



Office for  
Statistics Regulation



UK Statistics  
Authority

# Misuse of statistics: Myths and how to address them

*Ed Humpherson, Director General for Regulation  
UK Statistics Authority  
September 2020*

# Three myths

- 1. People don't care about statistics**
- 2. Public confidence in statistics and experts is low**
- 3. There is nothing we can do about misuse of statistics**

# First... the Office for Statistics Regulation

- **The regulatory arm of the UK Statistics Authority**
- **Promote and safeguard the production and publication of official statistics**
- **Do not produce statistics and are separate from the Office for National Statistics (ONS)**

# What we do on misuse

Identify

100 cases a year

Analyse

The statistics  
The context  
Is this normal political  
debate?

Conclude

Is the use likely to  
mislead about what the  
underlying statistics  
mean?

Act

The best way to support  
the appropriate use of  
the statistics



# Three myths

- 1. People don't care about statistics**
- 2. Public confidence in statistics and experts is low**
- 3. There is nothing we can do about misuse of statistics**

# 1. People don't care about statistics

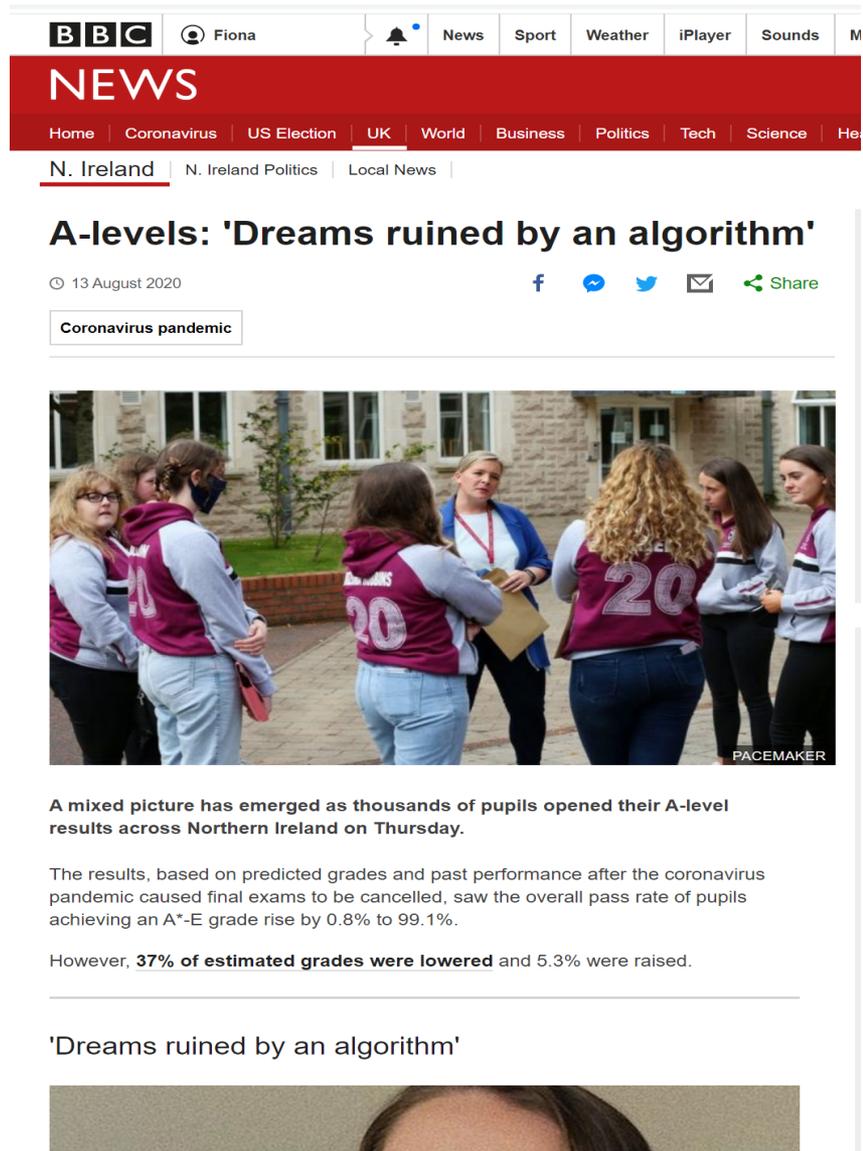
**Myth:** People are busy, or mistrusting, or low in statistical literacy, so they don't care about statistics

**Our view:**

- The pandemic shows the importance people place on trustworthy statistics
- People are intensely interested in COVID-19 statistics about their community
- People want to see their lives reflected in the statistics

