

Statistical bulletin

Coronavirus, the UK economy and society, faster indicators: data as at 2 April 2020

New data and experimental indicators on the UK economy and society, including information related to the coronavirus (COVID-19). Indicators are constructed from rapid response surveys, novel data sources and experimental methods.

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Next release: 9 April 2020

Notice

20 April 2020

Online price change of high-demand products

Because of the way our automated web-scrapers collected prices from one particular high-street retailer, our new, experimental price indices have been overstating online price changes for some categories of high-demand products.

We are temporarily suspending publication of these figures to give us time to improve price collection from this retailer. We will correct these indices and resume publication of these data as soon as possible. This only effects the online price change of high-demand products section of this release; the other indicators are not affected.

These data are experimental statistics and this error has no impact on any of our regular consumer price statistics. This will not affect our use of web-scraped data in our future transformation plans.

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1. New weekly indicators in response to the coronavirus (COVID-19)

This is the first publication of our new, weekly release containing data and <u>experimental</u> indicators about the condition of the UK society and economy and the impact of the coronavirus (COVID-19) pandemic. Some of the metrics contained in this publication will become regular releases, while others will be one-off pieces of analysis. Today's publication contains two new indicators: one on business impacts and one on online price changes for high-demand products.

Initial results are presented from the new fortnightly <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u> for the period 9 March to 22 March 2020, covering business turnover, workforce, producer prices and trade.

Experimental weekly online price indices are presented for several high-demand products (HDPs) for the period 16 March to 29 March 2020, covering items such as long-life food, health and household and hygiene products.

These data are experimental statistics and have been developed to provide early indicators of the impact of COVID-19 in a timely way.

2. Main points

- Of those 3,642 businesses who responded to the <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u>, 45% reported turnover that was "lower than expected" for the period 9 to 22 March 2020.
- Over a quarter (27%) of responding businesses said they were reducing staff levels in the short term, while 5% reported recruiting staff in the short term.
- Almost half (46%) of businesses who responded said that they had encouraged their staff had to work from home in the period 9 March to 22 March 2020.
- The majority of responding businesses reported that the prices they buy and sell at were stable, with 68% of businesses who responded reporting no change to their selling prices and 63% reporting that the costs of buying goods and services generally stayed the same in the period 9 March to 22 March 2020.
- For those businesses that responded where importing and exporting were applicable, 57% of importers and 59% of exporters reported that trade had been affected by COVID-19.
- Overall, online prices of items in the high-demand products (HDPs) basket have increased by 1.1% over the period week 1 (16 to 22 March) to week 2 (23 to 29 March).
- Over the same period, most items in the basket saw modest price changes, with 13 out of the 22 items showing price changes between negative 1.0% and positive 1.0%.
- In the week commencing 16 March 2020, both unique shipping visits and total shipping visits increased on a UK level, but some large UK ports saw decreases in unique visits in this period.

Online price data are created using experimental methods where a selection of HDPs are determined based on anecdotal evidence. Results from the BICS are experimental and should be interpreted with caution as the survey is both new and voluntary; the latter may mean that the results reflect only the characteristics of those who responded and not the wider business population.

3. Business Impact of Coronavirus (COVID-19) Survey

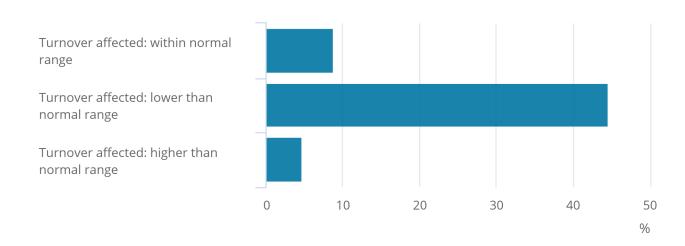
Financial performance

Figure 1: 45% of businesses that responded reported that their turnover was "lower than normal"

Effect on turnover, percentage of all responding businesses, UK, 9 March to 22 March 2020

Figure 1: 45% of businesses that responded reported that their turnover was "lower than normal"

Effect on turnover, percentage of all responding businesses, UK, 9 March to 22 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Notes:

1. Bars will not sum to 100 as a fourth category, Financial performance not affected, is not included on this chart.

Of the businesses that had responded to date, approximately 45% reported that their turnover was lower than their normal range, 5% reported their turnover was higher than their normal range, and 9% reported that while their turnover had been affected between the period 9 to 22 March 2020, it was still within their normal range. Of the affected businesses, 98% of those that reported that their turnover was abnormally affected between this period attributed this to the coronavirus (COVID-19). These effects were widespread across all sectors.

