

UK Tory government manipulated statistics to play down COVID-19 danger to educators

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4 December 2020

As far back as June, the Office for National Statistics (ONS) published data showing that 148 education workers in the UK had died of COVID-19, including 81 teachers, 21 teaching assistants and 18 in nurseries and childminding.

In the face of such shocking evidence, the Conservative government, in enforcing its policy of herd immunity, has rubbished any conclusion that teaching is a high-risk occupation using a combination of manipulated statistics and outright lies.

This was exposed in a recent response from the Office for Statistics Regulation (OSR) to a complaint about the government's attempt to manufacture a scientific justification for keeping schools open throughout the limited second national lockdown.

On November 3, the Department for Education (DfE) Twitter account posted a comment made by the chief medical officer for England, Professor Chris Whitty, that "[A]ll the data, including ONS [Office for National Statistics] data, do not imply that teachers are a high-risk occupation, unlike, for example, social care workers and medical staff like myself."

This was met with incredulity among experts, with Dr Sarah Rasmussen, a mathematician at the University of Cambridge who has reported extensively on statistics concerning the coronavirus pandemic, tweeting, "What is Whitty talking about? There's no UK data to answer this." She suggested Whitty was referring to data collected during the first wave of the pandemic, when schools were largely closed.

Since schools fully reopened in September, teachers have reported conditions which guaranteed the rapid spread of the virus, with a lack of masks and social distancing. ONS data for October shows that the rate of infection among secondary school-aged children was far higher than the rates for age groups over 25. It would be perverse to claim that the spread of the pandemic in schools today is the same as it was between March and May, yet the OSR states that this is exactly what Professor Whitty was saying.

Three days after Whitty's comment, the ONS Coronavirus Infection Survey's weekly bulletin included an "ad-hoc analysis" section, not present in any previous weeks. This presented new analysis of the data collected between September 2 and October 16, which it claims showed "there is no evidence of difference in the positivity rate between teachers and other key workers" in the COVID-19 test results gathered by the survey.

This prompted a complaint by Rasmussen to the OSR, about what seemed to be the leak of this analysis by Whitty, and also

about the analysis itself. The use of unpublished ONS statistics was, according to Dr Rasmussen, a breach of the "trustworthiness principle" of orderly release contained in the OSR's Code of Practice for Statistics. The code, which applies to all government bodies, states that the trustworthiness principles are based on the notion that "no-one can just expect to be trusted. An organisation must provide testable evidence to demonstrate that they have the interests of the public at heart" —a key democratic principle on which all ethical use of public statistics is based.

Dr Rasmussen quoted two sections of the code Professor Whitty would have breached by referring to the November 6 report in his comments, which assert, "Policy, press or ministerial statements referring to regular or ad hoc official statistics should [...] contain a prominent link to the source statistics" and "ahead of their publication [...] no indication of the statistics should be made public".

The breaches outlined can only leave the public without the ability to independently scrutinise claims from highly political figures such as the chief medical officer, and vulnerable to dishonest and misleading statistical manipulations.

The means by which subtle statistical manipulations are used to conceal the truth from the working class are revealed by the other part of Dr Rasmussen's complaint about the ONS report itself. The analysis used two main methods to manipulate its results to justify Professor Whitty's conclusion that the data "do not imply that teachers are a high-risk occupation": the separation of teachers into four categories, and the presentation of an average figure for the whole period September 2nd to October 16th.

The sample of 12,201 teachers was separated into four different categories: three based on the age of the children, and one extra "teacher of unknown type" category. The name of this final category, separated from the other three categories by the entry for university lecturers, is intended to suggest that it is a small, insignificant sample, and that teachers reading the survey ought to look at the positivity rate for the type of school in which they work, which for primary and secondary teachers is lower than the figure for other key workers. This is extremely misleading. The "unknown type" category contains every respondent to the survey who wrote "teacher" as their profession. More teachers are contained in this category than in any of the other three, as can be seen by the small "error bars" which describe the size of the fluctuation caused by a small sample size: small error bars indicate a large, reliable sample.

