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# Screening Programmes – Knowledge, Research and Information Committee

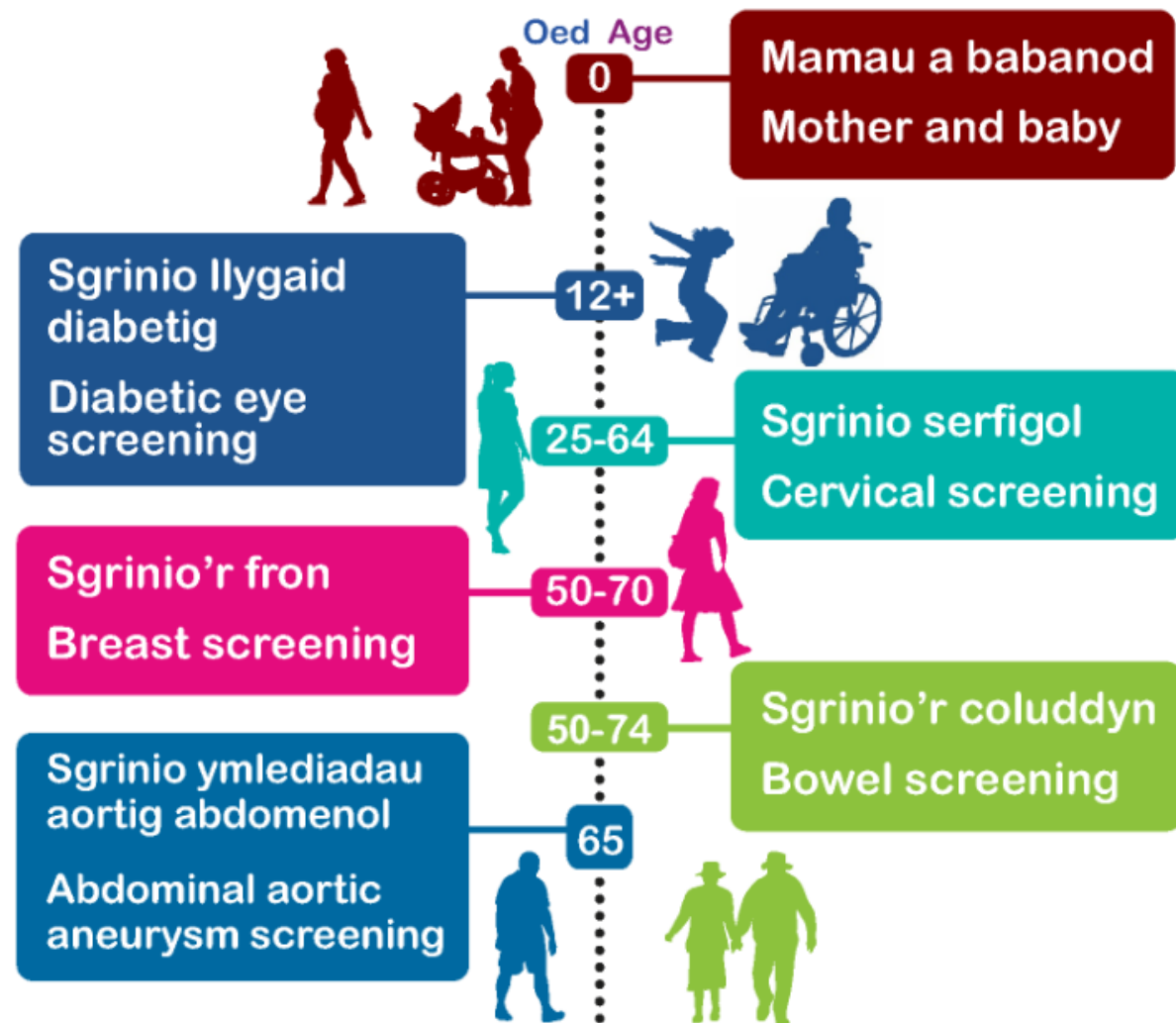
**Dr Sharon Hillier**  
Director Screening Division

June 2025

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# Screening Programmes

- Screening services are delivered in line with recommendations from the UK National Screening Committee. This UK body makes decisions about screening based on the latest and best evidence and research. This way, screening is only offered when there is more benefit than harm for the people invited.



