Public Health Annual Report 2015-16

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1.0 Introduction

The public health annual report aims to provide an overview of the current state of health of the people of Orkney, support the development of public health policy to improve health and reduce avoidable health inequalities, and highlight local public health activity.

Scottish Government has produced a number of significant reports over the year which will shape care. These include the National Clinical Strategy in February 2016 which highlights the approach of providing the majority of care at home or in a homely setting, and addressing over-treatment, harm, waste and variation.

The Chief Medical Officer of Scotland published her first report in January 2016 challenging the current approach to how medicine is practiced and advocating for a “Realistic Medicine” approach. The Health and Social Care Delivery Plan, December 2016, sets clear activities and milestones that focus on four major programmes of activity around health and social care integration, the National Clinical Strategy, NHS Board reform and public health improvement.

There has been significant change in the health system with the activation across Scotland in April 2016 of integration authorities that commission health and social care services, and there is further change particularly in public health likely to come.

However, some of the issues impacting on the well being of the people of Orkney remain unchanged – high levels of obesity in adults and children, misuse of alcohol, and smoking remain problematic locally and nationally in Scotland. Working with other agencies at a local, regional and national level, is required to tackle these issues. A focus on the underlying social and economic determinants that drive poor health and well being must also be maintained.

I would like to thank everyone who has contributed to this report, which would not have been possible without support from colleagues across the NHS, Orkney Islands Council and the Community Planning Partnership. I would also like to thank the members of the public health team for their hard work and support over the past year.

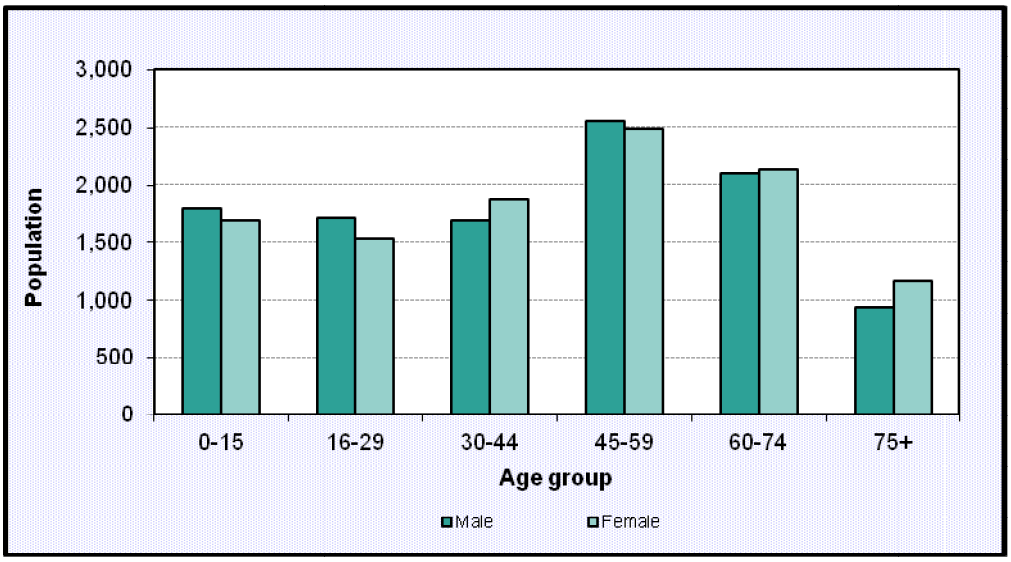
This report is aimed at organisations and individuals interested or involved in improving the health of the people of Orkney. I hope you find it useful and I welcome your comments on issues raised in the report.

Dr Louise Wilson
Director of Public Health

2.0 The Facts & Figures

The population of Orkney was estimated to be 21,670 in 2015, an increase of 0.4% from 2014. Figure 2.1 shows the age profile for males and females.

Figure 2.1 Estimated population of Orkney Islands by age and sex, 30 June 2015



Source: National Records of Scotland 2016

The trend, within Orkney as elsewhere in the Scotland, is currently towards an ageing population. Currently 9.7% of the total population is estimated to be aged 75 years or over (Table 2.1).

Table 2.1 Estimated population of Orkney Islands and Scotland, by age group, 2015

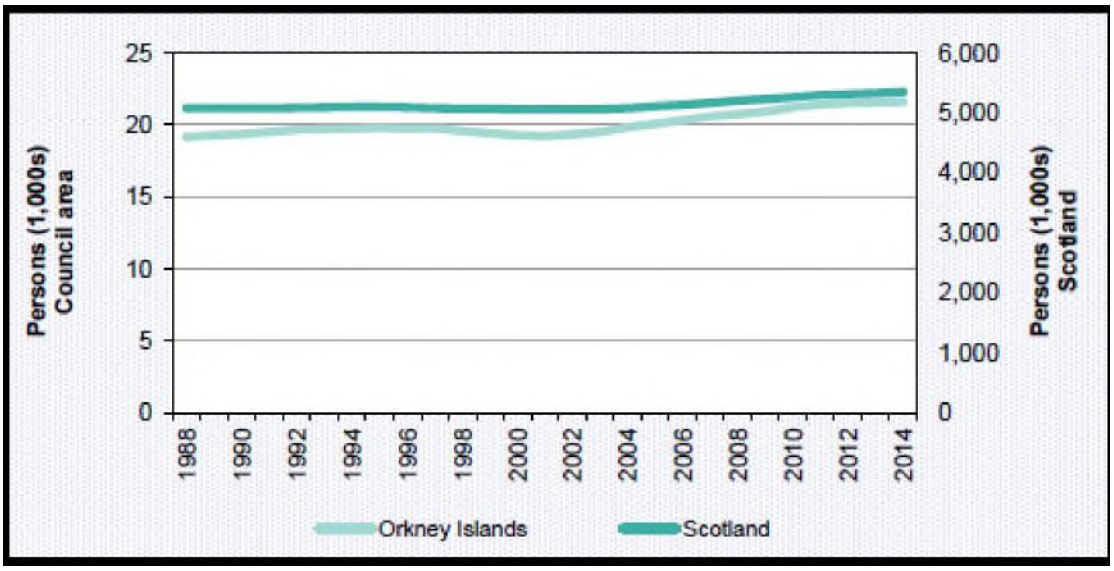
Age group	Male pop. Orkney Islands	Female pop. Orkney Islands	Total pop. of Orkney Islands	% of total pop. of Orkney Islands
0-15	1,796	1,693	3,489	16.1%
16-29	1,706	1,530	3,236	14.9%
30-44	1,683	1,874	3,557	16.4%
45-59	2,563	2,489	5,052	23.3%
60-74	2,100	2,139	4,239	19.6%
75+	937	1,160	2,097	9.7%
All ages	10,785	10,885	21,670	100.0%

Source: National Records of Scotland 2016

Migration within Orkney and Migration to and from Orkney

The number of residents in Orkney is partially determined by the number of people who leave or move to the islands (Figure 2.2).

