## BREACH OF THE CODE OF PRACTICE FOR OFFICIAL STATISTICS

This document reports a breach of the Code of Practice for Official Statistics, or the relevant Pre-release Access to Official Statistics Orders, to which the Code applies as if it included these orders.

## 1. Background information

Name of Statistical Output (including weblink to the relevant output or 'landing page')

Public Health Outcomes Framework (PHOF) November data update: https://www.gov.uk/government/statistics/public-health-outcomes-framework-november-2014-quarterly-data-update and http://www.phoutcomes.info

and

Local Tobacco Control Profiles for England (LTCP) November data update: <u>https://www.gov.uk/government/statistics/local-tobacco-control-profiles-for-england-november-2014-data-update</u> and <u>http://www.tobaccoprofiles.info/</u>

## Name of Producer Organisation

Public Health England

Name and contact details of the statistical Head of Profession (Lead Official in an Arm's Length Body) submitting this report, and date of report

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## 2. Circumstances of breach

Relevant Principle/Protocol and Practice

Protocol 2: Release Practices

Practice 4: "Issue statistical releases at a standard time of 09:30 on a weekday to maintain consistency and to permit time for users to understand and respond to the information during normal working hours."

Date of occurrence

#### 4 November 2014

Nature of breach (including links with previous breaches, if any)

The publications due to go out on 4 November 2014 were made available on gov.uk at 09:30, but the associated website containing the statistical data was not made available until 11:45 on that date, a delay of 135 minutes. The breaches were notified by the development team to the project team at 09:30 and a notice was placed on the gov.uk webpages immediately to alert users to the delay.

A previous breach of a similar nature occurred on 4 February 2014 affecting the PHOF February 2014 data update.

#### Reasons for breach

On Monday 3 November 2014 the updated PHOF and LTCP data was deployed to the live server for testing, in preparation for the 09.30am PHOF and LTCP releases on 4 November 2014. During testing a configuration issue was identified which was apparent only in the live environment. This meant the PHOF and LTCP data could not be released until the configuration problem had been fixed.

The Fingertips, PHOF and Healthier Lives web sites are hosted on the same servers with updates to all three published on the first Tuesday of every month. On each server there are two copies of the combined web application, with one copy live and the other acting as a backup which we can roll back to if needed.

The development team released Healthier Lives the previous week. With the PHOF/LTCP and Healthier Lives releases so close together, the two sites had to temporarily run side by side, leaving no backup to roll back to.

On Monday 3 November, the two senior members of the development team were both on annual leave and the developer carrying out the deployment was not able to resolve the issue. On Tuesday 4 November the development team lead had to redeploy the database to the live server, rather than just switch to the backup. This was completed by 10:30am. The configuration issue was then resolved and a fix was deployed at 11.45am, causing a delay of 2 hours and 15 minutes to the Quarter 4 PHOF and LTCP updates.

#### 3. Reactions and impact (both within the producer body and outside)

Two tweets about the PHOF breach were made on the morning of release:

https://twitter.com/phoutcomes/status/529571465780551680 https://twitter.com/phoutcomes/status/529603068254769152

No impact was observed for the LTCP outside PHE.

Within PHE the breaches have triggered an investigation (see below).

# 4. Corrective actions taken to prevent reoccurrence of such a breach (include short-term actions, and long-term changes made to procedures)

An investigation has been undertaken within PHE to identify the root cause of the delays on 4 November 2014 and 4 February 2014.

A high calibre systems analyst, based in the Public Health England (PHE) Information Communication and Technology (ICT) department, has been tasked with urgently looking at the end to end process of how our statistics are published in Fingertips. Fingertips is a suite of interactive web tools that provide easy access to in-depth health and health related data, including the Public Health Outcomes Framework (PHOF). The task will be to understand the process, identify the weak points or potential areas of stress, and make recommendations.

Prior to the above the following actions have been proposed:

- Allow more time for the development team to test the web application on the live servers before making it live.
- PHE indicator community to change their way of working and agree to get all data and copy changes completed, quality assured and uploaded through Fingertips Profile Manager on the Wednesday before the scheduled go live date, rather than the Friday night before. Friday night was the time chosen after the February breach (it was Monday night) but this has not proved sufficient.
- Create a 3<sup>rd</sup> application instance to provide a staging environment to cover any additional releases that are outside our regular monthly release schedule.
- Improve testing by increasing the number of automated acceptance tests run on the code.
- Set up a continuous integration environment to run all tests automatically every time code changes are committed.
- The development team need more timely support from ICT and a single point of contact in ICT to co-ordinate infrastructure requests and server set up.
- Allocate more disk space on servers to prevent any storage problems in the future.
- Simplify current live server configuration.
- Increase the level of mutual engagement between development team, indicator teams and ICT and increase understating of the corporate priority of the tools and their releases. We need to spot problems earlier and avoid crisis situations.
- Review and develop more formal procedures for contingency planning across the data release pathway.
- Review formal and informal procedures for escalating issues and problems as they arise, including a clearly defined escalation route for when things go wrong.

## 5. Links to published statements about this breach

When the breach report is published on the UK Statistics Authority website we will link to it from our website as soon as possible at: https://www.gov.uk/government/organisations/public-health-england/about/statistics

## 6. Any other relevant supporting material