# Knowledge

## UK National Screening Committee

- The UK NSC assesses evidence for screening against its criteria for appraising the viability, effectiveness and appropriateness of a screening programme. These cover the condition, test, treatment and the effectiveness of a screening programme.
- The UK NSC has made recommendations on screening programmes for more than 100 conditions.
- The recommendations consider published evidence against the criteria with expert independent review and include stakeholder and public consultation before finalising
- Regular review and if significant evidence is published in between can review earlier
- Reviews evidence for suggested changes to existing screening programmes and suggestions for new topics

UK NSC Recommendations considered in Wales by the Wales Screening Committee and Welsh Government makes policy decision.

# UK National Screening Committee – recent considerations

## Recommendations:

### Progress update on UK NSC's recommendation to screen for tyrosinaemia

13 November 2023 - General, NHS Health Services, Blood and Tissue Donations



In February, we reported about the UK National Screening Committee's (UK NSC's) recommendation to introduce screening for hereditary tyrosinaemia Type 1 (HT1) in newborns.

### UK NSC recommends introduction of targeted lung cancer screening

15 November 2022 - General



The UK NSC has recommended that the 4 UK nations should move towards implementing a targeted national lung cancer screening programme, integrated with smoking cessation services.

### NHS England starts detailed implementation planning for tyrosinaemia screening

18 December 2024 - General



## Developing recommendations:

### Assessing the evidence for using multi-cancer early detection tests in screening

16 November 2023 - General



### UK NSC sponsors new research into use of AI in breast screening

17 May 2023 - General



### Final data analysis under way to inform SCID screening recommendation

28 March 2025 - General



Charlie Rando, from Manchester, had a stem cell transplant after screening positive for SCID as part of the UK's October 2021 - you can read more about Charlie's story on the International SCID website.

### Experts discuss the challenges of using surrogate endpoints in cancer screening

19 February 2025 - General



### Progress update on UK NSC work to assess newborn screening for SMA

19 November 2023 - General



### Seminar explains process of planning and running an in-service evaluation

10 November 2019 - Unpublished



### The Generation Study: exploring genome sequencing in newborns

12 February 2025 - General



# Targeted Lung Cancer Screening :

UK NSC recommends introduction of targeted lung cancer screening

20th Dec 2022, 09 November 2022 - General



The UK NSC has recommended that the 4 UK nations should move towards implementing a targeted national lung cancer screening programme, integrated with smoking cessation services.



September 2022 UK National Screening Committee approved 'Targeted screening for lung cancer is recommended for people aged 55 to 74 identified as being at high risk of lung cancer. Evidence shows that screening with low-dose computed tomography:

- reduces lung cancer mortality (up to 33% reduction at 10 years)
- is acceptable to patients and professionals if adequately resourced and quality assured

Lung cancer is the leading cause of cancer death in Wales -52% annual mortality rate in Wales with 68% of lung cancers identified at stage 3 or 4

- Report submitted to WG end March 2025 incorporating recommendations re: pathway and delivery model, estimated costs and indicative timeframe for implementation
- Recommendations approved by Wales Screening Committee April 2025
- Summary presented to NHS Leadership Board April 2025, generally positive feedback
- Advised that briefing has been provided to the Cabinet Secretary for Health and Social Care - feedback awaited
- Programme team preparing for a positive response e.g. developing governance structure for implementation, detailed implementation plans etc

# Newborn Screening for Tyrosinaemia type 1:

In November 2022, the UK National Screening Committee (UKNSC) recommended the introduction of screening for an additional condition, Tyrosinemia type 1 (HT1), into the newborn bloodspot screening programmes.

England planning to implement July 2025 and complex work to safely manage cross border babies.

The Wales Screening Committee agreed to accept this recommendation in principle in August 2023 and to support work towards implementation of screening for this condition within the Newborn Bloodspot Screening Wales (NBSW) programme

A Wales Implementation Group has been established, with representation from laboratory and clinical colleagues as well as third sector.

Requirements for Implementation :

- The IT system currently used by NBSW is not fit for purpose and is beyond end of life. Re-platforming work is now underway lead internally rather than DHCW - will provide a stable base. Hoped to complete replatform July 2025 and not certain of funding for delivery of next phase which is needed for additional conditions.
- Laboratory infrastructure (Cardiff and Vale) – accommodation for expansion (bid being prepared by HB to WG) and moving to commercially available tests required.

Progress update on UK NSC's recommendation to screen for tyrosinaemia



In February 2023, the UK National Screening Committee (UKNSC) recommended to introduce screening for hereditary tyrosinaemia type 1 (HT1) in newborns.