Figure 2.2 Estimated population of Orkney Islands and Scotland, 1989-2015



Source: National Records of Scotland 2016

The number of residents in Orkney is partially determined by the number of people who leave or move to the islands. The most recent figures on migration (2013-2015) show a positive net in-migration for Orkney of 83 people (Table 2.2). Like last year, the greatest inward migration is in the 16-29 age group, which also shows the greatest outward migration.

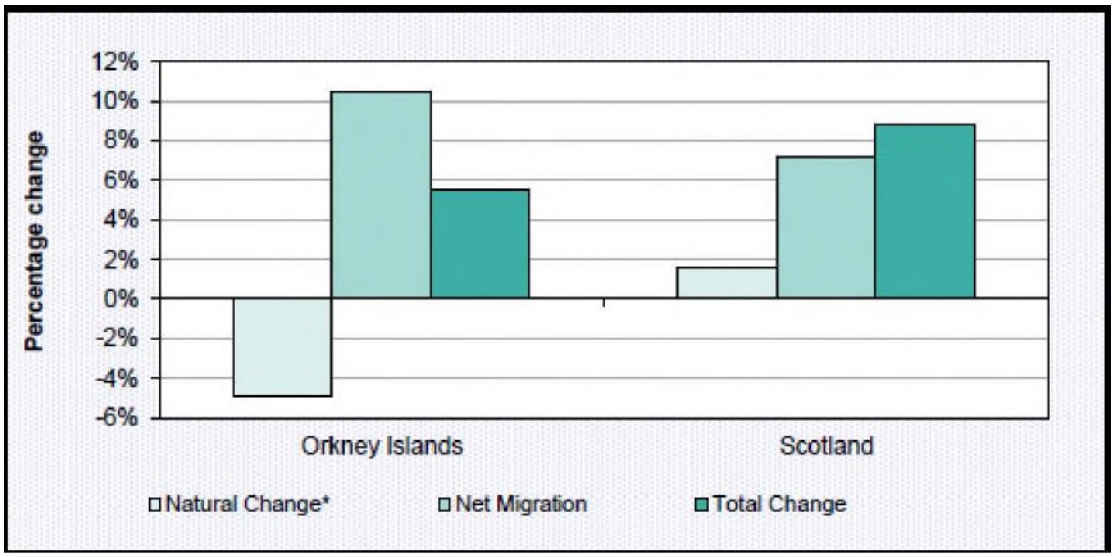
Table 2.2 Average migration in and out of Orkney Islands, 2013-15

Age Group	In	Out	Net
0-15	117	79	38
16-29	220	270	-50
30-44	157	123	34
45-64	183	127	56
65+	65	60	5
All ages	742	659	83

Source: National Records of Scotland 2016

In the long-term the population of Orkney is projected to increase by 5.5% due to the impact of in-migration, whereas the population of Scotland is projected to increase by 8.8% (Table 2.3).

Table 2.3 Components of projected population change for Orkney Islands and Scotland, 2012-2037 (2012-based projections)



*Natural change equals births minus deaths

Source: National Records of Scotland 2016

Projected population of Orkney

The population of Orkney is projected to rise to 22,724 by 2037 (Table 2.4).

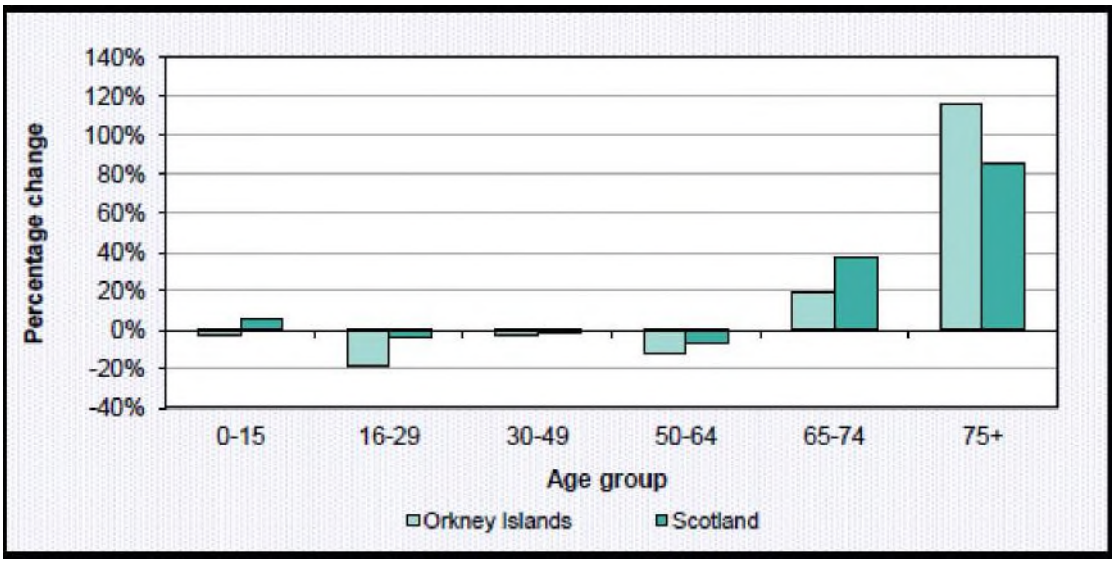
Table 2.4 Projected population, by age group in Orkney Islands 2012-2037

Age group	Base year	Projected years				
	2012	2017	2022	2027	2032	2037
0-15	3,572	3,477	3,621	3,652	3,611	3,463
16-29	3,306	3,096	2,736	2,505	2,583	2,687
30-49	5,504	5,152	5,244	5,563	5,505	5,328
50-64	4,698	4,916	4,875	4,594	4,154	4,137
65-74	2,601	2,769	2,841	2,903	3,143	3,119
75+	1,849	2,294	2,819	3,279	3,675	3,990
All ages	21,530	21,704	22,136	22,496	22,671	22,724

Source: National Records of Scotland 2015

It can be seen that the number of children and adults is projected to decrease in contrast to the increase in older people (Figure 2.3). In Orkney, both health and social care services are preparing to meet the needs that the predicted increase in people over the age of 65 will generate.

