

With Every Breath We Make

Clean Air Workplace series:

Bitesize 1



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**START WITH
CLEAN AIR**





Bitesize 1: Air pollution in the workplace - the situation

This Bitesize brief addresses the challenges of tackling workplace air pollution. It is the first of four within the Clean Air Workplaces Bitesize series, which supplements the White Paper, 'With Every Breath We Make: Ensuring Healthy Air for Manufacturing Workers'ⁱ.

While COVID-19 has brought devastation to the health, wellbeing and economy of the UK and other countries around the world, slight improvements to the levels of outdoor air pollution have been seen due to reduced vehicle and industry emissions during government lockdownsⁱⁱ.

Contrastingly, levels of indoor air pollution, specifically in workplace settings, have continued to be high and ignored by government. In recent years, it has not received enough monitoring and enforcement action which is concerning, as prolonged exposure to high levels of air pollution can damage lung function, increase blood pressure, and increase lung and heart-related hospital admissions and deathsⁱⁱⁱ.

This Bitesize brief highlights the health effects of poor workplace air quality.

The economic cost of air pollution on health

In the UK, the economic cost associated with the health impact of poor air quality is estimated to be around £15 billion^v. CBI Economics notes that the UK loses 3 million working days a year because its air pollution exceeds the WHO's recommend limits on particulate matter^{vi}.

Air quality in the manufacturing sector

The manufacturing sector is the fourth largest employer in the UK, employing nine percent of the workforce, approximately 2.98 million people^v. Its activities include those that involve the physical or chemical transformation of materials, substances or components into new products, in addition to working on products either 'ready for use' or semi-finished so as to become an input for further manufacturing^{vii}.

Health and safety protections for workers within industrial settings are needed beyond ventilation to combat COVID-19. Workers need holistic protection, which considers the impact of indoor air pollution on health.

The White Paper, *With Every Breath We Make: Ensuring Healthy Air for Manufacturing Workers*^{viii} highlights the challenges of workplace air pollution in the manufacturing sector, before and during the COVID-19 pandemic.





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Key conclusions from the White Paper are:

- Workers on irregular and zero-hours contracts are the biggest losers in workplace settings with poor air quality due to pressures to work, with no sick pay, often in substandard conditions.
- They doubly lose out most when then their health is affected by air pollution, which can trigger asthma attacks and exacerbate existing heart conditions.
- Specifically, employers in the manufacturing sector face the difficult challenge of protecting the health of three million workers while activity inside their factories generates the very air pollutants harmful to health.
- As well as causing serious illness to workers, high levels of airborne particles can also directly impact production with increased equipment failures, less efficient heating/ventilation systems and reduced product quality.

2020 and 2021 have been critical years of urgent public health messaging concerning COVID-19 and resultantly, employers have been forced to put in place important preventative measures to protect workers.

A similar approach is needed when addressing air pollution in a workplace setting. The effects of indoor air pollution on workers' health will continue to worsen unless concerted action is taken now.

As we come out of government lockdowns, now is a time for companies to seize the moment, 'level-up' and address indoor air pollution.

It's time to build back better and fairer.

Endnotes

- i https://www.globalactionplan.org.uk/files/with_every_breath_we_make_-_ensuring_healthy_air_for_manufacturing_workers.pdf
- ii <https://ncas.ac.uk/air-pollution-down-by-40-in-cities-during-covid-19-lockdown/>
- iii <https://www.gov.uk/government/publications/comeap-mortality-effects-of-long-term-exposure-to-particulate-air-pollution-in-the-uk>, 2018
- iv <https://www.gov.uk/government/publications/nitrogen-dioxide-effects-on-mortality> (NO2)
- v https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69340/pb13378-air-pollution.pdf
- vi <https://www.cbi.org.uk/media/5539/2020-09-cbi-economics-caf-report.pdf>
- vii <https://www.hse.gov.uk/statistics/industry/manufacturing.pdf>
- viii https://www.globalactionplan.org.uk/files/with_every_breath_we_make_-_ensuring_healthy_air_for_manufacturing_workers.pdf