

Sandwell JSNA



Chapter 5: Place

Healthy Urban Environment

5.1 Air Quality & Noise Pollution

5.2 Safe & Sustainable Travel

Crime & Community

5.4 Crime

Appendix



Research Sandwell

Key Points

Background

Poor air quality is a major public health issue. Evidence shows that air pollution is linked to coronary heart disease, stroke, respiratory disease, lung cancer, asthma, low birth weight and reduced life expectancy. Deprived areas often have poorer air quality than more affluent places, thus widening health inequalities. Sandwell is the 12th most deprived local authority in the country and has a road network of local and major arterial roads, including the M5 and M6 Motorways, which are some of the busiest and most congested roads in Europe.

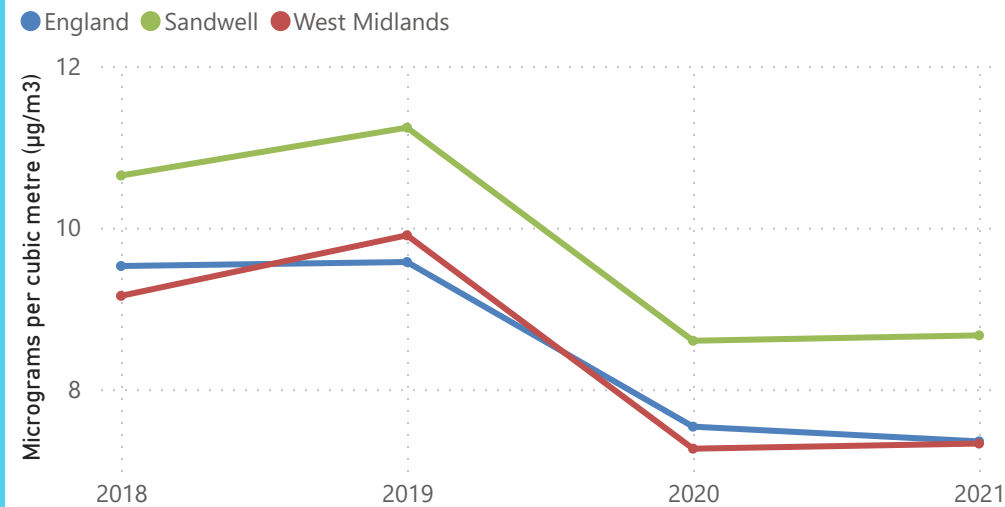
Particulate matter and air pollution

Particulate matter (PM) in the air with a diameter of 2.5 µm or less is known as fine particulate matter (PM2.5). This pollutant has a significant impact on public health because the particles are small enough to be inhaled into the deepest parts of the lung. This means there is no safe level of exposure to PM2.5. PM2.5 comes from a range of sources such as direct or 'primary' emissions from road transport, domestic combustion, manufacturing and industrial processes. 'Secondary' PM2.5 is formed in the atmosphere by chemical reactions involving primary emitted particles. Concentrations of PM2.5 vary from year to year due to the weather. Sandwell has had consistently higher levels of PM2.5 than the regional and national levels. However, the COVID-19 pandemic and lockdowns resulted in a substantial decrease in PM2.5 emissions between the years 2019 and 2020.