## **2. Public confidence in official statistics and experts is low**

# Public confidence really matters



The image is a screenshot of a BBC News article. At the top, the BBC logo is on the left, and navigation links for 'Fiona', 'News', 'Sport', 'Weather', 'iPlayer', and 'Sounds' are on the right. Below this is a red 'NEWS' banner with sub-links for 'Home', 'Coronavirus', 'US Election', 'UK', 'World', 'Business', 'Politics', 'Tech', 'Science', and 'Health'. The article's main category is 'N. Ireland', with sub-links for 'N. Ireland Politics' and 'Local News'. The headline is 'A-levels: 'Dreams ruined by an algorithm'' in large black font. Below the headline, it says '13 August 2020' and has social media share icons for Facebook, WhatsApp, Twitter, Email, and a 'Share' button. A 'Coronavirus pandemic' tag is visible. The main image shows a group of young women in maroon and white school uniforms talking to a woman in a blue jacket. The image is credited to 'PACEMAKER'. Below the image, the text reads: 'A mixed picture has emerged as thousands of pupils opened their A-level results across Northern Ireland on Thursday.' This is followed by a paragraph: 'The results, based on predicted grades and past performance after the coronavirus pandemic caused final exams to be cancelled, saw the overall pass rate of pupils achieving an A\*-E grade rise by 0.8% to 99.1%.' Another paragraph states: 'However, 37% of estimated grades were lowered and 5.3% were raised.' Below this is a sub-headline: ''Dreams ruined by an algorithm'' and the top of another image showing a person's hair.

BBC Fiona News Sport Weather iPlayer Sounds M

**NEWS**

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## A-levels: 'Dreams ruined by an algorithm'

13 August 2020 f WhatsApp Twitter Email Share

Coronavirus pandemic



PACEMAKER

**A mixed picture has emerged as thousands of pupils opened their A-level results across Northern Ireland on Thursday.**

The results, based on predicted grades and past performance after the coronavirus pandemic caused final exams to be cancelled, saw the overall pass rate of pupils achieving an A\*-E grade rise by 0.8% to 99.1%.

However, **37% of estimated grades were lowered** and 5.3% were raised.

### 'Dreams ruined by an algorithm'



# Public confidence in official statistics and experts is low

**Myth:** People have low confidence in official statistics

**Our view:**

- UK Public Confidence in Official Statistics survey shows high levels of confidence c80%
- IPSOS Mori Veracity Index shows growing trust in scientists and civil servants (up to 40 percentage points over 20 years)
- But...
  - People state lower levels of confidence in politicians and media

### **3. There is nothing we can do about misuse of statistics**

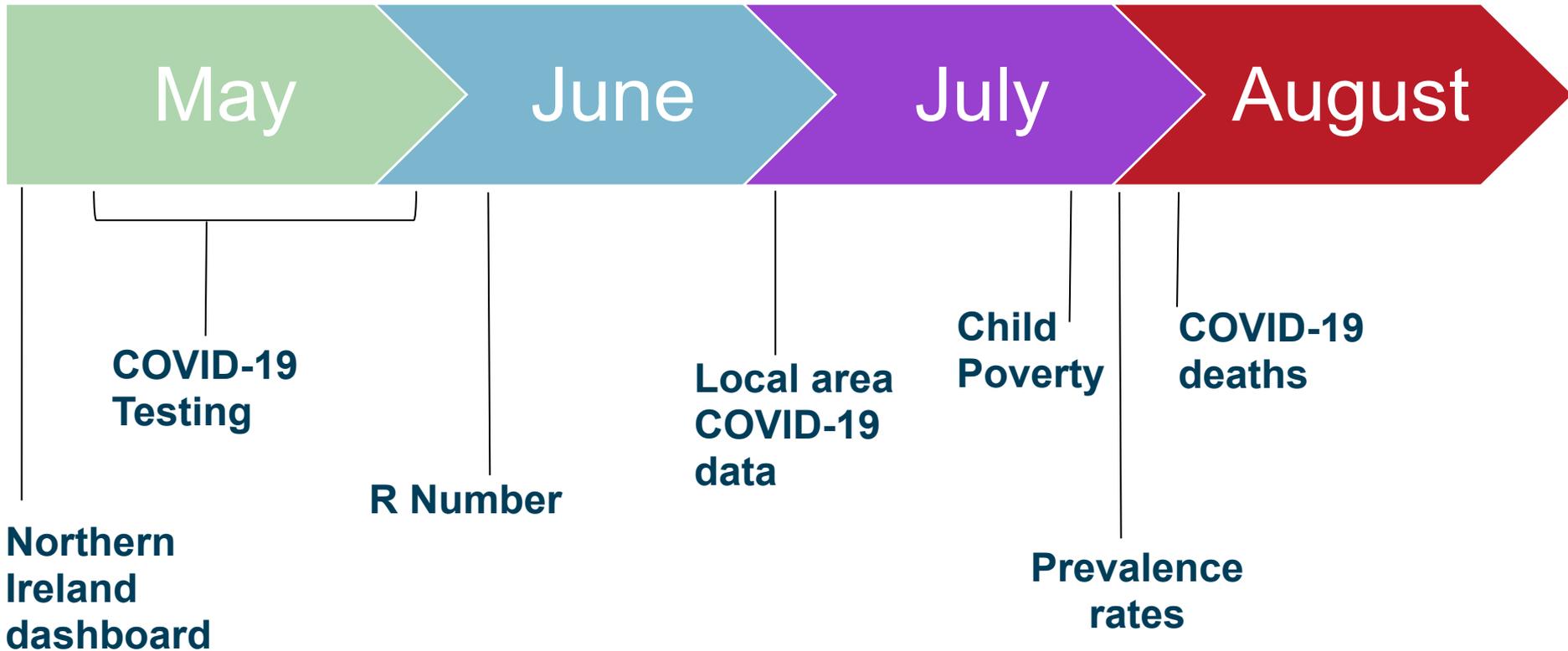
# There is nothing we can do about misuse of statistics

