

# 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

BBC

Fiona

News

Sport

Weather

iPlayer

Sounds

M

NEWS

Home

Coronavirus

US Election

UK

World

Business

Politics

Tech

Science

He

N. Ireland

N. Ireland Politics

Local News


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

🕒 13 August 2020

Coronavirus pandemic

f

Share




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'



8



# 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

May

June

July

August

COVID-19  
Testing

R Number

Local area  
COVID-19  
data

Child  
Poverty

Prevalence  
rates

COVID-19  
deaths

Northern  
Ireland  
dashboard

## What the Government said on testing

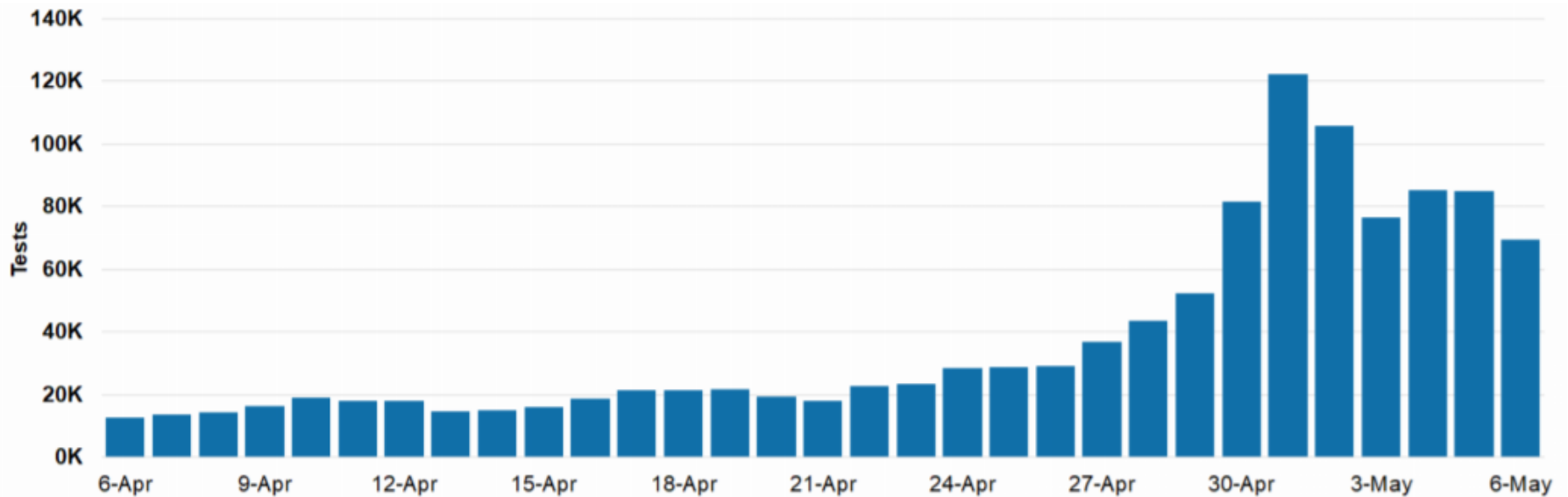


"I'm now setting the goal of **100,000** tests per day by the end of this month. That is the goal and I'm determined we'll get there."  
(2 April)

# 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 surpr  
Andrew  
Tuesday 2

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

The UK  
the "ex

**Hancock defends virus statistics after criticism**

Coronavirus 40,000 de  
🕒 2 June 2020

avirus testing total at

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

ITV REPORT 2 June 2020 at 12:13pm

Head of UK S  
clarity from g

- [Coronavir](#)
- [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:

Ed Humpherson:

[DG.Regulation@statistics.gov.uk](mailto:DG.Regulation@statistics.gov.uk)

Visit OSR's website:

<https://osr.statisticsauthority.gov.uk/>

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