NHS England starts detailed implementation planning for tyrosinaemia screening

Miranda Lawton and Jane Hibbert, 18 December 2024 - General





# Research and Evaluation

# Ymchwil Sgrinio

Collaboration between PHW Screening Division and Cardiff University's Division of Population Medicine to:

- Promote population-screening research, evaluation and education.
- Enhance the health of the population of Wales by improving uptake and decreasing inequalities of uptake.
- Advance innovative practice, novel screening technologies and methodologies

## Objectives

- Identify population-screening related research questions
- Develop joint funding bids and research and evaluation projects
- Explore pathways to translate and incorporate research output into service delivery
- Undertake joint undergraduate and postgraduate teaching initiatives and related research
- Explore the establishment of joint posts (honorary and funded)
- Train and develop staff and students in research and engagement and public impact
- Develop a cohort of researchers and future leaders with expertise in population-based screening research and education.

# Research

- **Bowel Screening Wales – Positive Non-Responder project**

- Funded by Cancer Research UK,
- The project aims to explore and evaluate innovative approaches to improving cancer screening uptake by better understanding and addressing why some individuals do not respond to screening invitations.
- Focuses on participants who do not respond after receiving a positive result from a bowel screening test kit.
- Revised result and reminder letters, the introduction of SMS reminders, and a dedicated Pathway Navigator making outbound calls to encourage engagement and increase uptake of follow-up appointments.
- Early indications show it is already making a positive difference in shaping more targeted and effective strategies to that could reduce inequalities.

- **Bowel Screening Wales – Colospect Research Study**

- Funded by Cancer Research Wales
- Swansea University working with Public Health Wales and Bowel Screening Wales to see if we can increase the accuracy of bowel cancer screening using the Raman blood test.
- Blood samples will be analysed from 2000 people who are referred for a colonoscopy following a positive screening test. The aim is to assess how accurately the Raman blood test detects cancer in these patients, but also to determine how many colonoscopies could be avoided by ruling out the presence of bowel cancer.

# Evaluation

## Targeted intervention to non-responders for first screening offer

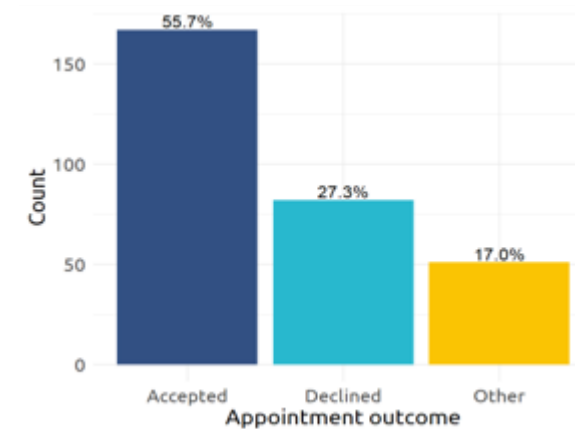
National Health Protection Support Team (NHPST) skilled to undertake intervention to contact non-responders, To increase likelihood of taking up screening offer, reduce inequity gap, and understand barriers to attending screening

Innovative and Collaborative work –

- Priority health protection response and keeps skills
- NHPST, Behavioural Science Team, Health Protection and Screening
- WAAASP first programme and just started with DESW

### Impact

- Increased screening appointments booked – improving uptake
- Aneurysms detected in previous non responders – direct outcome of work
- Understanding of barriers
  
- **Key evaluation Projects going forward joint working with PHW Central Evaluation team:**
- **Evaluation of Cell Free DNA pathway that has been introduced as part of the Antenatal Pathway for pregnant women who have RhD negative blood group.**
- **Evaluation of the Topcon Non-Mydriatic Retinal Camera to undertake diabetic retinopathy grading in Wales without the application of tropicamide eye drops (transformation opportunity for service)**



# Evaluation

## Wales Abdominal Aortic Aneurysm Screening - UK Effectiveness review

Detailed review into the first decade (April 2013 to March 2023) of the screening programme's full implementation across the UK.

The effectiveness review of those 10 years found that:

- 3.45 million men were invited for screening, of whom 80% attended
- the death rate from ruptured AAAs in the UK fell by around a half
- the number of men treated in hospital for ruptured AAAs also fell by around a half

The review concluded that the national NHS AAA screening programmes in the UK are effective and contribute substantially to the ongoing reductions in AAA-related deaths.

Percentage of deaths related to AAA 2002 to 2024 (Wales data).

