

# Deep Dive: Health Protection Division

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# Divisional overview



# Background Information

## Who we are and what we do...

- Protecting the health of the population of Wales from infections and environmental threats is key to achieving a healthier Wales.
- The Covid-19 pandemic, and its ongoing implications, highlighted the grave threat to health from communicable diseases and reinforced why health protection and health security will, within the changing realities of an interconnected world, remain a public health priority

Key **Divisional objectives** contributing to the organisation Long Term Strategy include;

- Better described communities at increased risk of harm from communicable disease leading to evidence-based interventions to reduce the number of people who become ill or die from a communicable disease and environmental harms
- Provided system leadership supporting the delivery of excellent immunisation and vaccination programmes, therefore seeing much fewer people with ill health due to vaccine preventable diseases
- Provided timely information for action to interrupt the transmission and reduce the impact of communicable disease on individuals and healthcare services



# Background Information

## Who we are and what we do...

- After receiving confirmation of sustainable funding from Welsh Government the Division is currently recruiting to the target headcount of 256 WTE
- The Division is responsible for a pay budget of £14.3 million and a non-pay budget of £5.9 million
- Division is structured around Divisional Deputy Directors and Programme Leads within the areas of;
  - Health Protection Team/All Wales Acute Response Service
  - Environmental Public Health
  - Communicable Disease Inclusion Health Programme
  - Communicable Disease Surveillance Centre
  - Vaccine Preventable Disease Programme
  - Training and Guidance
  - Business and Operations

# Strategic Priority 5

## Delivering excellent public health services to protect the public and maximise population health outcomes

Protecting the public from the effects of infections and exposure to environmental problems, such as air pollution, and the delivery of our national screening programmes are core responsibilities for Public Health Wales. Our Category 1 responder status demonstrates our role in protecting the public from ill health and working with our partners to mitigate risks to human health.

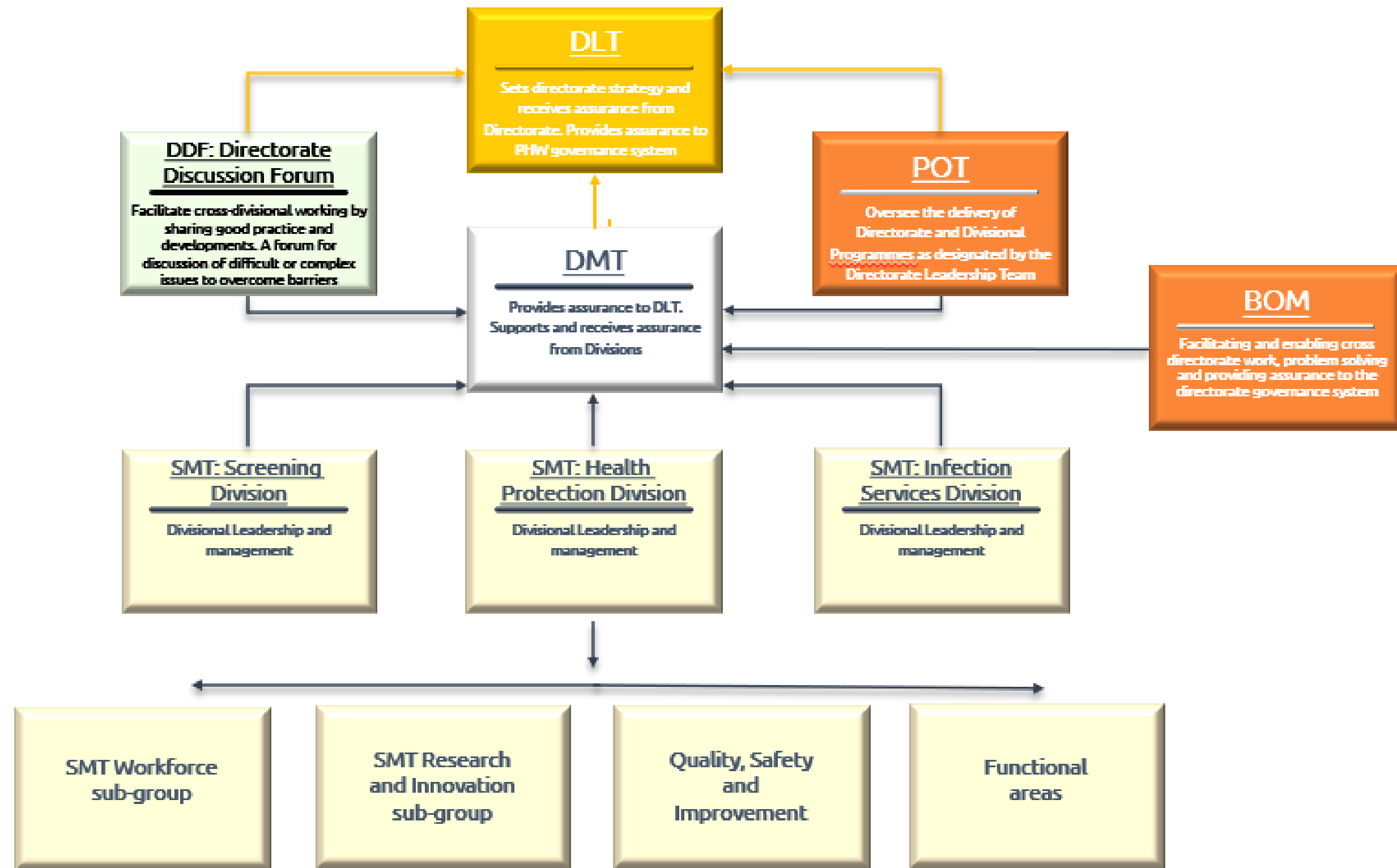
We work to protect the health of the people of Wales through the delivery of a number of health protection and infection control services. We have defined excellence through quality domains and enablers within the Health and Social Care (Quality and Engagement) (Wales) (Act) (2020).

