for cross-border cases of workers harmed by occupational exposure.

These are just recommendations of Baskut Tuncak, the UN Human Rights Special Rapporteur, and have no legal weight, at the moment. The adoption, implementation and vigorous enforcement of these recommendations worldwide would help to achieve the aim of cutting the 1 million worker deaths from exposure to dangerous substances down to zero. It is our Human Right as workers not to be exposed to dangerous substances that may kill us or make us ill. We Remember the Dead and we must Fight for the Living

FIGHT For The Living

STOP DEADLY EXPOSURES @WORK TODAY!

Occupational cancer = Zero Cancer!

To stop preventable work-related deaths, remove exposure to hazardous substances @work

Worldwide: 160 million occupational diseases every year: Over 1 million deaths

Evidence shows good health and safety laws, strictly enforced with regular inspections, and appropriate penalties, plus trade union organisation with elected, active, involved safety reps, make work safer and healthier. This includes managing hazardous substances to prevent exposure. Every year in the UK hundreds of thousands of workers are made ill, and tens of thousands are killed by hazardous substances. Every one of these illnesses and deaths is preventable. The Hazards Campaign estimates at least 30,000 deaths caused by exposures to dangerous substances: 18,000 deaths from work cancer, 20,000 deaths from heart disease, some of which are caused by dust and fumes, and 12,000 deaths from lung, neurological and other illnesses the majority of which are caused by chemicals and dusts .

Hazardous substances: organic and inorganic chemicals; elements like lead and arsenic; minerals such as asbestos and silica; compounds and mixtures such as pesticides or solvents; metals; plus dusts and biological agents viruses, bacteria, fungi and prions; nanomaterials, second hand tobacco smoke. Workplace exposure to hazardous substances causes illnesses such as cancer of many organs, lung and heart disease, asthma, reproductive, neurological, endocrine, reproductive and autoimmune illnesses, dermatitis and other skin diseases.

Asbestos causes mesothelioma, lung cancer, asbestosis, and pleural thickening

Flour & tea dust, moulds, microbes, isocyanates cause asthma, respiratory irritation and sensitivity

Cleaning chemicals cause skin, eye and respiratory irritation, hormone disrupting disorders and cancers

Diesel fumes, silica, wood dust, paint, hair dyes cause cancers

Endocrine disrupting chemicals (EDCs) found in plastics, pesticides, cleaning products, food & many other products cause endocrine system problems- diabetes, obesity- reproductive system cancers

Organic Solvents cause skin , eye, respiratory and neurological illness

Biological agents, body fluids cause Legionnaires Disease, Ebola, HIV, TB, Weil's disease, Gastro-intestinal illnesses.

Which workers are at risk of exposure to hazardous substances? Almost all may be. Even in supposedly safe workplaces, like offices, don't forget carcinogens in fragrances and endocrine disrupters in leaning materials; printer and photocopier fumes, asbestos in the fabric of building, flame retardants and formaldehyde in carpets and furniture, plastic microfibres in dust. Many workers are exposed to a toxic cocktail of hazardous substances e.g. building workers to asbestos, wood, silica dust, paint and diesel fumes. Even very low levels of exposure, especially of asbestos, endocrine disrupting chemicals (EDCs) and mixed chemicals, can significantly harm our short or long term health. Sperm, eggs & developing foetus can be harmed by very small work exposures. Remember a female foetus carried by a pregnant woman at work is also exposing the next generation as her eggs are developing.

250,000 substances on market but only 181 tested by independent organisations for health & environmental effects. **4,000** substances are proven carcinogens, mutagens or toxic for reproduction and **5,000** more are suspected to be **3,600** are respiratory sensitizers and more than **11,000** are skin sensitizers.

Asbestos is found in almost 90% of our schools, in public & residential buildings built or refurbished before year 2000. 150 teachers have died of mesothelioma in the last decade; plus other school staff, and possibly up to 300 ex-pupils a year may die from past asbestos exposure in schools. Around 20 Tradesmen die each week due to past asbestos exposure.

Passive Smoking is a cancer risk for prison guards.

Endocrine Disrupting Chemicals (EDCs) cost Europe over £110 billion a year and need to be regulated to prevent hormone related cancers.

Take action together through your trade union

Exposed to hazardous substances at work? There should be a law against it, and there is!