In the most reliable "teacher of unknown type" category, 0.51 percent of respondents tested positive for COVID-19, compared with 0.40 percent of those categorised as "other key workers", a category including care home and healthcare workers. As the value of 0.40 percent still lies within the error bars for teachers of "unknown type"—and it is impossible to rule out the possibility that the difference is due to the small sample size—the ONS concludes pedantically that "there is no evidence of difference". However, Dr Rasmussen notes that as dividing the data into four categories reduced the sample sizes (and so increased the size of the error bars), this really means "we disaggregated and restricted the data in such a way as to make the analysis too underpowered to generate significant evidence."

In response to this complaint the ONS published a new analysis combining all teachers into one category, of which 0.43 percent tested positive for COVID-19 in the survey. Considering the small sample size, Dr Rasmussen's criticism of the analysis as "underpowered" still holds for the updated version. It is disingenuous to draw any conclusion about the risk to teachers from the results presented.

The other issue is that the figure presented in the ONS analysis is based on data collected over the entire period between the start of the school year on September 2 until October 16, three weeks before the analysis was published. While collecting data over a long period can increase the sample size of a study and may be appropriate when studying something which changes quite slowly, such as the average height of the population, it is misleading when presenting analysis of a rapidly developing coronavirus pandemic.

As Dr Rasmussen points out, the data collection started on September 2, but many schools were closed to pupils for teacher training until September 7 and so infections would have been low during this period, making the *average* figure over the whole period far lower than the true value on November 6 when the results were published.

The exclusion of data collected in the three weeks before the analysis, during which time the ONS data shows a sharp increase in positivity rates nationally, and an even faster increase among school-age children, was justified by the ONS as the additional time required to sort the data into categories based on profession, but had the same distorting effect on the average figure.

The ONS is aware of the problems with presenting a single average figure calculated from rapidly evolving data. In fact, the ONS deals with these issues competently in most of the bulletin: in every other section which analyses data collected over a period of more than two weeks, the result for each fortnight is presented separately.

This has been the standard procedure the survey has followed since June, so even if the additional time needed to process profession data were a valid reason to exclude three weeks of data (which Dr Rasmussen disputes), the only reason to avoid showing the change in infection rates among teachers over the period covered is to conceal data revealing that the risk to teachers has increased over time, and for the most recent period is higher than other professions.

These issues alone are enough to render the ONS analysis untrustworthy, with Dr Rasmussen comparing the report to the lies

about "weapons of mass destruction" used to justify the Iraq War. She wrote, "If you push hard enough for the manufacture of evidence, evidence will be produced, whether it's valid or not."

The National Education Union's joint general secretary, Kevin Courtney, feigned outrage at the ONS report, posting on Twitter the day the complaint was reported, "The outcome of this complaint to the UK statistics authority is very important to teachers and support staff... @NEUUnion will write to UK Stats asking for urgent decision on this complaint."

Also very important to teachers and support staff is last month's vote of the NEU National Executive against a national ballot for strike action in opposition to the dangerous conditions in schools.

Waiting for the outcome of the complaint is another in a long list of manoeuvres intended to provide excuses for the NEU's lack of action to defend its members.

The response from the OSR to Dr Rasmussen's complaint concedes some of the criticisms of the analysis, but makes mealy-mouthed excuses for each, stating, "We do not think that ONS intentionally presented the analysis in a misleading way".

When responding to the allegation that the chief medical officer was referring to the unpublished report in the comments tweeted by the DfE, the OSR reports a damning admission. It said, "We have been told that the evidence which informed the CMO's [chief medical officer's] response on 3 November included other published ONS data." The OSR including a link to the report on deaths analysed by occupation over the period March 9 to May 25.

Either this is true and Professor Whitty used data collected when schools were closed to claim that teachers are not currently at high risk, or it was a lie and he was merely making use of more recent heavily manipulated statistics. Either scenario reveals the dishonesty and abuse of science rife in ruling circles to justify their campaign to keep schools open—a key objective in their push to get parents back to work producing profits.

That the supposedly independent ONS is used as a weapon against the working class in this campaign demonstrates, as the *World Socialist Web Site* and the International Committee of the Fourth International have insisted, that the fight against COVID-19 is not a medical issue, but a political struggle.

The Educators Rank-and-File-Safety Committee was founded to fight for the necessary response to effectively combat the pandemic, including full transparency of all information about the spread of the COVID-19 pandemic. We urge all teachers and school staff to sign up for the Educators' Newsletter and join the Educators Rank-and-File Safety Committee to take this fight forward.



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