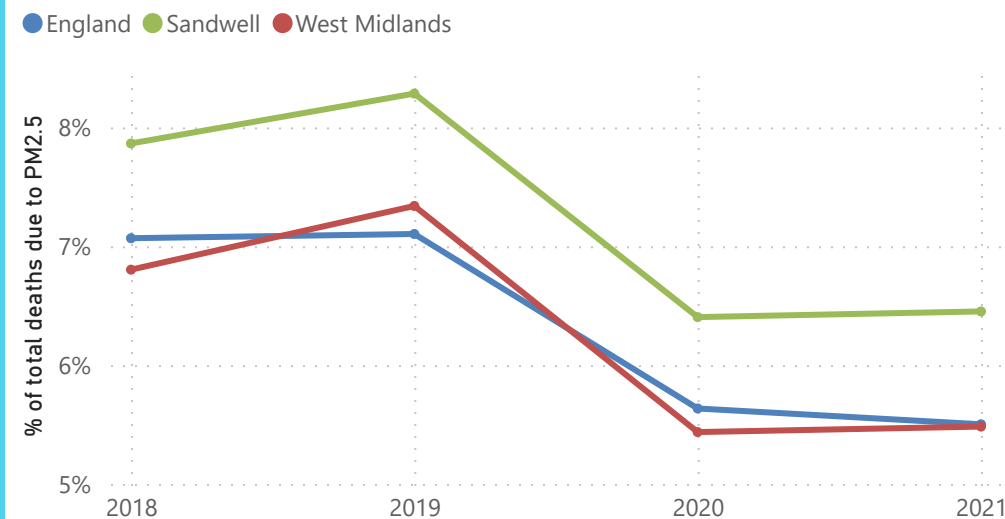
Air pollution-related mortality

Evidence indicates that the relative risk associated with living in areas with higher levels of air pollution over the long term is greater than that of daily variations in exposure. Sandwell's consistently higher levels of air pollution is reflected by higher rates of death which are attributable to long term exposure to particulate air pollution.

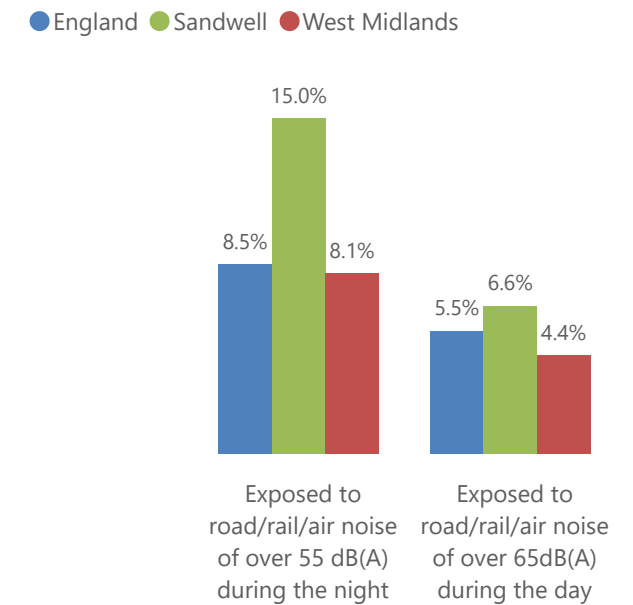
Air pollution: Annual average concentrations of fine particulate matter (PM2.5)



% of deaths per year attributable to particulate air pollution (PM2.5) (aged 30+)



Population % affected by noise pollution from transport (2016)



Noise pollution in Sandwell

The World Health Organisation (WHO) classes noise as one of the top environmental hazards to health and well-being in Europe. Noise exposure can cause stress and sleep disturbance which have negative impacts on quality of life and health. Long term exposure to high levels of environmental noise e.g. vehicle noise, is linked to health conditions such as strokes and heart attacks. The Department for Environment, Food and Rural Affairs (DEFRA) conducts a noise mapping and modelling exercise by local authority every 5 years. The latest available data for 2016 shows that the proportion of Sandwell residents who are exposed to noise from road, rail and air transport is almost double that of the regional rates (15% vs 8.1%). Daytime noise level exposure affects a smaller proportion of Sandwell residents (6.6%); however, this is still higher than the regional and national rates (4.4% and 5.5% respectively).