Most of the period that businesses were asked to refer to and report on occurred before the closure of all "non-essential" businesses, which formally came into effect from 20 March 2020. This included nightclubs, theatres, cinemas, gyms and leisure centres being ordered to close immediately from this date in response to COVID-19. It is likely that the weakness in turnover reported by many businesses reflects, in part, consumers' anticipation of that announcement and their increase in social distancing.

More about coronavirus

- Find the latest on <u>coronavirus (COVID-19) in the UK.</u>
- All ONS analysis, summarised in our <u>coronavirus roundup</u>.
- View <u>all coronavirus data</u>.

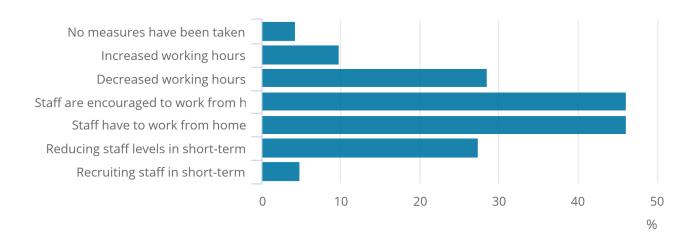
Workforce

Figure 2: Measures taken to manage workforce as a result of COVID-19

Percentage of all businesses, UK, 9 March to 22 March 2020

Figure 2: Measures taken to manage workforce as a result of COVID-19

Percentage of all businesses, UK, 9 March to 22 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Notes:

1. The percentages in this chart will not sum to 100 as businesses were able to select multiple options.

Of businesses that responded to our survey, almost half (46%) reported encouraging their staff to work from home between 9 March and 22 March 2020, with 46% of businesses making it mandatory for staff to work from home. However, it should be noted that there is likely overlap in these figures.

Over a quarter (27%) of responding businesses said they were reducing staff levels in the short term in the period 9 March to 22 March 2020, while 5% reported that they were recruiting staff in the short term.

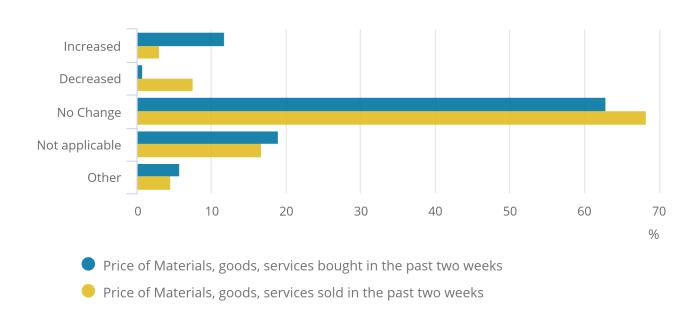
Prices

Figure 3: Impact on prices bought and sold

Percentage of all responding businesses, UK, 9 March to 22 March 2020

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Percentage of all responding businesses, UK, 9 March to 22 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Notes:

1. "Other" category includes responses for "mixed changes" and "not sure".

Between 9 March and 22 March 2020, prices of materials, goods or services bought generally stayed the same for 63% of responding businesses. However, 12% of responding businesses reported that prices had increased.

In the same period, 68% of responding businesses reported not having to change the price of items they sold.

Of businesses that responded, 48% were able to get required materials, goods or services from within the UK in the given period. An additional 19% of reporting business were able to get the required materials, goods or services but had to change suppliers to do so. Of reporting businesses, 13% were unable to get required materials, goods or services.