The Control of Substances Hazardous to Health (COSHH) Regulations say employers must prevent exposure of workers to substances that harm their health @work. There are specific Regulations for exposure to Asbestos & Lead.

Are you exposed at work? Use the COSHH. Your employer must use the COSHH Control Hierarchy:

- **Identify** all substances used at, or arising in the course of, work– dust, fumes, combustion & by-products
- **Assess** their risks, and if they are hazardous to health - in short or long term as ,carcinogenic, irritant, corrosive, asthmagen, mutagen, reproductive toxin, **then employers must:**
  - **Eliminate or substitute** with safer substances. See http://www.subsport.eu/ - **If this is not possible, then**
  - **Use engineering & other controls** to prevent exposure of all workers—isolate, enclose, local exhaust ventilation - and
  - **Only as a last resort** use Personal Protective Equipment
- **Eliminate or control the most hazardous substances first** —MERCS: Mutagens (cause changes to genes), Endocrine disrupters(act like hormones), Carcinogens (cause cancer), Reproductive toxins.

As we learn more about substances, the more we find that even small exposures of previously thought safe substances can be harmful, especially for children and the developing foetus. So it makes sense to reduce our exposure to all substances as far as we can. For example, identify and eliminate all cleaning chemicals that have hazard warning signs and use safer substitutes. Work with your union and employer on a **Toxics Reduction** programme.

In the EU 100,000 people die from work cancer every year. In GB at least in 8 cancers is work-related, that's 40,000 cases and 18,000 deaths per year. Each and every one could have been prevented, they are no accident but there is little action and no urgency from UK government or HSE to stop this preventable death toll while UK, EU and USA experts call for urgent action.

European Trade Union Institute (ETUI): Action on work cancer is decades overdue: "More protective laws, effective enforcement and unrelenting union action are needed to address Europe's 'immense' occupational cancer problem."

UK Alliance for Cancer Prevention: "Our current cancer strategies and plans are failing us they are inadequate, fragmented and unsustainable. Focus solely on' lifestyle factors' comes at expense of action on occupational and environment risk factors, exposures and primary prevention. We are experiencing an epidemic of cancer and diseases linked to our 21st Century jobs and lives, while our strategies to deal with them are stuck in the last century."

American Public Health Association (APHA) Resolution: Breast Cancer and occupation – a need for action. Based on ground breaking, award winning work by Stirling University researchers in Canada, Jim Brophy, Marge Keith and others , showing that women who work in in agriculture, plastic, food packaging, metal manufacturing and bar and gambling have a much increased risk of developing breast cancer. **#Put cancer out of work: Employers must comply with COSHH and REACH Regulations**

Asbestos in Schools & all Workplaces. Government Review of Asbestos in Schools just published, acknowledges school staff have died of mesothelioma, that children are more at risk and that asbestos will be removed when schools are refurbished under the Priority Schools Building Programme. But it has no strategy to deal with the risk from asbestos in most schools. The *Control of Asbestos at Work* Regs requires duty holders to manage asbestos safely, to consult employees & safety reps, to carry out a management survey on all pre 2000 buildings, to record presence of asbestos & its condition in an Asbestos Register. **Ask to see the Asbestos Register and management plan.** TUC and Union call for asbestos eradication: https://www.tuc.org.uk/workplace-issues/health-and-safety/asbestos/asbestos-eradication-campaign

More information: HSE: www.hse.gov.uk/ASBESTOS/managing/intro.htm HSE Hidden Killer Campaign: http://www.hse.gov.uk/asbestos/tradesperson.htm Asbestos in Schools campaign: www.asbestosexposureschools.co.uk/ Joint Union Asbestos Committee, JUAC: www.juac.org.uk/ echa.europa.eu/view-article/-/journal_content/title/know-more-about-the-effects-of-the-chemicals-we-use-in-europe
Hazards Cancer Resources: www.cancerhazards.org;
www.hazards.org/chemicals/ www.hazards.org/cancer/ https://www.etuc.org/press/end-workplace-cancer#.WKx5UfmLQdU

Use the COSHH Hierarchy to #Put dangerous substances out of work

For more information please contact: Greater Manchester Hazards Centre, Windrush Millennium centre, 70 Alexandra Rd., Manchester M16 7WD Tel: 0161 636 7558 janet@gmhazards.org.uk