Key Points

Background

Physical inactivity is one of the leading causes of illness and death. It is linked to cardiovascular disease, coronary heart disease, stroke, diabetes, obesity, osteoporosis, colon and breast cancer, and poor mental health. Active travel i.e. walking or cycling to work or to the shops is one form of physical activity which can be incorporated into everyday life. Active travel also reduces car travel, air pollution, carbon dioxide emissions, congestion, road danger and noise. It increases the number of people of all ages out on the streets, making public spaces more welcoming and providing opportunities for social interaction and children's play.

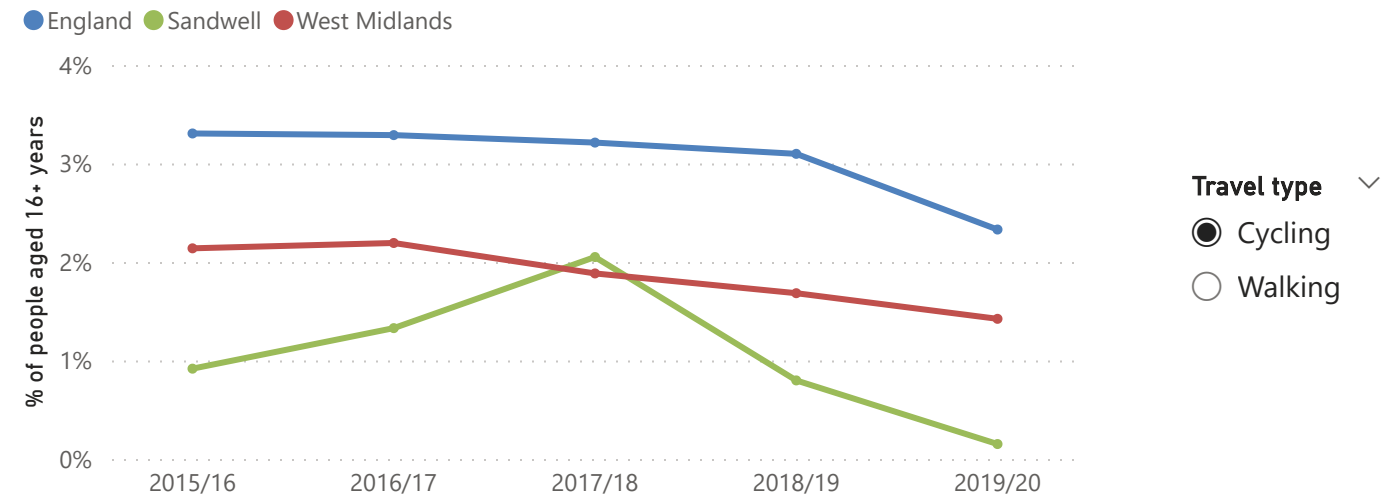
Active travel in Sandwell

Rates of active travel in Sandwell between 2015 - 2020 were consistently below the national rate. The COVID-19 pandemic and lockdowns caused a further reduction in active travel in 2019/2020.