We will work to support the following system wide outcomes:

- Increase vaccination rates for all vaccine preventable diseases
  - • 90% uptake of HPV by age 15 (Baseline: 69.3%, COVER Report 145)
  - • 95% uptake of MMR by age 2 based on new schedule (Baseline: 93%, COVER Report 145)
- Eliminate hepatitis B and C as a public health threat by 2030 (Baseline: approx. 12,000 hepatitis C infected individuals in 2017, WHC/2017/048)

# Governance and Accountability Arrangements

## Overview



# Successes (1)

## Overview

- Worked with key partners to support the ongoing process to strengthen the national health protection system in Wales to prioritise activity, including partners across the UK through the UK Health Protection Committee and Four Nations Oversight group
- Sexual Health case management business case submitted and approved by Welsh Government, with the discovery phase in progress
- Response to Pertussis and Measles outbreaks throughout the winter period in collaboration with Health Board colleagues, effectively assisted by the National Surge team
- Successful delivery of the annual winter respiratory virus vaccination campaign and supported transformation of vaccine services in line with the National Immunisation Framework, including the provision of expert advice into new governance structures
- Progressed a vaccine equity strategy with expansion to additional vaccination programmes
- Delivered activities to highlight the 10th anniversary of Wedinos and the programmes achievements, including public facing media open day within the laboratory
- Worked alongside external partners in Healthcare settings and Welsh Government to deliver a bespoke, multi-professional education and training programme to increase levels of proficiency and reduce the burden on the Health Protection team

# Successes (2)

## Overview

- Built research capacity within the Health Protection Division through protected time, training and peer support resulting in 52 peer reviewed publications in scientific journals in the last calendar year
- Progressed a vaccine equity strategy with expansion to additional vaccination programmes
- Continued evolution and maturing of the both the Business and Operations and Training and Guidance functions
- Provided specialist public health advice coordinated through partners to support implementation of Wales Clean Air Plan and the development of a new Clean Air Act for Wales
- Completed Tarian discovery phase in collaboration with the Data, Knowledge and Research Directorate
- Operation Lazurite arrangements (nationalisation of entitled peoples from Afghanistan) – working with Ministry of Defence to ensure arrangements are in place to facilitate joint working in the event of routine notifications of infectious diseases and in the event on an outbreak on site
- Publication of the Communicable Disease Outbreak Plan for Wales 2023 which will be used to manage all communicable disease outbreaks with public health implications across Wales.



