[Excess weight can increase risk of serious illness and death from COVID-19](#)

Being obese or excessively overweight increases the risk of severe illness and death from COVID-19, a [new Public Health England (PHE) report](#) confirms.

The report summarises findings from evidence published during the pandemic on the effects of excess weight and obesity on COVID-19. UK and international evidence suggests that being severely overweight puts people at greater risk of hospitalisation, Intensive Care Unit (ICU) admission and death from COVID-19, with risk growing substantially as body mass index (BMI) increases.

The current evidence does not suggest that having excess weight increases people's chances of contracting COVID-19. However, the data does show that obese people are significantly more likely to become seriously ill and be admitted to intensive care with COVID-19 compared to those with a healthy BMI.

One study found that for people with a BMI of 35 to 40, risk of death from COVID-19 increases by 40% and with a BMI over 40 by 90%, compared to those not living with obesity. Other data found that in intensive care units, 7.9% of critically ill patients with COVID-19 had a BMI over 40 compared with 2.9% of the general population.

Almost two-thirds (63%) of adults in England are overweight or obese, with people aged 55 to 74, those living in deprived areas and certain black, Asian and minority ethnic groups more severely affected.

Excess fat can affect the respiratory system and is likely to affect inflammatory and immune function. This can impact people's response to infection and increase vulnerability to severe symptoms of COVID-19. Obese people may be less likely to access healthcare and support, and it is also thought that COVID-19 affects other diseases associated with obesity.

The report highlights that supporting people to achieve and maintain a healthy weight may reduce the severe effects of COVID-19 on the population, especially among vulnerable groups that are most affected by obesity.

Dr Alison Tedstone, Chief Nutritionist at Public Health England, says:

> The current evidence is clear that being overweight or obese puts you at greater risk of serious illness or death from COVID-19, as well as from many other life-threatening diseases.
>
> It can be hard to lose weight and even harder to sustain it, which is why people cannot easily do it on their own. Losing weight can bring huge benefits for health – and may also help protect against

the health risks of COVID-19. The case for action on obesity has never been stronger.

The report notes some limitations on evidence to date and highlights the need for more evidence, including research to establish the effect that weight management might have for groups at greater risk of the severe effects of COVID-19.

The report also summarises evidence regarding the nation's eating and exercise habits during the COVID-19 pandemic. While some data suggests that more people have exercised during lockdown, evidence indicates that the nation's exercise levels have not increased overall since before the pandemic. Meanwhile, snack food and alcohol sales in high street shops have increased.

Background

PHE Chief Nutritionist Dr Alison Tedstone and PHE Health Improvement Director Professor John Newton are available for broadcast interview bids.