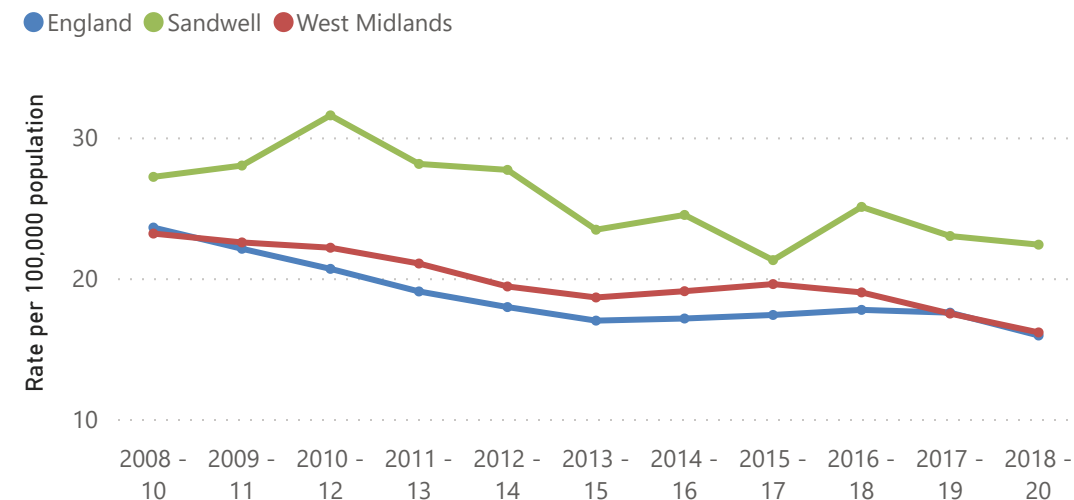
Road safety

According to the Office for Health Improvement & Disparities, parents cite vehicle speed and volume as reasons why they do not allow their children to walk or cycle, thereby reducing opportunities for active travel. In Sandwell, children under the age of 16 suffer significantly higher rates of death and serious injury in road accidents than the national rate.

Active Travel: Percentage of adults cycling or walking for travel at least 3 days per week



Children aged 0-16 years killed or seriously injured in road accidents



Key Points

A total of 85,406 crime incidents were recorded in Sandwell in the two-year period January 2021 - December 2022.

The majority (44.3%) of these incidents were episodes of violence and sexual offences, followed by public order offences (9.2%) and vehicle crime (9%).

At ward level, these five wards had the highest rates of crime per 1,000 population:

- West Bromwich Central - 552.5
- Greet's Green and Lyng - 384.1
- Oldbury - 320.3
- Soho and Victoria - 308.3
- Princes End - 298.0

Three of these wards, West Bromwich Central, Princes End and Soho and Victoria were designated by West Midlands Police in 2019 as 'Impact Areas' i.e. areas of greater need of police intervention and support due to higher crime rates. These wards are among the most deprived wards in Sandwell.

For the same two-year period, the five wards with the lowest crime rates per 1,000 population were:

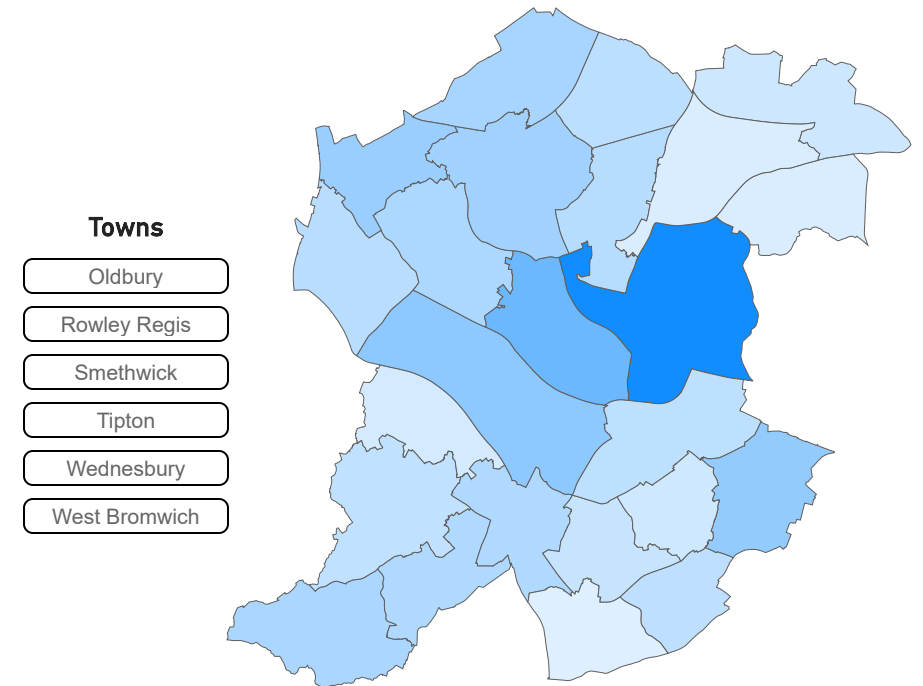
- Smethwick - 196.9
- Tividale - 188.5
- Newton - 176.3
- Charlemont with Grove Vale - 175.2
- Old Warley - 167.5

Of these five wards, four were among the least deprived wards in Sandwell except for Smethwick which is one of the most deprived wards in the borough.