Figure 2.3 Percentage change in population in Orkney Islands and Scotland 2012-2037(2012 based projections)

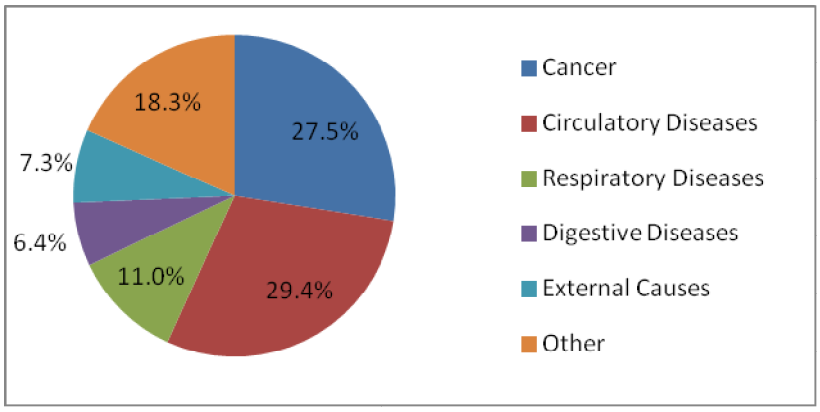


Source: National Records of Scotland 2015

Deaths

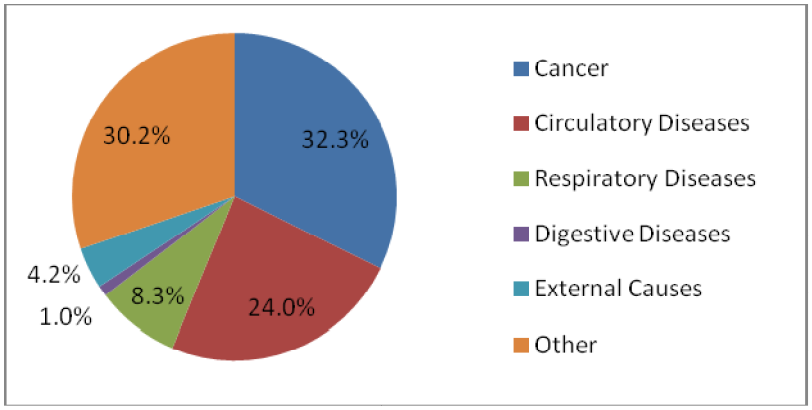
In 2015 there were 222 deaths recorded for Orkney, a standardised rate of 10.4 per 1000 population over the period 2013-15, equal to the Scottish rate of 10.4 (National Records of Scotland September 2016). The causes of death are shown in Figures 2.4 and 2.5.below.

Figure 2.4 Causes of death in males, Orkney 2015



Source: National Records of Scotland 2015

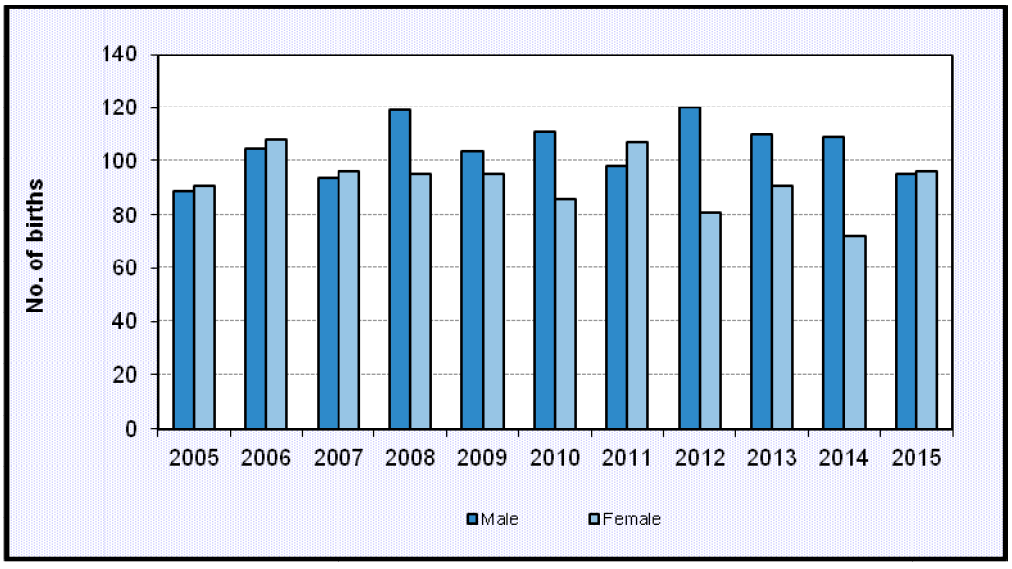
Figure 2.5 Causes of death in females, Orkney 2015



Source: National Records of Scotland 2015

In 2015 there were 191 live births recorded for Orkney, an increase of 5.5% from 2014. The number of births in Scotland fell by 2.9% over the same period. The fertility rate increased to 54.3 births per 1000 women aged 15-44, above the Scottish rate of 53.2. In 2015 Orkney had more girls than boys born (Figure 2.6).

Figure 2.6 Live births by sex, Orkney Islands 2005-2015



Source: National Records of Scotland 2016

Life expectancy

The latest life expectancy data is from 2015. Life expectancy at birth in Orkney is greater for females (82.8 years) than males (78.8 years), and both were greater than the Scottish average (females 81.1 males 77.1 years) (Figure 2.7). Life expectancy in Orkney at age 65 is greater for females (21.2 years) than males (18.7 years).

Figure 2.7 Life expectancy at birth in Orkney Islands and Scotland, 2013-15

Source: National Records of Scotland 2016

Premature mortality

One of the 12 quality indicators for the NHS focuses on addressing premature mortality. This is usually measured by looking at the death rates for people aged under 75. For the last 7 years of reported data the under 75 age-standardized death rate for all causes of death in Orkney has been lower than the Scottish rate (Table 2.5).

Table 2.5 Death rates (All causes) under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

Year	Orkney	Scotland
2006	450.5	520.4
2007	558.1	516.8
2008	444.4	501.3
2009	323.5	477
2010	371.3	467.4
2011	346.7	456.1
2012	341.1	445.3
2013	345.5	437.5
2014	336.7	423.2

Source Scottish Government 2016

When we look at mortality for under 75 year olds for specific diseases we can see that in general the mortality rate from all heart disease in Orkney is lower than the Scottish rate (Table 2.6).

