



## **Action Plan for Improvement in Response to Public Health Wales Data Breach**

This document presents the Public Health Wales Action Plan that has been developed in response to the data breach incident that took place on the 30 August 2020. The action plan is in two parts. Part 1 details the immediate actions undertaken, primarily by the Communicable Disease Surveillance Centre (CDSC), upon identification of the data breach. Part 2 details the actions that will be undertaken in response to the recommendations outlined in the report of the external investigation report.

The actions are further delineated by timescale i.e. immediate, short term and longer term respectively, furthermore actions specifically for CDSC and longer term actions are identified separately.

## Part 1: Remedial actions and improvements undertaken in response to the data breach in August 2020

### Key:

**Green** – action complete

**Blue** – immediate/short term actions (Nov 2020-March 2021)

**Yellow** – longer term actions (April 2021 onwards)

Remedial actions and improvements undertaken by PHW immediately following detection of the data breach and prior to the investigation			
	Action	Owner	Target Date
1.1	The table in question was removed from the Tableau public server to prevent further incidences of accidental publication.	CDSC	Completed
1.2	The use of tableau for disseminating individual-level identifiable data was immediately suspended.	CDSC	Completed
1.3	The publishing of external facing and internal facing reports were separated so that they are completed by different individuals at different times.	CDSC	Completed
1.4	Publication of the public facing dashboard is now the responsibility of more experienced senior staff.	CDSC	Completed
1.5	Relevant standard operating procedures were updated to emphasise that the correct server is selected.	CDSC	Completed
1.6	The Surveillance rota team and analysts were briefed on the data breach with emphasis on inherent risks and controls over the publication of data.	CDSC	Completed
1.7	The process for sharing person level identifiable data using secure NHS Wales systems was strengthened.	CDSC	Completed
1.8	The 'Out of hours' complaints procedures strengthened.	Assistant Director of Integrated Governance	Completed

## Part 2: Action plan in response to the recommendations of the investigation into the data breach (November 2020)

### Key:

*\*Actions to be implemented within existing organisational work plans*

*# Additional actions identified for implementation by CDSC team*

Recommendation 1 – Root cause analysis, when properly implemented, is a comprehensive method of investigation that identifies the sequence of events that resulted in an adverse incident or a human error. In respect of the breach, PHWT should commit to a series of Information Governance audits to assess whether Standard Operating Procedures and Validation processes are sufficient to meet its current and changing Information processing responsibilities, which will help to reduce the Likelihood of the human factor reoccurring.				
	Action	Owner	Target Date	Outcome
1.1	Develop a PHW organisational information handling audit plan with a programme of rolling controls and improvement audits and escalation process. *	Assistant Director of Integrated Governance	December 2020	Improved assurance over information handling systems and processes.
	Implement Year one of the audit plan.*		November 2021	Significantly reduced risk of further data breaches.  More efficient and effective information handling procedures.
1.2	Develop and implement training on information risk handling for identified PHW information risk handling managers.*	Assistant Director of Integrated Governance	March 2021	Managers can demonstrate working knowledge and competency in information risk handling
1.3	Develop a CDSC process for the approval of new/revised data requests and information release methods and practices.#	Head of CDSC; Assistant Director of Integrated Governance	December 2020	A clear consistently applied process for data requests and information release. Any audit undertaken identify the process is working as expected.  The viability of Information requests and the resultant release methods are assessed, approved and prioritised.
1.4	Revise and reissue the Small Numbers guidance to ensure that person level identifiable data is managed correctly.	Assistant Director of Integrated Governance	December 2020	Audits undertaken to ensure that no small numbers are inappropriately published

<b>Recommendation 2 – As previously described in this report, PHW has considered the workload and capacity of teams and individuals with epidemiological data analysis and publication responsibilities. Progress has been made in recruiting the additional staff required by the CDSC. However, PHW should have a continual review cycle of resource requirement across those areas that have a greater responsibility to meet the demands of pandemic analysis and reporting.</b>				
	Action	Owner	Target Date	Outcome
2.1	Recruit to workforce surveillance requirements as identified in the stage two operational plan to enable successful delivery (approved in October 2020). <sup>#</sup>	Deputy Director of Public Health Services/Acting Director of People and OD	January 2021	Optimum and resilient workforce establishment within CDSC.
2.2	Review the CDSC rota and out of hours workforce arrangements and ensure this complies with the Working Time Directive/Organisational Policy. Ensure mechanisms for the ongoing review of workforce capacity are included. <sup>#</sup>	Head of CDSC	December 2020	Efficient and effective working arrangements for the CDSC team.
<b>Recommendation 3 – PHW should develop a process to review outputs from CDSC's surveillance team. For example, to ensure that bespoke reports are (i) necessary and (ii) need to be maintained as long-term outputs. Any applicants requiring bespoke outputs should be asked to provide an expiration date aligned with need, or PHW should apply its own in order to ensure the surveillance team has capacity to deal with workloads.</b>				
	Action	Owner	Target Date	Outcome
3.1	Undertake a peer review process by a similar organisation/function to include the CDSCs: <ul style="list-style-type: none"> <li>surveillance team processes for outputs;</li> <li>procedures to assess report requests, their necessity, longevity and expiration date;</li> <li>procedures for maintaining capacity to address fluctuating workload</li> </ul> Develop a process for ongoing review of the CDSC's surveillance team outputs. <sup>#</sup>	Deputy Director of Public Health Services	March 2021	Gain further leaning to continually drive improvements.
3.2	Develop and implement the learning from the peer review process.	Assistant Director of Integrated Governance	April 2021	Continued assurance that current arrangements are comparable with good practice and are of good quality.