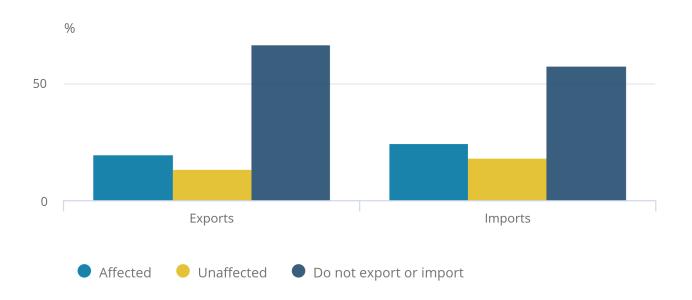
Trade and supply chains

Figure 4: The majority of importing and exporting businesses felt the impact of COVID-19 in the past two weeks

Percentage of all responding businesses, UK, 9 March to 22 March 2020

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Percentage of all responding businesses, UK, 9 March to 22 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Notes:

1. These data include goods and services for import and export.

Of businesses that responded to our survey, a higher percentage of businesses reported exports being affected by COVID-19 than unaffected (20% and 14%, respectively). The same pattern was seen regarding the impact on imports (24% and 18%, respectively). Excluding businesses that said the question was not applicable, almost three-fifths (59% of exporters and 57% of importers) of respondents said their trade had been affected by COVID-19.

4. Online price change for high-demand products (HDPs)

A timely indication of price change for high-demand products (HDPs) has been developed by the Office for National Statistics (ONS) covering the period 16 March to 29 March 2020. These indices are produced using different methods and quality thresholds to the regular ONS measures of consumer price inflation; as such, they should not be used to pre-empt any future consumer price inflation publication.

These products (listed in Table 1) were chosen using anecdotal evidence on products that saw increased demand from consumers during the early stage of the pandemic. Prices were scraped from a number of UK retailers. For more information on the methods and data sources used for these price indices, please see Measuring the data.

Table 1: Items in the high-demand products (HDPs) basket

Long-life food	Household & hygiene products	Health	Other
Dried pasta	Antibacterial wipes – hand	Ibuprofen	Pet food
Long-life milk	Antibacterial wipes – surface	Paracetamol	
Pasta sauce	Handwash	Cough and cold Medication	
Rice	Kitchen rolls	Vitamin C	
Tinned beans	Tissues		
Tinned soup	Toilet rolls		
Baby food	Spray cleaning products		
Flour	Nappies		
Tomato puree			

Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

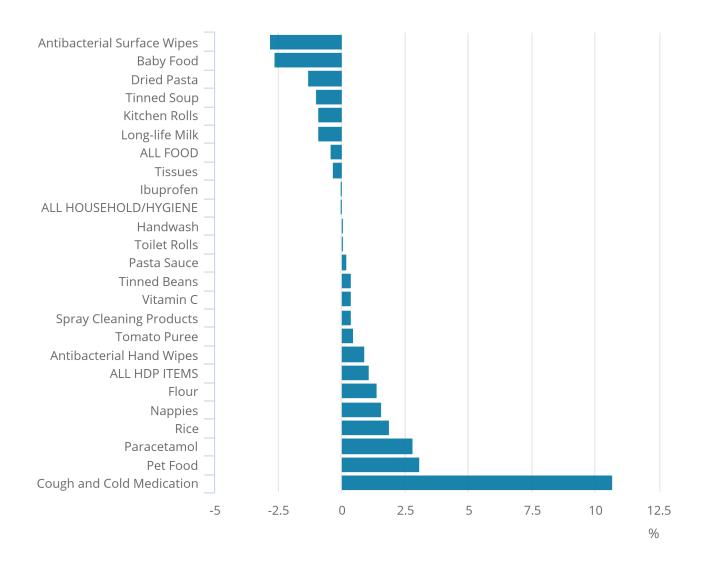
A weekly <u>Jevons index</u> has been produced for each of these items. For this release, only two weeks of data are available: 16 March to 22 March (week 1) and 23 March to 29 March (week 2). This time series will be expanded in future releases. The price change from week 1 to week 2 for each item is presented in Figure 5.