Table 2.6 Circulatory Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

Year	Orkney	Scotland
2006	103	141.4
2007	158.6	139.5
2008	110.1	130.1
2009	81	117.2
2010	61.7	113.8
2011	77.5	106.7
2012	83.6	104.2
2013	50.4	101.5
2014	95.8	94

Source Scottish Government 2016

When we look at the mortality rate from all types of cancer we see a year to year variability for Orkney with in recent years, the rate below the Scottish rate. (Table 2.7).

Table 2.7 Cancer Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

year	Orkney	Scotland
2006	195	187.5
2007	231.3	186.8
2008	150	183
2009	108.9	178.9
2010	132.9	174.5
2011	137.6	174
2012	104.1	172.7
2013	122.9	170.2
2014	114.5	165.8

Source Scottish Government 2016

When we look at the mortality rate from respiratory system disease we see a year to year variability for Orkney the rate generally below the Scottish rate. (Table 2.8).

Table 2.8 Respiratory System Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

year	Orkney	Scotland
2006	41.2	49
2007	45.4	47.1
2008	49.8	45.5
2009	24.7	45.2
2010	39.6	42.5
2011	13.2	43.7
2012	32.6	43.2
2013	47.7	41.5
2014	17.7	40

Source Scottish Government 2016

3.0 Health Improvement

3.1 Promoting Healthy attitudes to substances

The Orkney Alcohol and Drugs Partnership continue to provide training around the topic of New Psychoactive Substances, also often referred to as 'Legal Highs'. The training provides a current update on new and emerging trends within the ever changing arena of the drugs world.

The training has been delivered since 2013 with 215 people attending the training locally (92 people in 2015/16). This year there was a specific focus to deliver more outreach events focusing on younger people and those that work and support young people as research shows that 16 to 24 year olds are the most likely age group to use New Psychoactive Substances.

Over 2015/16 training was delivered to volunteers at the local Red Cross, all junior high schools on the outer isles as well as Stromness Academy and Kirkwall Grammar School senior pupils. Students, lecturers and support staff at Orkney College were trained as well as youth workers employed by Orkney Islands Council, leaders and volunteers at Girl Guiding Orkney and members of Board of NHS Orkney at their quarterly meeting received an information session.

The Orkney Alcohol and Drugs Partnership agreed to undertake a local survey of the Orkney community to learn about local knowledge and opinions of synthetic highs; and to use this information to inform future harm reduction and safety campaigns. The survey was aimed at the general population of Orkney, including senior pupils within the local secondary schools.

The survey was undertaken mostly via an electronic Survey Monkey link which was shared widely with all members of the ADP and wider organisations and forums. The link was also shared on the NHS Orkney, Radio Orkney and The Orcadian Facebook pages. A short radio article was delivered prior to the survey launch to encourage people to take part and to bring the topic into the forefront of people's minds. Local secondary schools were encouraged to complete the survey during PSE classes. Some paper copies were returned by Orkney Islands Council Housing Support Workers who supported service users to undertake the

survey in their own home. The survey was open from 2nd November until 18th December 2015 and a total of 661 responses were received.

Some examples of questions and responses were:

88% of respondents had heard of New Psychoactive Substances.

The most commonly referenced name was: Mary Joy (mentioned 158 times), followed by Black Mamba, Spice, Meow Meow and Benzo Fury.

45% of respondents stated that they or someone they knew had tried NPS.

Synthetic cannabis was the most commonly used NPS in Orkney, with 38% of respondents reporting use.

The majority (47%) of responses felt that their experience of NPS was 'very negative'

76% felt that NPS were NOT safer than illegal drugs

Over 55% of respondents did not think that NPS are more socially acceptable than illegal drugs

44% of respondents felt that they knew where to get support and information on NPS

Alcohol Brief Interventions

Alcohol brief interventions (ABIs) are an effective early intervention to help individuals reduce hazardous/harmful alcohol consumption, thereby reducing their chances of developing more serious alcohol-related problems. All health boards in Scotland are required by Scottish Government to deliver ABIs. As an NHS delivery Standard, the target number of ABIs required to be delivered in 2015-16 in the three priority settings, (Antenatal, Accident & Emergency and Primary Care), was 249. This figure was achieved by end March 2016.

Looking forward: With ABI continuing as a Standard in 2016-17 and forming part of the Health Promoting Health Service CEL (01), NHS Orkney and Orkney Alcohol & Drugs Partnership will continue to embed ABI through use of service agreements, pathways, documentation and training to ensure ABIs remain a core component of local strategies – helping to reduce alcohol related harm.

2015-16 saw:

- Revision of ABI LES to promote undertaking of ABI following FAST screen within primary care.
- 2 ABI training sessions held with 8 staff trained

- 3588 people FAST screened
- 278 people accept ABI
- 71 people offered referral with 36 accepted
- Review of ABI training to better meet needs of participants and trainers who also work clinically.
- Continued work to embed ABI's in range of settings including Primary Care, Accident and Emergency Antenatal and Third Sector.
- Continued to work with education and Third Sector to raise awareness around alcohol - providing displays and information as appropriate.

New guidelines on alcohol consumption were published in 2016. The recommendations are that :

- Men and women should drink no more than 14 units of alcohol per week. Fourteen units is the equivalent of 6 pints of beer, a bottle and a half of wine, or half a 750ml bottle of spirits.
- If people drink 14 units per week, this should be spread over three days or more.
- Women who are pregnant or trying to conceive should avoid drinking alcohol.

3.2 Smoking Cessation

Smoking remains the single biggest cause of preventable ill-health and premature death in Scotland causing over 13,500 deaths a year. The annual cost to NHS Scotland of treating smoking related diseases is estimated to be more than 409 million pounds.

Figures in 2014 showed that in Orkney smoking prevalence among adults over 16 years was slightly lower than the national figure with 19.4% of adults smoking compared to 20.2 % across Scotland. The Scottish government HEAT standard for smoking continued in 2015/16 with a smoking quit being defined as a person not smoking for 12 weeks following a quit date. The standard is an inequalities driven target and 23 quits were to be achieved in Orkney from the most deprived areas of the county. However with the population size in these areas being low and smoking prevalence lower than the national picture achieving the target for Orkney was always going to be challenging. At the end of March 2016 68 people across all areas had made an attempt to quit smoking with 36 of those being in the most deprived areas. At the end of the year 8 people from the most deprived areas were still not smoking 12 weeks after setting a quit date, 35% of the target was achieved.