**Recommendation 4 – This investigation identified a specific inherent risk associated with the software publication process for the specific internal and external dashboards referenced throughout this report. The scope of the investigation and the timescale involved did not allow for an assessment of other software used by PHW for similar purposes. As such, in due course, PHW should consider a full review of its information management, analysis and publication tools. Any such review needs to consider the current demands on the workforce and the need to ensure data analysis and information outputs are not disrupted at this stage of the COVID19 pandemic.**

	Action	Owner	Target Date	Outcome
4.1	Develop a programme to review the risks and controls within and around PHW's information handling software, analysis and publication tools (including cyber security risks).*	Informatics lead / Information Governance	June 2021	Public Health Wales risk handling process identifies risk promptly and effective controls to mitigate any risks are implemented.
4.2	Develop a framework to specify information handling system requirements including control specifications over publication software and processes for internal / external dashboards.*	Informatics / Information Governance	June 2021	A consistent approach to procuring / developing all internal / external information systems is in place and applied.

**Recommendation 5 - We are aware that the CDSC surveillance team has updated its standard operating procedures in light of the data breach. These procedures must be regularly reviewed (aligned with Recommendation 1), updated and approved to ensure they reflect changes in working practices.**

	Action	Owner	Target Date	Outcome
5.1	CDSC will produce and gain approval of a procedure to identify the governance arrangements for reviewing and updating SOPs within CDSC. #  This will also feed in to the organisational Integrated Governance base line assessment.*	Head of CDSC  Assistant Director of Integrated Governance	January 2021  January 2021	SOPs are kept up to date and are effective controls to mitigate risks.
5.2	Assess the feasibility of Office 365 to support PHW's document control/records management system architecture.*  Undertake an options appraisal of a document control/records management system (Office 365 or alternative).*	Assistant Director of Integrated Governance	September 2021	Information, documents and records are managed and stored as per regulation and best practice guidance.

**Recommendation 6 - We were informed during the investigation that, post-incident, PHW has reminded its staff of the importance of following incident reporting procedures. This should be regular event and PHW should consider the development and implementation of a communications plan aimed at raising staff awareness of their responsibilities in relation to incidents, including data breaches. This should include reference to the key elements of the Incident Management Procedure.**

	Action	Owner	Target Date	Outcome
6.1	Review and reissue the Incident Management Policy and Procedure including a proactive internal communications and awareness campaign.*	Assistant Director of Integrated Governance	December 2020	Recorded incidents are all addressed efficiently within prescribed timescales.
6.2	Implement (when released) the all Wales data breach reporting tool.*	Assistant Director of Integrated Governance	TBC	Consistent and timely reporting of future data breaches or any other adverse incidents.
6.3	Implement a programme of ongoing refresher incident management and reporting training and ensure this training is embedded within staff induction.*	Assistant Director of Integrated Governance	January 2021	All staff fully aware and up to date with incident management and reporting procedures.

**Recommendation 7 - PHW should consider a review of its approach to handling 'out of hours' emails and telephone calls to ensure that urgent matters can be directed to an appropriate contact –who understands the escalation process – at an early stage.**

	Action	Owner	Target Date	Outcome
7.1	The National Contact Centre (NCC) and National Health Protection Cell (NHPC) Oversight and Governance Groups will review and strengthen the 'out of hours' management of urgent matters by identifying and implementing improvements.	Assistant Director of Public Health Services	November 2020	An effective process is in place for handling out of hours concerns/issues/incidents accordingly and all NCC and NHPC staff comply with 'out of hours' procedures.

**Recommendation 8 - PHW should consider undertaking a training needs analysis, with the aim of ensuring staff responsible for processing and disseminating data, and information, have appropriate and targeted training. Training could include, for example, technical elements relevant to the specific software PHW uses and/or specific data protection or information governance training relevant to their role. This should help staff develop an even greater understanding of the risks associated with processing personal data.**

	Action	Owner	Target Date	Outcome
8.1	A training needs analysis will be undertaken for CDSC staff responsible for processing and disseminating data. #	Acting Director of People and OD/Assistant Director of Integrated Governance	December 2020	All CDSC staff understand the data handling systems and comply with control procedures.
8.2	CDSC line managers and staff with responsibility for processing and disseminating data should ensure that mandatory Information Governance training is complete and up to date. #	Acting Director of People and OD/All Executive Directors	December 2020	CDSC information governance training up to date and compliant.
8.3	Following the completion of the CDSC Training Needs Analysis a training package and/or resources to be developed or procured that will address identified gaps. #	Acting Director of People and OD/Assistant Director of Integrated Governance	January 2021	Assurance that all technical and control elements of CDSC data handling systems are understood from an information governance perspective.