Figure 5: Overall, online prices of items in the HDP basket have increased by 1.1% over the period week 1 to week 2

Online price change of high-demand products (HDPs), percentage change between week 1 (16 to 22 March) and week 2 (23 to 29 March). UK

Figure 5: Overall, online prices of items in the HDP basket have increased by 1.1% over the period week 1 to week 2

Online price change of high-demand products (HDPs), percentage change between week 1 (16 to 22 March) and week 2 (23 to 29 March), UK



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Figure 5 shows that, compared with week 1, there was a wide range of price movements for items in the HDP basket. At the higher end, prices for cough and cold medication rose by 10.7% over the period from week 1 (16 to 22 March) to week 2 (23 to 29 March) for the retailers sampled. Most items saw more modest price changes, with 13 out of the 22 items showing price changes between negative 1.0% and positive 1.0%. At the lower end, antibacterial surface wipes saw a price fall of 2.8% over the same period.

Aggregate indices were also produced for all items in the HDP basket, long-life food items, and household and hygiene items. These aggregate indices show that overall, online prices of items in the HDP basket have increased by 1.1% over the period for the retailers sampled. For long-life food items, prices have remained fairly stable, with an overall price fall of 0.4%. Prices for household and hygiene products remain unchanged (0.0%) over the period.

5. Shipping indicators

This section discusses the shipping indicators based on counts of all vessels, cargo ships and tankers to the week commencing 16 March 2020 for weekly data and to the 28 March 2020 for our daily ships visits data. In this release, we have added the ports of Portsmouth and Tyne to our data; we have included data both with and without these additions in Figure 6 for comparison purposes, but in the future we will include Portsmouth and Tyne as standard.

The data for shipping presented here are not comparable with those given in previous releases. Following a review, we have changed the source of these data and improved the methodology used to produce them. We aim to increase the length of these time series in future releases.

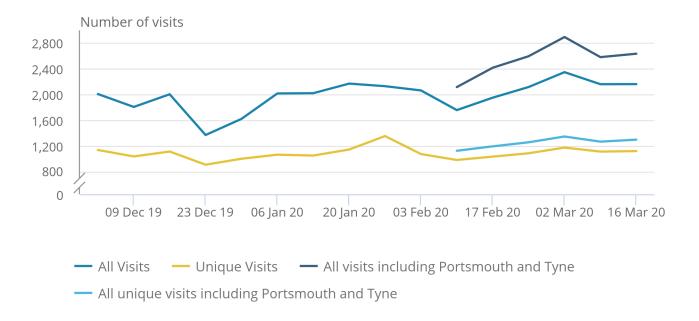
As discussed in <u>Faster indicators of UK economic activity: shipping</u>, we expect the shipping indicators to be related to the import and export of goods.

Figure 6: Both unique visits and total visits increased in the week commencing 16 March 2020

Number of visits, not seasonally adjusted, UK, week commencing 2 December 2019 to week commencing 16 March 2020

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Number of visits, not seasonally adjusted, UK, week commencing 2 December 2019 to week commencing 16 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Notes:

1. The ports of Portsmouth and Tyne are new additions to the data this week. Given the time series that includes all ports is only available for the past six weeks, we have included the data on the previous basis as an indicator of previous movements.

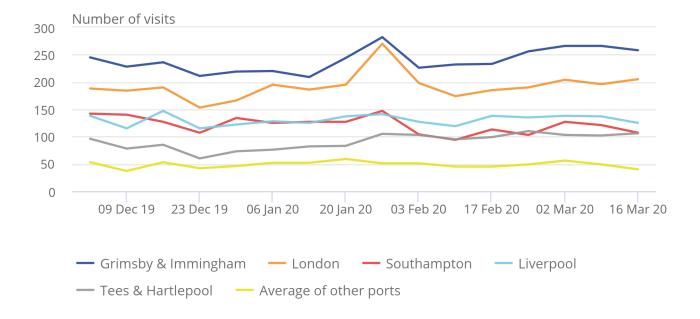
In the week commencing 16 March 2020, the number of unique visits to UK ports grew by 2.4%. Total visits to UK ports grew by 2.1% in the same period.