Cessation support continued to be offered in various G.P surgeries around mainland Orkney. In addition evening sessions were held in Kirkwall library to ensure that people who work in the day could access support. G.P practices on the mainland of Orkney refer to the cessation service but not everyone then goes on to engage with an attempt to quit.

Official data shows that some people have accessed their local community pharmacy for cessation support but in 2015/16 no one had a recorded quit through using this service. One pharmacy reported having one person who had quit but due to issues with the national database were not able to record this. This problem has been fed back nationally.

Support to smokers living on the outer isles was provided by local clinicians with input as required from the central service. Telephone and teleconference options were available as required.

Scottish Government directed all Health Boards to be smoke free by 1st April 2015.NHS Orkney became Smoke-Free in 2013 requiring people not to smoke in any NHS grounds as well as premises. All people who are having a planned admission to the Balfour Hospital receive a leaflet explaining about the policy and offering them help and support to cope with not being able to smoke whilst they are in hospital. Referrals to the cessation service from acute services are monitored through reporting for the Health Promoting Health Service programme.

The level of pregnant women who smoke in pregnancy in Orkney is considerably lower than across Scotland. In 2013 only 9.8% of pregnant women in Orkney smoked compared to 18.5 % across Scotland.

Despite this staff in maternity continue to routinely offer carbon monoxide monitoring to pregnant women and use the result to explain the effects of smoking on their baby's health and advise stopping smoking in pregnancy. Women are offered referral onto the specialist cessation service for support.

Staff members who smoke continue to be offered support through Smoking Matters Orkney and can attend sessions in work time following agreement with their line managers.

3.3. Obesity and Physical Activity

Actions from the Maternal and Infant Nutrition Framework have continued during 2015 and 2016, successes have included health visiting staff successfully being re-accredited with Stage 3 Unicef Baby Friendly status. The Maternity Department has also continued their efforts to maintain their Stage 3 accreditation.

Maternity ward staff have worked to establish three volunteer led breastfeeding cafes which offer breastfeeding support and encourage visibility of breastfeeding in wider community settings. A peer support network has also been developed, once trained the peers supporters will offer social and breastfeeding support through phone, text and home visits. Wheelie walks recommenced on the 25th of May 2016 for mums and dads with babies and young children, these walks take place one lunch time per week and are planned to run until the end of September 2016.

Healthy weight in childhood

The "Go for It!" school-based programme aims to give children and their parents an increased understanding of healthier choices which can lead to a healthier weight. Sessions were delivered to three primary 5 classes by a range of professionals on topics such as the portion sizes, hidden sugars and the importance of good hydration and sleep. The programme was well received and evaluated well with school staff and the pupils themselves.

As well as school-based programmes, one to one programmes for children who are overweight or obese have been available. These programmes are delivered by specially trained dietitians and can be based around the child healthy weight programmes 'SCOTT' and 'SCOTTlite'.

During the year Health Promotion staff and the Oral Health team have attended events in various pre-school locations and engaged with the wider public to raise

awareness of the national “Eat Better, Feel Better” campaign, and hidden sugars as well as offering information and ideas about healthy snacks and portion sizes appropriate for pre-school children.

The “Keep Healthy Keep Hydrated” team has delivered education sessions for secondary pupils during Health Week at KGS as well as promoting the importance of hydration for maximizing attainment and health with teaching staff and with pupils transitioning from primary to secondary schools. The team has also provided free water at ranging community sporting events, encouraging children to “drink before, during and after sport” to improve their performance and overall health through competitions and display materials.

Orkney continues to have a high level of children at risk of being overweight or obesity. In 2014 the Scottish government decided to review the national target for Child Healthy weight but work continued locally to address this sensitive issue.

Healthy weight for adults

Dietetic and Health Promotion staff have continued working together to offer healthy weight group programmes. These have received very positive feedback and have been met with high levels of demand. Efforts are now being made to increase access as well as work to develop the programme further in response to feedback. It will now be delivered over 12 rather than 6 weeks and will offer the opportunity to explore a wider range of benefits to participants health including blood pressure, glucose monitoring and cholesterol level checks.

The lead dietitian has continued to offer Counterweight Plus, the low calorie liquid based diet for people who are morbidly obese. Evidence shows that this approach is just as effective in motivated individuals as bariatric surgery without the associated risks. The costs are also considerably less.

3.4 Detect Cancer Early

In February 2012 the Detect Cancer Early (DCE) programme was launched in Scotland. One aim of the DCE programme is to increase the percentage of people who are diagnosed early in the disease process (with stage 1 disease) by 25% by the end of 2015. A HEAT (Health, Efficiency, Access and Treatment) target was developed to monitor performance in meeting this objective and the target concentrated on breast, colorectal and lung cancers, which collectively accounted for 44% of all cancers diagnosed in Scotland in 2012. Table 3.1 shows the number and percentage of patients by stage of diagnosis with breast, colorectal and lung cancer in Orkney for the years 2014 and 2015 combined.

Table 3.1 Number and percentage of patients by stage at diagnosis for breast, colorectal and lung cancer for Orkney, the North of Scotland cancer network and Scotland for 2014 and 2015 combined.

Area of Residence	Stage 1		Stage 2		Stage 3		Stage 4		Stage Not Known		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
SCOTLAND	**6,208**	***25.10***	**6,356**	***25.70***	**4,458**	***18.00***	**6,394**	***25.80***	**1,362**	***5.50***	**24,778**	***100.00***
NOSCAN	**1,332**	***22.00***	**1,551**	***25.60***	**1,029**	***17.00***	**1,613**	***26.60***	**528**	***8.70***	**6,053**	***100.00***
NHS Orkney	24	*28.20*	25	*29.40*	8	*9.40*	16	*18.80*	12	*14.10*	85	*100.00*

Note that Orkney has a high percentage of cancers where the stage is not known at 14.1%, and this relates to the way staging for breast cancer in particular is carried out in NHS Grampian. This is a data issue rather than a clinical staging issue. Work is being undertaken to align the recording of staging to that used elsewhere in Scotland. Overall around 1 in 4 cancers in Scotland are detected at Stage 1.

Breast cancer: For the two-year period, 2014-15 the most common stage of disease at diagnosis for breast cancer in Scotland was stage 2 which accounted for 43.7% of all patients. During this period the percentage of patients in Scotland with breast cancer diagnosed as stage 1 disease was 40.5% and in Orkney 40.8% (Table 3.2).

Table 3.2 Number and percentage of patients by stage at diagnosis for breast cancer for Orkney, the North of Scotland cancer network and Scotland for 2014 and 2015 combined.