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# Health Protection Team

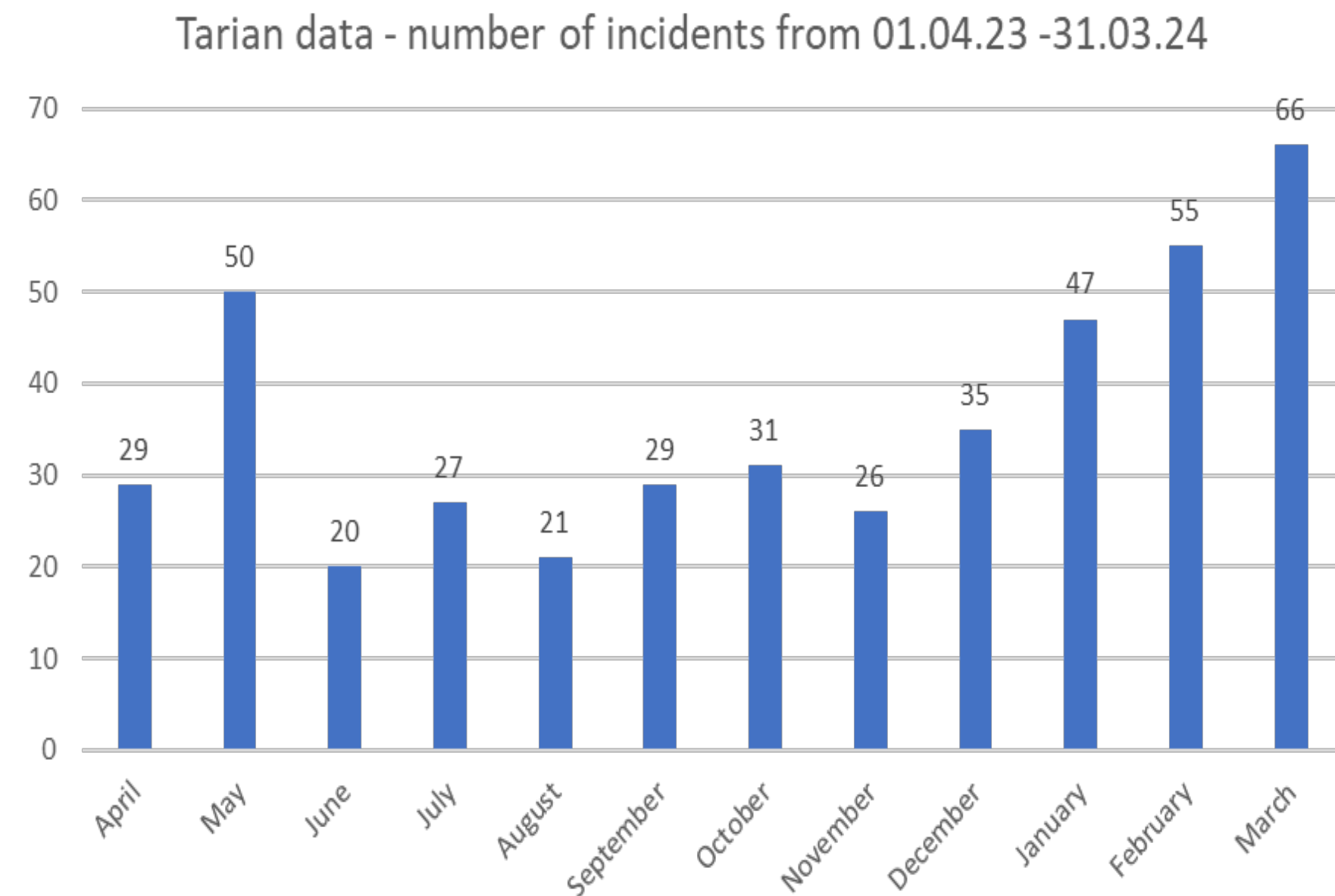
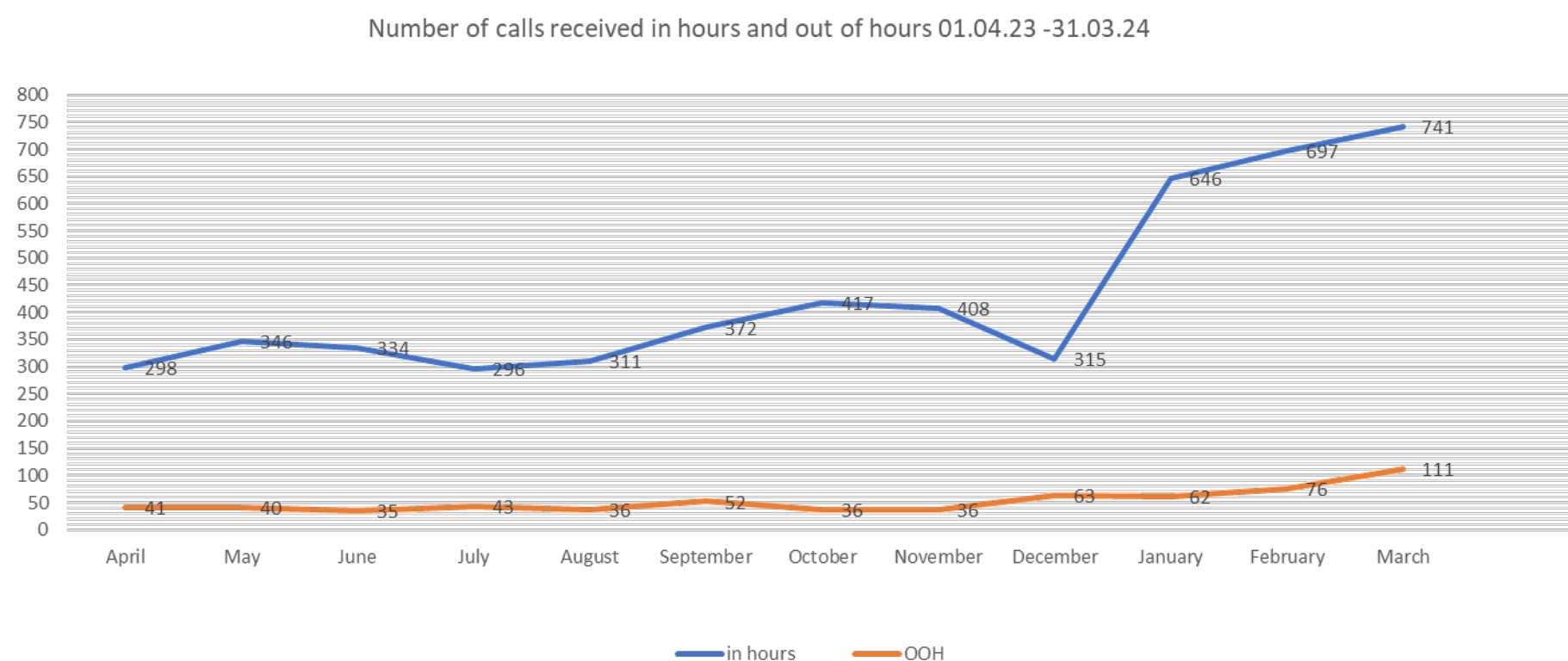


# Team overview

- Health Protection Team provides specialist public health protection advice on infectious disease control 24-hours a day. Working closely with other NHS, local authorities and other agencies to help reduce the spread of infectious diseases in Wales
- The Health Protection Team deliver an All Wales Acute Response Service known as AWARe, which receives all notifiable disease reports during normal working hours 9am – 5pm, Monday to Friday. During out of hours our calls are handled by an external company We Are Frontline who triage the calls and escalate as necessary
- We also have seven regional teams which are based throughout Wales and are aligned to the three regions of North Wales and Powys, South East and Mid and West Wales
- These teams work closely with regional partners to reduce the impact of infectious diseases in their local community by policy development, strategic work with Health Boards and other partner work
- Our Consultants in Communicable Disease Control are subject matter experts having advanced knowledge in specific fields such as vaccine preventable diseases, tuberculosis, acute respiratory infection, Covid-19 in care homes, port health and zoonoses