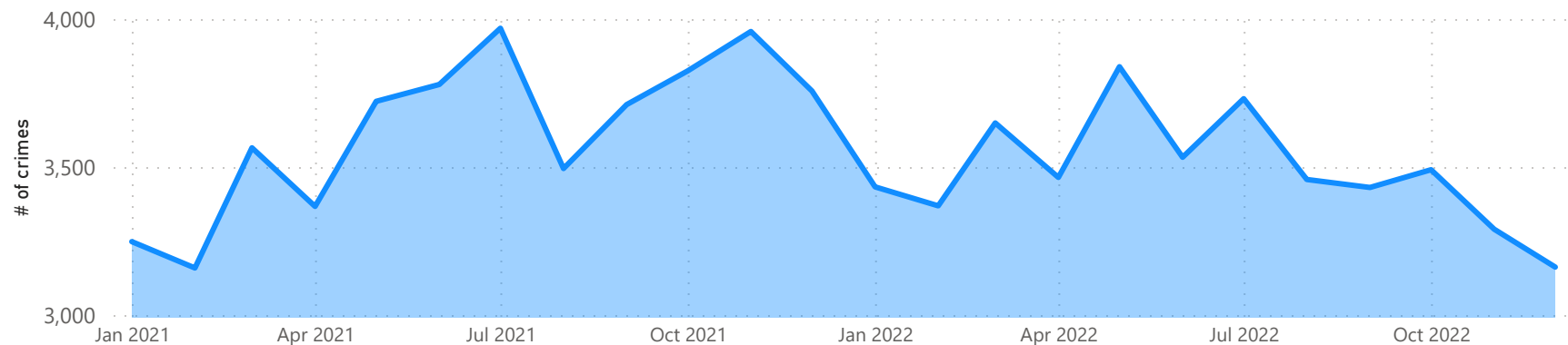
Total recorded crime in Sandwell 2021, 2022

Type of crime	% of total crime
Violence and sexual offences	44.3%
Public order	9.2%
Vehicle crime	9.0%
Criminal damage and arson	7.5%
Anti-social behaviour	7.1%
Theft	6.8%
Burglary	4.6%
Shoplifting	3.8%
Drugs	2.2%
Other crime	1.9%
Robbery	1.9%
Possession of weapons	1.6%
Total	100.0%

Crime rate per 1,000 population by ward 2021, 2022



Offences committed per month: January 2021 - December 2022





Data Sources

Air pollution: Annual average concentrations of fine particulate matter (PM2.5)

Fingertips - Air pollution: fine particulate matter (new method - concentrations of total PM2.5)

% of deaths per year attributable to particulate air pollution (PM2.5)

Fingertips - Fraction of mortality attributable to particulate air pollution (new method)

Population % affected by noise pollution from transport

Fingertips - The percentage of the population exposed to road, rail and air transport noise of 55 dB(A) or more during the night-time

Fingertips - The percentage of the population exposed to road, rail and air transport noise of 65dB(A) or more during the daytime

Active travel: percentage of adults cycling or walking for travel at least 3 days per week

Fingertips - Percentage of adults walking for travel at least three days per week

Fingertips - Percentage of adults cycling for travel at least three days per week

Children aged 0-16 years killed or seriously injured in road accidents

Fingertips - Children killed and seriously injured (KSI) on England's roads

Crime rates

<https://data.police.uk/data/>

Contact

If you have any queries or comments please contact the Public Health Research and Intelligence Team: research_sandwell@sandwell.gov.uk