Area of Residence	Stage 1		Stage 2		Stage 3		Stage 4		Stage Not Known		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
SCOTLAND	**3,481**	***40.5***	**3,756**	***43.7***	**636**	***7.4***	**458**	***5.3***	**256**	***3.0***	**8,587**	***100.0***
NOSCAN	**820**	***38.1***	**902**	***42.0***	**123**	***5.7***	**107**	***5.0***	**198**	***9.2***	**2,150**	***100.0***
NHS Orkney	20	*40.8*	21	*42.9*	1	*2.0*	2	*4.1*	5	*10.2*	49	*100.0*

Colorectal cancer: For the two-year period, 2014-15, the most common stage of disease at diagnosis for colorectal cancer in Scotland was stage 2 which accounted

for 26.4% of all patients. During this period the percentage of patients in Scotland, with colorectal cancer diagnosed with stage 1 disease was 15.4% and in Orkney 5.3% (Table 3.3). Note the small numbers diagnosed in Orkney can have significant impact on percentages diagnosed at each stage.

Table 3.3 Number and percentage of patients by stage at diagnosis for colorectal cancer for Orkney, the North of Scotland cancer network and Scotland for 2014 and 2015 combined.

Area of Residence	Stage 1		Stage 2		Stage 3		Stage 4		Stage Not Known		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Scotland	**1,018**	***15.4%***	**1,750**	***26.4%***	**1,687**	***25.5%***	**1,518**	***22.9%***	**646**	***9.8%***	**6,619**	***100.0%***
NOSCAN	**214**	***12.1%***	**474**	***26.9%***	**438**	***24.8%***	**392**	***22.2%***	**246**	***13.9%***	**1,764**	***100.0%***
NHS Orkney	1	*5.3%*	4	*21.1%*	5	*26.3%*	3	*15.8%*	6	*31.6%*	19	*100.0%*

Lung cancer: For the two-year period, 2014-15, the most common stage of disease at diagnosis for lung cancer in Scotland was stage 4 which accounted for 46.2% of all patients. During this period the percentage of patients in Scotland, with lung cancer diagnosed with stage 1 disease was 17.9% and in Orkney 17.6% (Table 3.4).

Table 3.4 Number and percentage of patients by stage at diagnosis for lung cancer for Orkney, the North of Scotland cancer network and Scotland for 2014 and 2015 combined.

Area of Residence	Stage 1		Stage 2		Stage 3		Stage 4		Stage Not Known		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Scotland	**1,709**	***17.9***	**850**	***8.9***	**2,135**	***22.3***	**4,418**	***46.2***	**460**	***4.8***	**9,572**	***100***
NOSCAN	**298**	***13.9***	**175**	***8.2***	**468**	***21.9***	**1,114**	***52.1%***	**84**	***3.9***	**2,139**	***100***
NHS Orkney	3	*17.6*	-	*0.0*	2	*11.8*	11	*64.7*	1	*5.9*	17	*100*

Detect Cancer Early baseline data and Year 4 comparison.

In Scotland, there was an 8% increase in the percentage of people diagnosed at stage 1 for breast, colorectal and lung cancer (combined) between the baseline and year 3. A 43.3% increase in stage 1 diagnosis has occurred in Orkney (Table 3.5). Note, however, the small number of individuals involved.

Table 3.5 Number and percentage of stage 1 patients for breast, colorectal and lung cancer by NHS Board of residence and region, with percentage change from baseline to year 4.

Area of Residence	Baseline		Year 4		% change
	Number	%	Number	%	
Scotland NOSCAN	**5,550**	***23.2***	**6,208**	***25.1***	**8.0**
	1,299	***22.2***	**1,332**	***22.0***	**- 0.7**
NHS Orkney	13	*19.7*	24	*28.2*	43.3

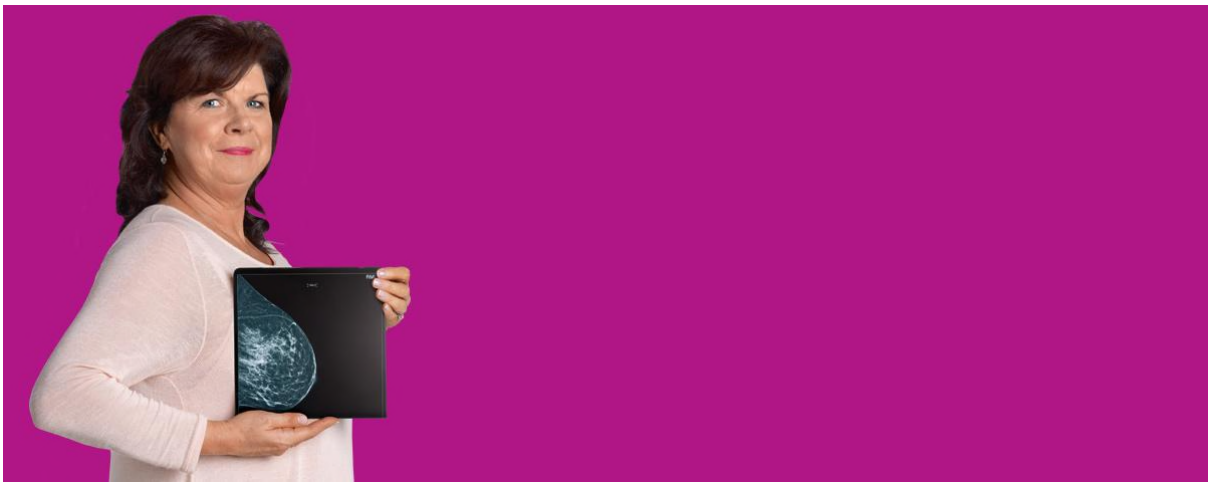
A number of health promotion activities were undertaken in relation to the detect cancer early programme.

'Don't get scared, get screened'

One in nine women will be diagnosed with breast cancer in Scotland every year and when cancer is caught at its earliest stage you're five times more likely to survive cancer.

In Orkney, the last round of data was collected in 2012 when the mobile breast screening unit was in the County, from the 3030 women who were invited, 2553 attended, giving Orkney an overall 84.25% uptake which is higher than that of the Scottish average (73.5% in 2012).

A local campaign ran alongside the period when the mobile breast screening unit was in Orkney (April to August 2015). The main focus on the campaign took place in June which was mid way to encourage women who had yet to receive an appointment to go and also to give women another opportunity to attend if they had missed their appointment for any reason.