# Service / Function / Programme Performance

Activity figures 01.04.23 – 31.03.24	
Number of in-hours telephone notifications/inquiries/incidents	5181
Number of out of hours telephone notifications/inquiries/incidents	566
Number of AWARe inbox notifications/inquiries/incidents	18894
Total number of incidents	436
Total number of cases	15768
SOPs uploaded onto iPassport	69





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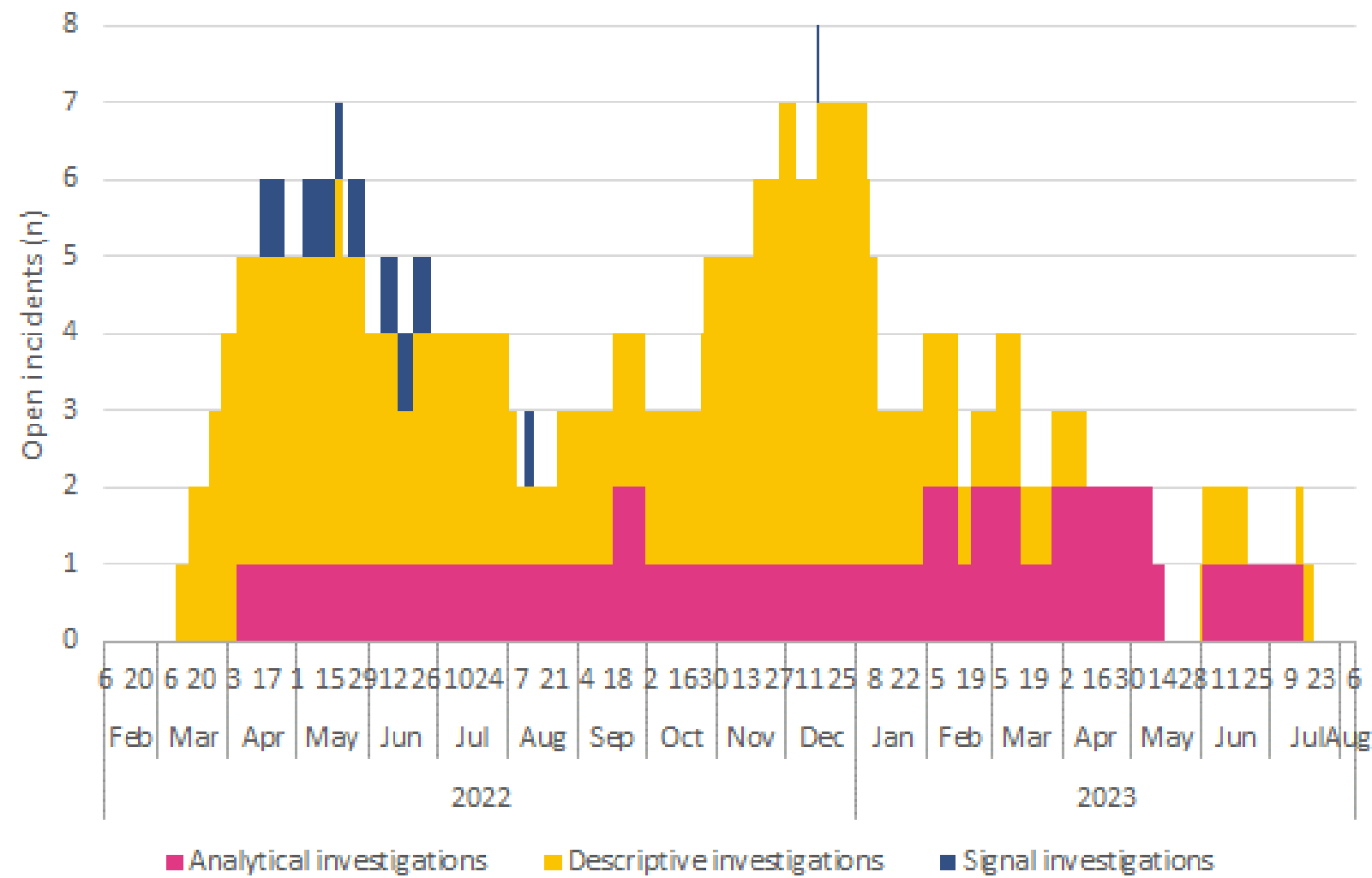
# Communicable Disease Surveillance Centre (CDSC)