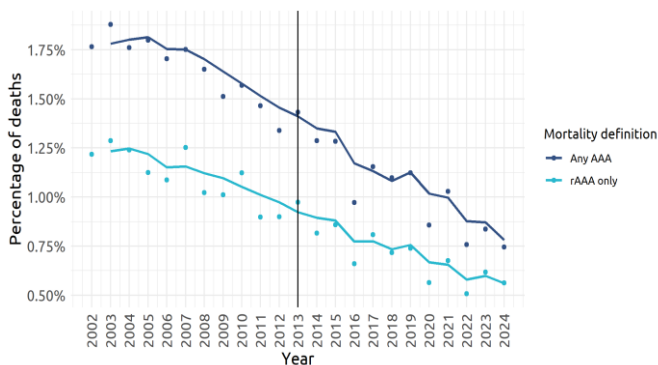


Table 1. Summary of ruptured abdominal aortic aneurysm outcomes in Wales as reported by the UK AAA effectiveness review.

Year	2013	2023	Percentage change
Prevalence of AAA in screened individuals	1.29	0.91	29.46%
Hospital admissions with rAAA primary diagnosis in males	138	44	68.12%
Percentage of deaths due to rAAA in 65+ males	1.30%	0.61%	53.08%

# Information

# Performance of Screening Programmes

**We aim to deliver Excellent Screening Services in Wales.**

**This means...**

- Safe (S)**  
 We offer high quality services, where each screening programme works to a set of quality standards. We work together with the rest of the health service so people are referred for further tests or treatment if they need it. All our staff are appropriately trained and keep their skills up to date.
- Timely (T)**  
 We aim to invite people on time, in line with our standards, and send information and results without delay.
- Effective (E)**  
 Screening services are delivered in line with recommendations from the UK National Screening Committee. This UK body makes decisions about screening based on the latest and best evidence and research. This way, screening is only offered when there is more benefit than harm for the people invited.
- Efficient (E)**  
 We make the best use of the resources we have to improve people's health and get the best value for money.
- Equitable (E)**  
 We aim to give everyone equal and fair access to the screening tests they can benefit from. We work with individuals, communities and organisations to make sure everyone can take up their offer of screening.
- People-centred (P)**  
 We aim to treat everyone respectfully and as individuals, recognising that people have their own needs, values and preferences. Taking part in screening is a choice. We work hard to give people the information they need in a way they can understand. This will help them make a decision about whether to take part. We ask for feedback and listen to people who take part in screening. We use this information to help us design and improve our services.

For each of the Screening Programme there are programme standards that can be aligned to the STEEP framework. These are reported monthly and metrics focused on timely are shared with the Board. These are process measures but not outcome measures

**Newborn Hearing Screening Wales - Screening Performance/ Activity Report**  
 All Wales Summary  
 January - March 2025

**Service Description**  
 The aim of Newborn Hearing Screening Wales is to identify babies with hearing impairment which, without additional help and support, is of sufficient severity to potentially cause a disability.

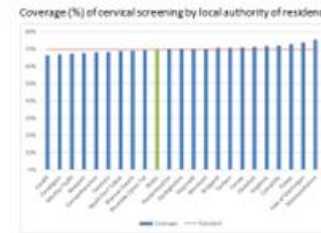
Indicator	Name	Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
1	NBH-001A	Completeness of offer	>= 99%	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9
2	NBH-001B	Coverage	>=98%	99.1	99.1	99.3	99.0	99.0	99.3	99.3	99.4	99.1	99.3	99.5
3	NBH-002B	Uptake	>=98%	99.2	99.1	99.4	99.0	99.1	99.4	99.4	99.1	99.4	99.6	98.9
4	NBH-004A	Well babies timeliness of completion of screening	>=90%	97.0	96.8	96.9	97.8	97.8	98.1	97.1	97.9	90.9	96.0	97.7
5	NBH-004D	High risk babies timeliness of completion of screening	>=95%	99.3	98.0	97.9	96.3	98.3	99.4	97.9	98.7	97.0	98.3	97.3
6	NBH-006A	Timeliness of offer of assessment for Well Babies	>=90%	100.0	92.9	100.0	95.7	100.0	95.2	100.0	100.0	88.2	100.0	100.0
7	NBH-006B	Timeliness of offer of assessment for high risk babies	>=90%	100.0	100.0	100.0	100.0	100.0	100.0	92.9	100.0	100.0	100.0	93.8
8	NBH-006C	Timeliness of initial assessment appointment attended by Well Babies	>=90%	96.0	71.4	91.7	76.2	93.8	84.2	100.0	92.9	75.0	94.7	66.7
9	NBH-006D	Timeliness of initial assessment appointment attended by high risk babies	>=90%	94.4	94.4	100.0	85.7	86.7	88.2	90.9	91.7	100.0	100.0	86.7
10	NBH-007A	Timeliness of completion of assessment	>=85%	93.5	93.9	87.0	89.2	91.2	85.4	76.9	86.7	87.5	93.9	86.7
11	NBH-007B	Timeliness of completion of assessment for well Babies	>=85%	92.6	92.9	85.7	82.6	94.1	90.5	83.3	87.5	88.2	95.0	83.3
12	NBH-007C	Timeliness of completion of assessment for High Risk Babies	>=85%	94.7	94.7	88.9	100.0	88.2	80.0	71.4	85.7	86.7	92.3	88.9
13	NBH-008A	Screening appointments offered to well babies that are not attended	<=3%	2.5	2.8	2.0	2.6	2.1	2.4	2.5	1.2	3.1	1.7	1.9
14	NBH-010	Screened babies referred for assessment	Between 1 - 2%			1.6			1.1			1.2		0.95
15	NBH-012	Babies who are referred for assessment and not seen	< 5%	6.5	3.0	8.7	5.4	8.8	9.8	7.7	10.0	3.1	3.0	3.3