The campaign focused on encouraging women aged between 50 and 70 years old to attend breast screening following receipt of their invitation but it also focused particularly on women based in the outer islands of Orkney and also younger women who may be able to have encouraged and /or influenced older relatives and friends to attend their appointments.

During June 2015 over 20 packs of resources including posters, leaflets, badges and thingymaboob key-rings were sent to local hairdressers and beauty salons including Kirkwall, Stromness, Finstown, Dounby and Westray.

All island GP surgeries also received packs as the campaign wanted to focus on slighter lower uptake rated from the islands.

In addition, two further local campaigns took place;

The local leisure centre, Pickaquoy Centre, spent four weeks highlighting the importance of breast cancer screening where information was shared on their Facebook page and their website, with over 1,000 people seeing the Facebook post and 199 visits to the website spending an average of 1 minute and 27 seconds on the page with the breast screening information.

Posters in the toilets and changing rooms, staff members and instructors wore badges and thingymaboob keyrings were handed out to women taking part in certain exercise classes such as Pilates, Step, Zumba and Body Balance.

Staff at the Pickaquoy Centre displaying the breast screening resources

Radio Orkney, the local radio station also ran a series of programmes dedicated to breast cancer screening which featured a number of local women who had come forward following an appeal to share their stories of screening, cancer and survival.

An evaluation was undertaken after the campaign and the following comments were collected:

"How brave were the women you spoke to about breast cancer - they all deserve a medal. Breast cancer is a disease that can and is treated very successfully but the secret is in early detection. Anything that encourages women to go for scans has to be a good thing".

"I'm ashamed to admit that I had ignored an invitation to go for a breast scan a few years ago. After hearing the brave women who had been diagnosed with cancer and come through the treatment - I called the screening service and got an appointment for a scan. It was daft not going in the first place but I suppose I just thought that it couldn't happen to me. After hearing the stories from the women that you interviewed I realised it could happen to me".

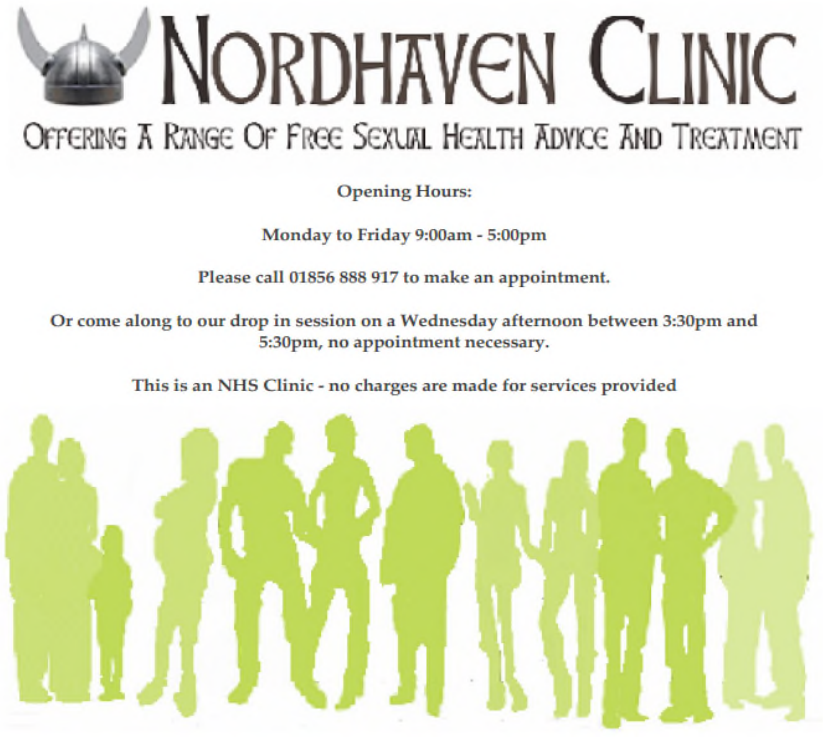
"Excellent campaign, interviews on radio should have made women who did not intend to take up the offer of screening, think again. The Pickaquoy Centre also did a very good job of promoting the service"

3.5 Sexual Health

The Sexual Health and Blood Borne Virus Framework for 2011-2015 has been updated and extended till 2020 by the Scottish Government. This means that all sexual health work within Orkney continues to work towards the five outcomes of this Framework, which are:-

- Fewer newly acquired blood borne viruses and sexually transmitted infections; fewer unintended pregnancies.
- A reduction in the health inequalities gap in sexual health and blood borne viruses.
- People affected by blood borne viruses lead longer, healthier lives, with a good quality of life.
- Sexual relationships are free from coercion and harm.
- A society where the attitudes of individuals, the public, professionals and the media in Scotland towards sexual health and blood borne viruses are positive, non-stigmatising and supportive.

The Nordhaven Clinic, Orkney's sexual health service, has continued to offer STI testing, access to contraception, including emergency contraception, pregnancy testing, sexual health related advice and information. Orkney's needle exchange service is accessed through the Nordhaven Clinic also, guaranteeing good access to health advice and testing through this service. The Nordhaven website and Facebook page have continued to provide a reliable source of information as well as continued access to the condoms by post scheme.



Information in regards to sexual health, local campaigns and national developments or news in relation to sexual health have been cascaded to statutory and third sector bodies through a monthly e-mail newsletter. This has been a useful method of maintaining communication and promoting services locally.

Orkney exhibits relatively low levels of sexual ill health at present however, work has continued not only to avoid sexual ill health but to promote positive sexual health and well-being across the county. Sexual health and relationships education have been delivered to young people across Orkney in a range of settings including through the Public Health department developed 'Lovebug' programme. This seeks to provide a bespoke programme tailored to young people's needs.

Local health promotion campaigns over this year sought to promote positive sexual health and wellbeing including prompting awareness of Hepatitis and availability of testing for Hepatitis. The department supported the national World Aids Day campaign within the hospital purposed to de-stigmatise HIV.

Young people's health and wellbeing

Adolescence is an important time in life, often having a big effect on shaping our health for the future. In 2015/16, the health promotion department, in recognition of the pressures young people are under during exams and the negative impact this can have on mental health as well as exam performance, gave all S4 and S5 pupils sitting exams in Orkney an exam stress survival pack. This had positive messages to encourage appropriate breaks, hydration and preparation for the exam period. These packs had a copy of the 'cool heads' pamphlet which give a lot of information, including signposting of services, to young people in regards to mental health and wellbeing.