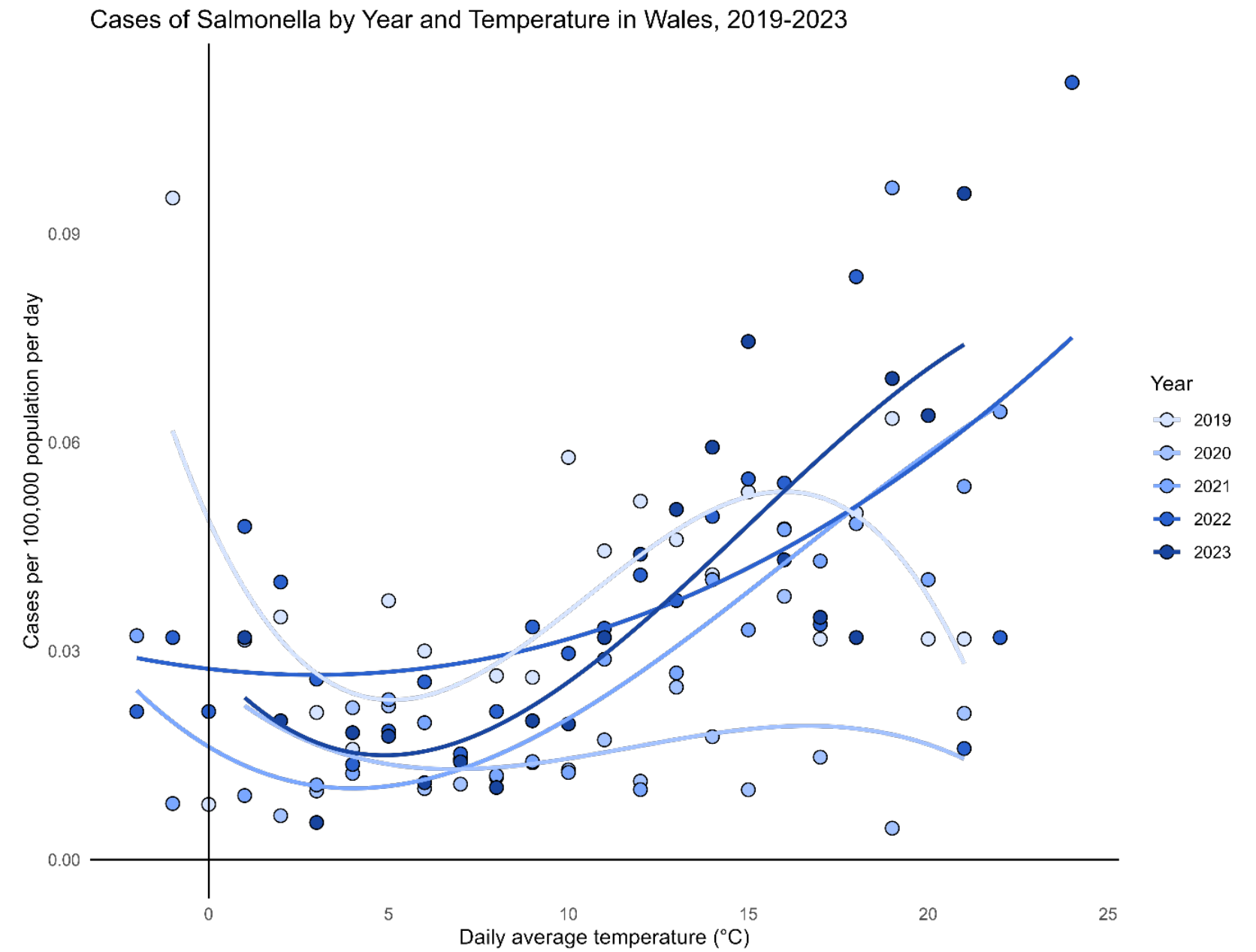
# Team overview

- To provide high quality field epidemiology, surveillance, scientific advice, research and training in order to protect and improve the health of the population of Wales (and other partner countries), with a focus on prevention and control of communicable disease
- The team is supported by Epidemiological scientists, Information Managers, Bioinformaticians and Information Analysts and structured around disease specialty groups including;
  - Gastrointestinal, Zoonotic and emerging infections
  - Field epidemiology, Surveillance, Research and development, Training
  - Healthcare Acquired Infections, Antimicrobial Resistance, Bioinformatics
  - Vaccine Preventable and Respiratory diseases
  - Sexual health, Blood-borne Viruses and Tuberculosis

- Field epidemiology service (chart of open incidents by day and type)



- Integrating environmental data into gastrointestinal reports, and draft climate sensitive infections report



# From local to international- influenza surveillance

## Wales National Influenza Centre- think globally, sample locally

- Expansion of sentinel surveillance has greatly improved sensitivity and representativeness
- Individuals consult GP or sentinel pharmacy and provide information on their symptoms, vaccine status and a swab for virology and sequencing
- Virology characterises virus
- Sequencing places the virus in the context of global viral changes
- Wales contributes to global (World Health Organisation) viral surveillance which influences the choice of vaccines across the world
- Collaboration between surveillance team (working with practices, logistics, reporting); Wales National Influenza Centre; Pathogen Genomics; Global sequence databases such as GISAID
- Sequence names include location – Anglesey swab from LlanfairPG challenged the character limits

### Tracking of Influenza Subtypes

A/H1N1

pared 56,484 A/H1N1 genome sequences from  
accessible via GISAID EpiFlu.

### Map of tracked variant occurrence

Circle size proportional to number of variant genomes, zoom into region for more detail. Color by recency with red being most recent.





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# Vaccine Preventable Disease Programme (VPDP)



# Vaccine Preventable Disease Programme – Background Information

## Mission Statement

*To save lives and prevent harm by maximising the protection of the population of Wales from vaccine preventable diseases, through leadership, engagement and information.*

## Our IMTP Objectives for 24/25

*Support the development and delivery of a cervical cancer elimination plan with a focus on improving uptake of the HPV vaccine*

*Support the delivery of the NIF for Wales, with a focus on providing leadership and expertise and increasing vaccine literacy.*

*Develop systems for routine collection of patient and professional feedback to support excellent service delivery*

## Role

*To provide expert input into policy and practice at a local, national, four nations and international level. This is achieved through delivery of surveillance, evidence, public and patient information, professional training and best practice guidance.*

## Our Values

*Our work will be guided and informed by our beliefs and commitments to a culture which is: Enabling, Collaborative, Leading, Evidence Based, Equitable and Diverse.*

## Our Long term objective

*By 2035 we will have helped lead and support excellent immunisation and vaccination programmes, resulting in much less ill health*

## Facts and Figures



The current routine UK vaccination schedule protects against 20 different diseases and infections. By the end of 2025 we expect to protect against 4 more diseases.