# Equity Data

**“Our vision, across the national screening programmes in Wales, is that everyone eligible for screening has equitable access and opportunity to take up their screening offer using reliable information to make a personal informed choice.”** - Screening Equity Strategy

We have **some** information on how people take up their offer of screening described by demographics but not all of the demographics that we would like to describe. Can describe geography, age, gender, deprivation and type of invitation. share these via:

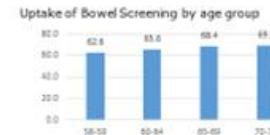
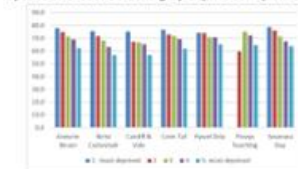
- Annual Inequity report [Screening Division Inequity Report 2023 - Public Health Wales](#)
- Cluster uptake and coverage [Uptake / Coverage by GP Cluster - Public Health Wales](#)
- Joint Screening and Health Board inequities meeting every 8 weeks with work to reduce inequity – with focused session on specific programmes and sharing of qualitative data from screening engagement projects



Uptake (%) of bowel screening by gender

Health Board	Male	Female	Gap	Inequity Gap 20/21
Aneurin Bevan LHB	62.6	62.6	0.0	1.9
Betsi Cadwaladr LHB	65.3	65.3	0.0	2.5
Cardiff and Vale LHB	65.5	65.5	0.0	2.0
Gloucestershire and Wiltshire LHB	65.5	67.6	1.8	0.0
Grampian LHB	66.0	65.9	0.2	0.1
Health Wales	65.4	70.5	5.1	5.5
Swansea Bay LHB	65.5	67.6	2.0	0.0
All Wales	65.0	65.0	0.0	3.0

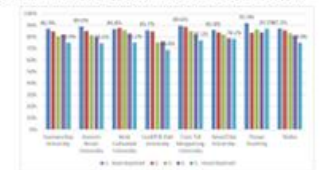
Uptake of Breast Screening by deprivation quintile by health board



Uptake of Bowel Screening by type of invitation

Invitation type	Invited	Accepted	Uptake
First	24861	20981	84.5
First, not previously contacted	8479	2069	24.4
First, previously contacted	24861	22872	92.0

Uptake of AAA Screening by deprivation quintile by health board



# Work still to do

**1. The Committee is asked to support joint working to be able to evaluate the screening programme impact on system outcomes.**

The long term strategy details the system wide outcomes that the adult screening programme aims to:

- Increase the proportion of bowel and breast cancers diagnosed at an early stage (to add lung cancer in future)
- Reduce the incidence of cervical cancer
- Reduce sight loss from diabetic retinopathy
- Reduce mortality from ruptured abdominal aortic aneurysms (in process).

**2. The Committee is asked to support the approach that routine demographics in Wales should include data that enable a detailed understanding of equity across all protected and other relevant characteristics.**

- It is important that other demographic details are described so that we can understand the patterns on uptake and measure impact of improvement work.
- These includes ethnicity which is not recorded routinely on demographic feeds in Wales. Cancer incident report released 5 June shows higher breast cancer incidence in females of Asian ethnicity – key to correlate with screening uptake.

**3. The Committee is asked to recognise the work that is underway to ensure that the screening programme have safe and effective IT systems that are fit for purpose**

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**Thank you very much**  
**Diolch yn fawr**