**Myth:** We are in a downward spiral of misuse and there's nothing we can do about it

**Our view:**

- We intervene when we have concerns about
- Our interventions lead to improvements: restatements, more data published, misuses exposed
- We have intervened extensively during the COVID-19 pandemic

# Timeline of our interventions



## What the Government said on testing

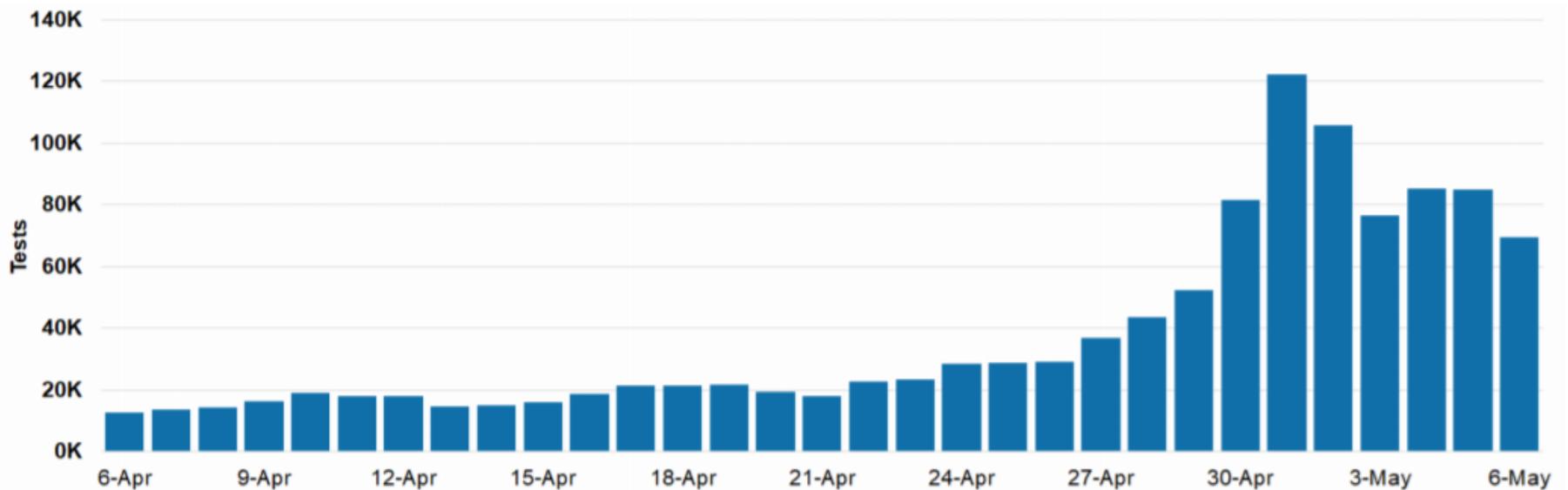


“I’m now setting the goal of **100,000** tests per day by the end of this month. That is the goal and I’m determined we’ll get there.”  
(2 April)

# COVID-19 testing figures

## Daily Tests (UK)

As of 9am 6th May, there have been 1,448,010 tests in total. In the 24 hours up to 9am on 6th May, there were 69,463 tests in the UK.



Source: DHSC/NHSX, NHSE, Welsh Gov., Scottish Gov., Northern Ireland Executive. The number of tests includes; (i) tests processed through our labs, and (ii) tests sent to individuals at home or to satellite testing locations. Chart date corresponds to the date tests were reported as of the 24 hours before 9am that day.



## What we said...

2 June 2020

*“The aim seems to be to show the largest possible number of **tests**, even at the expense of understanding...It is not surprising that given their inadequacy data on testing are so widely criticised and often mistrusted.”*

## What the media said...

**Coronavirus: Government's use of testing figures 'falls well short' of normal standards, warns chief statistician**

'Not surprised' by criticism of government's use of testing figures  
Andrew Dilmore  
Tuesday 2 June 2020

**Matt Hancock blasted by UK statistics watchdog over 'inadequate' testing figures**

The UK statistics watchdog has criticised the government's use of coronavirus testing figures, saying they are 'inadequate' and 'fall well short' of normal standards.  
The UK statistics watchdog has criticised the government's use of coronavirus testing figures, saying they are 'inadequate' and 'fall well short' of normal standards.

**Hancock defends virus statistics after criticism**

Coronavirus 40,000 deaths  
🕒 2 June 2020

**Statistics watchdog: ministers still misleading public on coronavirus tests**

ITV REPORT 2 June 2020 at 12:13pm

Head of UK Statistics Authority calls for more clarity from government

- [Coronavirus](#)
- [See all our](#)

**Statistics watchdog criticises government's inadequate data on coronavirus tests**

# Thank you for listening.

To get in touch or find out more:

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