VPDP supports and enables partners across NHS Wales to deliver 240,000 vaccines per week at peak delivery and over 2.1m doses each year



Vaccination for the 10 diseases offered by the NHS between 1947-2007 is estimated to have saved the NHS £330 million in Wales for each annual birth cohort vaccinated. (based on population share)



The cost of effective vaccination has been estimated to be only 5% of the cost of public health management of outbreaks of vaccine preventable disease (based on measles)



Our 2023 winter vaccinations campaign materials were seen over 20 million times between September and December.





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# Environmental Public Health



# Environmental Public Health

***The Environmental Public Health team works to protect health and prevent health harms, and increase the health benefits, linked to environmental hazards and a changing climate. Through this work it also aims to narrow the inequalities associated with health outcomes of environmental hazards and a changing climate, by improving health for all***

Priority 1: Environmental public health emergencies and incidents – prevention and response

Priority 2: Data review and interpretation

Priority 3: Climate change, weather and future and emerging threats to health

Priority 4: Wider determinants of environmental public health

Practice, influencing policy, research, training, teaching, surveillance

•Areas of work include proactive (including Clean Air Bill, transport, sex-based differences, Climate risk assessments for prisons), reactive (including, Extreme weather, Fires, Water quality / land contamination and Carbon monoxide) and quality (including Readability Review and Service User Experience Review)

# International Learning Opportunity (ILO) programme

## Overview

- Environmental Public Health Scientist Amber Horton recently undertook an eight-week ILO programme in Lesotho, Africa with the Lesotho Red Cross Society (LRCS) and Heal Our Land Organisation (HOLO).
- The programme is designed to push you outside of your comfort zone to challenge you creatively, developing both your personal and professional skills. Whilst on placement, you develop leadership skills, strategic thinking, problem solving, communication skills and many more
- As part of her work with the LRCS, Amber was based in the Disaster Management team, which specifically works on disaster preparedness and response, including extreme weather events.
- This work was closely linked to Amber's role here in Wales as an Environmental Public Health Scientist. Amber's work plan with LRCS included working on the roll-out of the Drought Early Action Protocol (EAP) which involved contribution to high-level, multi-agency meetings and the development of proactive health communication resources for use during droughts and other natural disasters
- Amber incorporated the skills used in the day job by delivering teaching and training sessions on extreme weather events and collaborating with another ILO participant on a teaching session
- Amber learnt an immense amount about the similarities and differences of the work taking place in Lesotho. With specific reference to extreme weather preparedness and response, the environmental public health team are currently brainstorming ideas of how they can potentially adopt the techniques and models used in Lesotho back in Wales





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# Communicable Disease Inclusion Health Programme (CDIHP)

# Service user/person/population centred health provision story

## Service improvement, examples from CDIHP

- **Using feedback from Sexual Health Wales online platform to constantly improve the service:**
  - *"I found it very hard due to I struggle to read"* - implemented 'Recite Me' within webpage
  - *"Should be able to send the kit to a collection point"* - introduced community test kits through stakeholders in local area
- **Monitoring feedback received from Sexual Health Wales:**
  - *"I really like that the questions were straight to the point and the reassurance before disclosing intimate information put me at ease"*
  - *"This is a fantastic service. I haven't had a sexual health check in years because it's too difficult for me to access. I have only just found out about this service."*
  - *"All self explanatory and easy to use/navigate"*
  - *"A reliable service for men too scared to enter a clinic. Well done."*
- **Using feedback from service providers to improve our outbreak support:**
  - *"Thank you for a very good morning. This was my first time being involved. The whole morning was extremely well organized and beneficial."*
  - *"I felt there could have been some time spent developing preventable measures to mitigate the risk. The session was very thorough provoking which has led to further discussions outside of this meeting which other services/ areas could have benefited from when coming up with a strategy in developing these measures."*

## Service planning, examples from CDIHP

- Involving service users in research – Including service users on our project board for *"Reducing substance use-related harm among people in prison and on their release: A qualitative study"*
- Using research to better understand the service users experience: *"Understanding COVID-19 vaccine hesitancy in prisons in Wales"*

# Service user/person/population centred health provision story

## Examples of feedback from WEDINOS

Hi WEDINOS.

Thank you  
for doing  
what you do.

- Grateful  
guy

Dear Sir/Madam,  
This is a sample of substance  
I found at home.

My son is an addict but  
will not tell me what he is on.

He is very poorly.

This will help us understand how  
to help him.

Thank you + Bless you  
for the help you provide.

Best wishes

THANK YOU FOR  
THIS AMAZING  
SERVICE! B

Big thank you  
for all the work  
you do.