Figure 7: Grimsby and Immingham remained the port with the most unique visits in the week commencing 16 March 2020, followed by London

Number of visits, not seasonally adjusted, UK, week commencing 2 December 2019 to week commencing 16th March 2020

Figure 7: Grimsby and Immingham remained the port with the most unique visits in the week commencing 16 March 2020, followed by London

Number of visits, not seasonally adjusted, UK, week commencing 2 December 2019 to week commencing 16th March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

Grimsby and Immingham remained the port with the highest number of unique visits, despite a contraction of 3% in the week commencing 16 March 2020. The number of visits in the same period also declined in Southampton, Liverpool and the average measure of the smaller ports.

We have now started to include weekly shipping indicators for the ship visits. We will look to include more daily data in future releases.

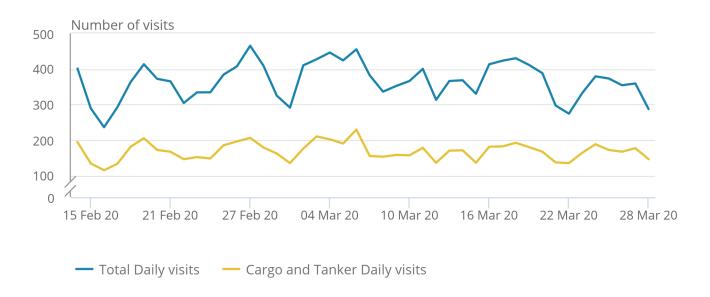
This release is the first to include daily shipping visits; these data are available up to 28 March 2020. Figure 8 shows UK total visits for all ships and cargo and tanker ships.

Figure 8: Daily movements in shipping visits

UK, 14 February 2020 to 28 March 2020

Figure 8: Daily movements in shipping visits

UK, 14 February 2020 to 28 March 2020



Source: Office for National Statistics - Coronavirus, the UK economy and society, faster indicators

6. Coronavirus, the UK economy and society, faster indicators data

Weekly shipping indicators

Dataset | Released 2 April 2020

The weekly shipping indicators dataset associated with the faster indicators of UK economic activity.

Business Impact of COVID-19 Survey (BICS)

Dataset | Released 2 April 2020

Initial results from the new BICS. This qualitative fortnightly survey covers business turnover, workforce, prices and trade. These data are not <u>official statistics</u> but have been developed to deliver timely indicators to help understand the impact of COVID-19 in a timely way.

7. Glossary

Faster indicator

A faster indicator provides insights into economic activity using close-to-real-time big data, administrative data sources, rapid response surveys or <u>experimental statistics</u>, which represent useful economic and social concepts.

High-demand product (HDP) basket

A HDP basket means everyday essential items that currently have a high consumer demand, including items from food, health and hygiene categories. The selection of these items was based on anecdotal evidence on patterns of consumer spend. The basket does not cover all items within these categories.

8. Measuring the data

Shipping

These weekly faster shipping indicators data are created through new <u>experimental</u> methods and are not <u>official</u> <u>statistics</u>. More quality and methodology information is available in <u>Faster indicators of UK economic activity:</u> <u>shipping</u>.

Business Impact of Coronavirus (COVID-19) Survey

The indicators and analysis presented in this bulletin are based on responses from the new voluntary fortnightly business survey, which captures business' views on impact on turnover, prices, workforce and trade. These data relate to the period 9 March 2020 to 22 March 2020.

This survey included questions on turnover, staff, prices and trade. The survey was sent to around 17,800 UK businesses, but results presented in this release are based on a limited number of responses, around 20.5% (3,642) of all businesses surveyed who responded. Estimates from the <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u> are currently unweighted and should be treated with caution when used to evaluate the impact of COVID-19 across the UK economy. Each business was assigned the same weight regardless of turnover, size or industry, and the data in the latest period are preliminary.

Online price change for high-demand products (HDPs)

This analysis is based on experimental statistics. The price indices were produced using different methods and quality thresholds to the regular Office for National Statistics (ONS) measures of <u>consumer price inflation</u>; as such, they should not be used to pre-empt any future consumer price inflation publication.