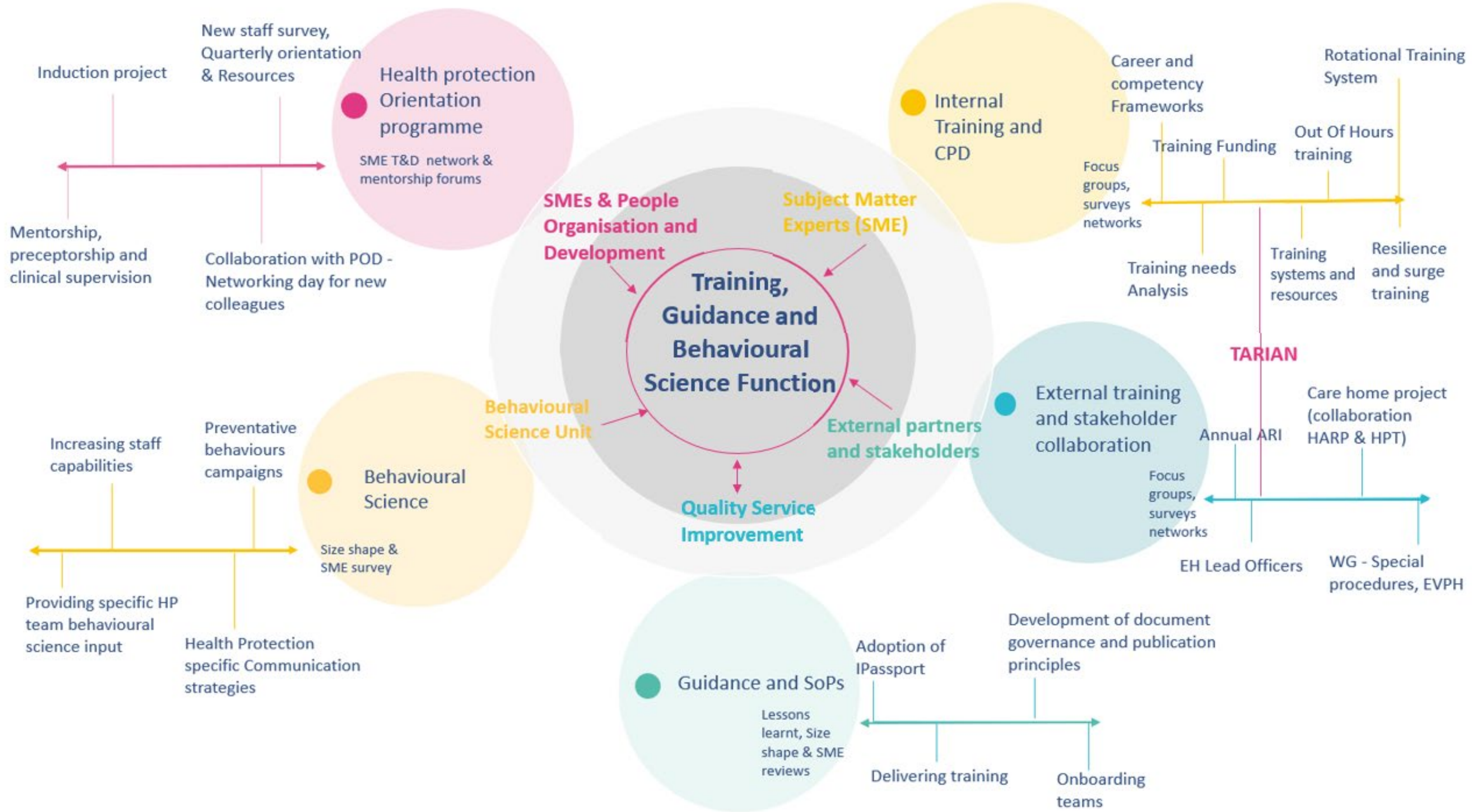


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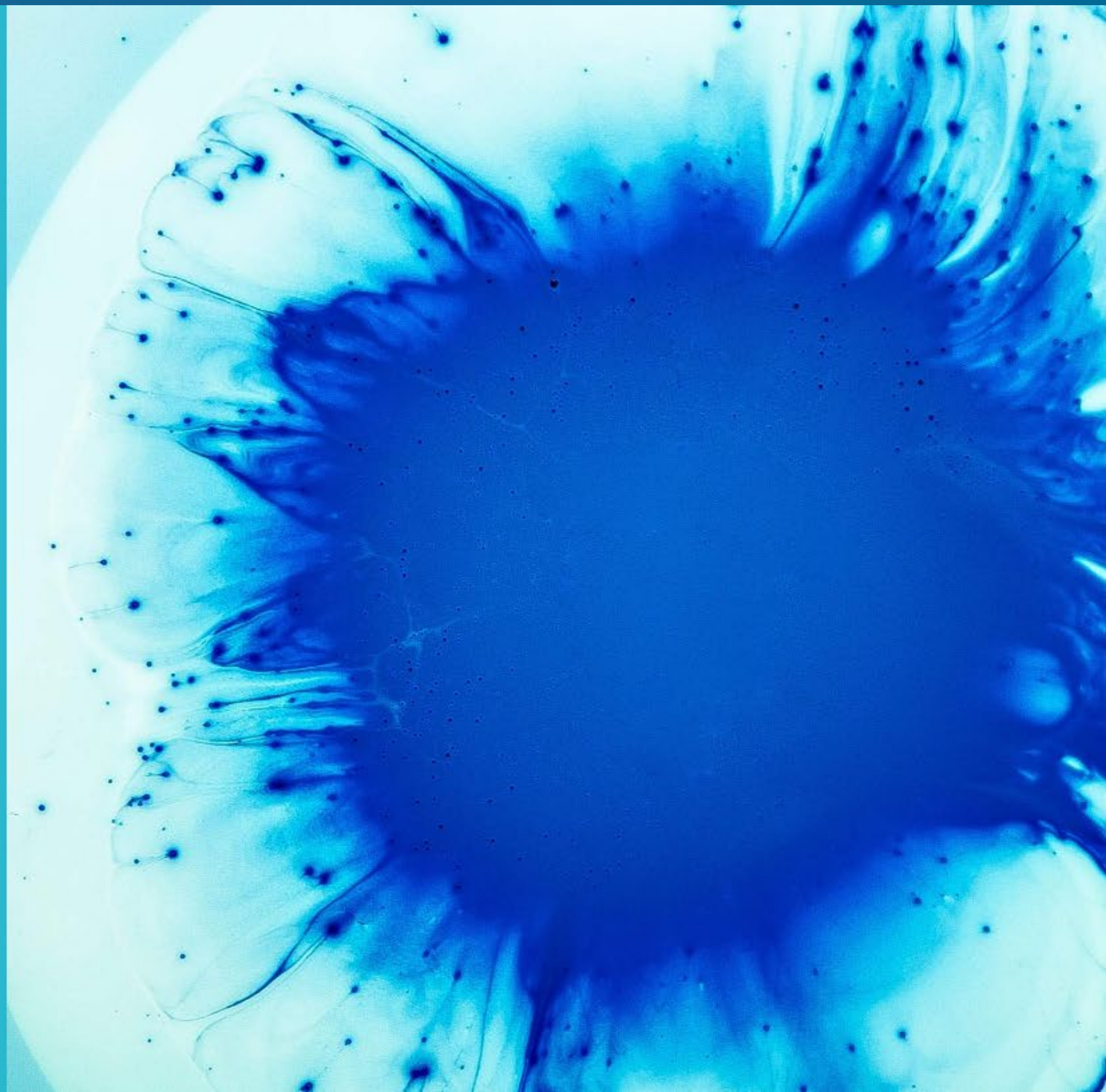
# Training and Guidance





# Science in Health Protection Seminar 2023

RESUME COURSE





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# Business and Operations



# Business and Operations Team

## Who we are and what we do...

- Led by the Head of Operations the Business and Operations team plays a key role in enabling and ensuring effective service delivery across the entire Health Protection Division
- The team is structured around Programme Managers, Operations Managers and Administrative Teams, each responsible for oversight at a single or multiple team level
- Key operational responsibilities within the team include financial management, risk and incident oversight and investigation, recruitment, performance and assurance reporting and day to day operational oversight of key areas
- The service focused elements of the team are comprised of Notification Officers and Senior Resource, Administrative Officers/Personal Assistants and Administrative Managers supporting both the All-Wales Acute Response (AWARe) service and senior clinical staff across the Division
- Key responsibilities include diary and email management, minute taking, file management, event coordination and making and receiving calls, including those through the AWARe service
- Within the team there are also specialist supporting roles in Quality, Audit, Risk, Incident management and Clinical and Non-clinical project support

# Forward Look

## Key priorities for 24-25

- Transition of the Division to the corporate records management system (SharePoint) by March 2025, including embedding a culture of records management demonstrated by effective and efficient records retention and destruction
- Managing historical records within the Division to ensure the risk of non-compliance with records management is reduced through accurate archiving and where possible digitisation
- Achieving more robust financial governance systems to enable the achievement of 0.5% variance to budget in the next two years
- Achieving more effective alignment with the long-term strategy, IMTP and operational plans and increased opportunity for collaborative working across the Division
- Development of detailed surge planning processes within all relevant staff groups, aligned with the organisational Emergency Response Plans and Outbreak Control Plan
- Completion of the recruitment of all posts secured through the sustainable funding plan and long term vacancies within the Division



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# Key priorities for 2024-25



# Forward Look (1)

- Review Health Protection and Infection Services delivery in the context of the new and revised delivery model in order to generate recommendations, opportunities for improvement and streamline processes and workflows
- Work with Key partners to support ongoing processes to strengthen the national Health Protection system in Wales which prioritises activities including partners across the UK health Protection Committee and four Nations Oversight Group
- Complete a comprehensive review of Health Protection team services in the context of developing Health Protection service models in the local Health board regions to ensure safety, efficiency and formal collaborative working
- Continue to support Welsh Government in their implementation of the recommendations from the independent external review of the health protection system in Wales
- Monitoring and delivering progress towards the elimination of six diseases by 2030, with a focus on the establishment of a Health protection led blood-borne viruses elimination oversight group and continued support of established blood-borne viruses, HIV and TB Welsh Government groups

# Forward Look (2)

- Develop and embed systems for routine collection and analysis of patient and stakeholder feedback to drive equitable, effective engagement and deliver excellent public health services
- In partnership with the Screening Services Division, support the development and delivery of a cervical cancer elimination action plan with a focus on improving uptake of the Human papillomavirus virus vaccine amongst the Welsh population
- Actively support the delivery of the National Immunisation framework for Wales and the six priority areas, with a focus on providing national leadership and expertise to improve the utilisation of epidemiological data and increasing vaccine literacy
- Continue to work with partners to address the requirements of the Sexual Health Priority Areas 2020-24, with a focus on increasing accessibility through the determination of access pathways and subsequent improvement of public understanding, implementation of sexually transmitted infection and BBV community kit provision with local stakeholders and delivery of the HIV Action Plan

# Forward Look (3)

- Improve, develop and implement processes to monitor harms associated with private water supplies, whilst continuing to as identify actions to address long term issues of quality and scarcity
- Develop, implement and embed new document and record management systems within the Environmental Health Protection team to ensure a robust, efficient and effective management of documents used to enable independent, specialist and contextualised advice and support to partner agencies and the public
- Review and evaluate opportunities for the use of field epidemiology in environmental incidents, with recommendations and improvement opportunities used to inform development and implementation within 2025-26
- Development of a robust and coordinated approach to the surveillance of weather-related health outcomes, using knowledge to inform evidence-based action and effective public health interventions



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Gweithio gyda'n gilydd  
i greu Cymru iachach

Working together  
for a healthier Wales