Prices were scraped from a number of large online UK retailers over the period 16 March to 29 March 2020 for selected items chosen to form the HDP basket. A weekly Jevons index was then produced for each of these item and retailer combinations. For more information, a detailed description of the <u>Jevons index</u> is available. An average price was calculated for each unique product for the period 16 March to 22 March (week 1) and compared with the average price for each product in the period 23 March to 29 March (week 2). A geometric mean was then calculated from these price relatives to form the elementary aggregate indices. It is envisaged that a chained Jevons method will be used in future periods to expand the time series.

These indices were then aggregated using the most recent retailer expenditure shares from the 2017 Annual Business Survey (ABS) to calculate an overall item index. These indices are therefore not representative of the whole retail population; for example, price change in smaller independent shops were not captured in this data collection.

To calculate the aggregate long-life food index, all household hygiene index and all items index, approximate item weights were calculated from weights for similar categories in the headline Consumer Prices Index including owner occupiers' housing costs (CPIH) basket. Some items such as antibacterial wipes are not currently collected in the CPIH, so it has not been possible to provide a baseline estimate of change for these products.

Strengths and limitations of these data sources and methods are covered in the next section.

Ongoing publication of COVID-19-related data

We will be publishing this faster indicator bulletin on a weekly basis during the COVID-19 pandemic. This is to ensure we are meeting user needs for more timely data. We will be adding new data and experimental indicators as and when data become available each week.

This publication will include regular updated data from the new fortnightly survey, BICS, and online prices for HDPs.

9. Strengths and limitations

Business Impact of Coronavirus (COVID-19) Survey (BICS) data

The data from the new fortnightly <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u> are based on a response rate of 20.5% and cover the period 9 March to 22 March 2020, across all business sectors. The survey is voluntary, and the data are businesses' qualitative responses, which should be treated with caution as results reflect the characteristics of those who responded and not necessarily the wider business population. The questions used in the survey ask respondents to categorise where turnover, workforce, prices or trade are "usual" for the period. Where these are not, they are asked to categorise if the changes are because of COVID-19 or otherwise. The survey is designed to give an indication of the impact of COVID-19 on businesses and a timelier estimate than other surveys. These should not be used in place of <u>official statistics</u> for such estimates, but instead they are included to support more timely information on the UK economy.

Online price change for high-demand products (HDPs)

This is <u>experimental</u> analysis. These indices were produced using different methods and quality thresholds to the regular Office for National Statistics (ONS) measures of <u>consumer price inflation</u>, and they only cover a small proportion of the total consumer price inflation basket of items. As such, they should not be used to pre-empt any future consumer price inflation publication.

These estimates should not be used in place of official statistics for price change, but instead they are included to support more timely information on the UK economy. There are a number of caveats that should be applied to the data sources and method:

- no comparable replacement or quality adjustments have been applied, which may lead to downward bias in the indices
- owing to the nature of web-scraped data, there are no expenditure weights available at the product level; therefore, there is no accounting for consumer substitution within these items
- for retailers that have a clear label indicating that a product is out of stock, we have removed those items
 from the analysis; however, other retailers may not have a clear indication of this, so there may be
 products currently out of stock that have still been included

10. Related links

Faster indicators of economic activity, UK: February 2020

Bulletin | Released 24 March 2020

This is a timely release of new, faster indicators of economic activity constructed from novel data sources.

Business Impact of Coronavirus (COVID-19) Survey

Web page

The Business Impact of Coronavirus (COVID-19) Survey (BICS) is being used to collect information about the financial and operational performance of businesses during the COVID-19 outbreak.

Coronavirus (COVID-19) product page

Product page | Updated as data become available

Latest data and analysis on COVID-19 in the UK and its effects on the economy and society.

Deaths registered weekly in England and Wales, provisional: week ending 20 March 2020

Bulletin | Released 31 March 2020

Provisional counts of the number of deaths registered in England and Wales, including deaths involving COVID-19, by age, sex and region, in the latest weeks for which data are available.