In order to involve and empower young people in the promotion of their health as well as develop skills for life, the health promotion department embarked on a youth health improvement/youth health ambassador's project. This project aimed to develop skills in team working, organisation, project development and evaluation as well as presentation skills. Alongside developing these skills, the project aimed to empower young people to develop a health promotion project of their own to improve the health of young people who are their peers. This project was directed by the young people themselves allowing for them to decide what aspects of health are important to their peers and what issues they are facing in relation to health. This project had mixed success due to issues of engagement, however it is hoped to continue with this project in the coming year using the learning to date.

3.6 Health Promoting Health Service

Keen to be an exemplar of “every healthcare contact is a health improvement opportunity” NHS Orkney continues to develop a health promoting culture, incorporating health improvement into everyday practice and supporting health behavior change amongst patients, visitors and staff alike.

A number of activities were undertaken over 2015-16 which link to and support this workstream.

Smoking: Support pathways were developed for smokers for when they are admitted to the Balfour Hospital and are not permitted to smoke in the grounds or premises. Leaflets have been developed to explain why NHS grounds are now smoke free as well as NHS premises.

Alcohol: The number of alcohol brief interventions (ABIs) required for 2015-16 Heat Standard was achieved.

Breastfeeding: Breast feeding rates in Orkney are among the highest in Scotland. The maternity unit continues to deliver care that uses the UNICEF Baby Friendly standards.

Food and health: Maintenance of Healthy Living Plus Award.

Healthy Working Lives: Maintained Gold status in Healthy Working lives.

Physical Activity: Health and well being benefits to be gained from physical activity promoted at various events throughout Orkney including schools and college. Continued to develop Health Walks throughout Orkney (now 11 active walking groups). Continued to offer corporate membership at local gym.

Physical Activity and Sports Strategy - work continues through two operational Groups linked with the Community Planning Partnership.

Two NHS Orkney Step Count Challenges were held. Work continues with staff in the secondary care setting to support implementation of Scottish Physical Activity pathway within priority areas with view to further roll out.

Active Travel. The Cycle purchase scheme started in 2011 continues. Time is allowed for active travel between meetings. Active travel options are being explored as part of the development of new hospital and healthcare facility with plans to link in to existing footpath and cycle networks. Active travel survey completed – learning gained fed back to new build redesign team.

3.7 Health in the workplace

Healthy Working Lives (HWL), the key national programme in relation to health in the work place, has evolved into a more centralised service with a website and helpline to support companies to achieve HWL awards. NHS Orkney contracted with NHS Highland for additional specialist support. A HWL advisor from NHS Highland provided one to one support to local companies as required.

In 2015 sixteen organisations submitted annual reviews to maintain awards and one organisation undertook their Bronze award.

NHS Orkney, who has achieved the gold HWL award, continues to work to maintain this with the help of an active staff health group, Fit2. This group planned a number of events in 2015/16 including organising the staff awards ceremony and dinner in 2015.

4.0 Health Protection

Health Protection, being one of the three main components of Public Health work, aims to protect the health of the public from communicable diseases and environmental hazards. In that respect, it covers the surveillance and notification when required of infectious diseases, and acts to limit, and correct these occurrences, and to prevent these situations from happening again.

In 2015 NHS Orkney worked with other island health boards to review health protection capacity, and instituted a joint health protection out of hours rota across the three island health boards. This innovative approach was shared with colleagues across the country at the Scottish Public Health Conference 2016.

In this section we will cover not only the aspects of communicable diseases and environmental hazards, but also related areas such as emergency preparedness and port health. When considering prevention of infectious disease, in general where there is a vaccine against an infectious disease, there is nothing better and more effective than immunisation.

This section will also cover screening programmes that enable early detection of disease when it can be treated more effectively.

4.1 Communicable diseases

During 2015-16 there have not been any major outbreaks of disease in the community, and only a few occasions in which linked cases, typically in families and in relation to food poisoning, have been identified. These have been dealt with according to national guidelines and notified to Health Protection Scotland (HPS).

As it can be seen in Table 4.1, during 2015-16 we had few cases of campylobacter, salmonella or cryptosporidium. This data has been processed in a new way with the introduction of the IT system HPZone nationally.

Table 4.1 Infectious disease surveillance including notifiable diseases (Oct 2015 to Aug 2016)

Year	2015	2016	Total
Campylobacter	14	11	**25**
Salmonella	1	1	**2**
Cryptosporidium	3	5	**8**
Giardia	-	2	**2**

Source: Laboratory Notifications, 2015, NHS Orkney via Public Health Administrator

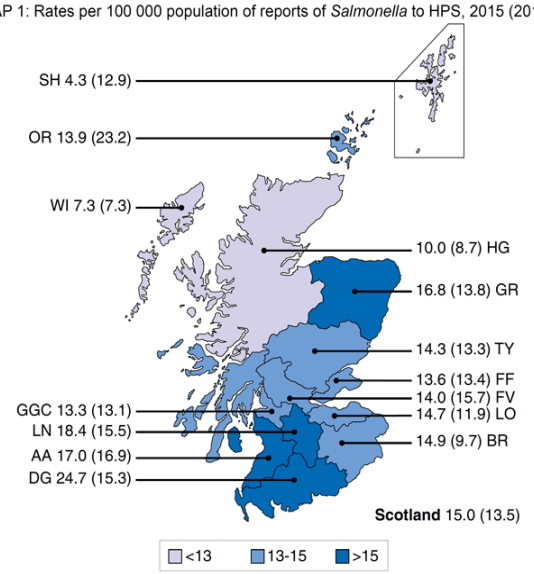
Campylobacter and salmonella are typically related to food-poisoning incidents, whilst cryptosporidium and giardia are more likely transmitted via drinking water.

Food Poisoning: Salmonellosis

Salmonella is a ubiquitous bacterium with over 2000 serotypes identified, but with two serotypes (*S*. Enteritidis and *S*.Typhimurium), as the most prevalent. Animal reservoirs include wild and domestic animals, birds and exotic pets such as lizards and amphibians. Salmonella Enteritidis DT4 is particularly prevalent in eggs. The majority of cases are sporadic although outbreaks do occur in the general population and in institutions.

In Orkney during 2015 there was a substantial decrease in Salmonella notifications (a trend that continues in 2016 as seen in the Table 4.1 above)(Map 1). Reporting rates to HPS have fallen from a high in 2014 (23.2 per 100,000 population)(Map 1) to below the national rate in 2015 (13.9 per 100,000 population). Due to the small population base, a small number of cases can influence rates substantially for the island boards.

MAP 1: Rates per 100 000 population of reports of *Salmonella* to HPS, 2015 (2014).



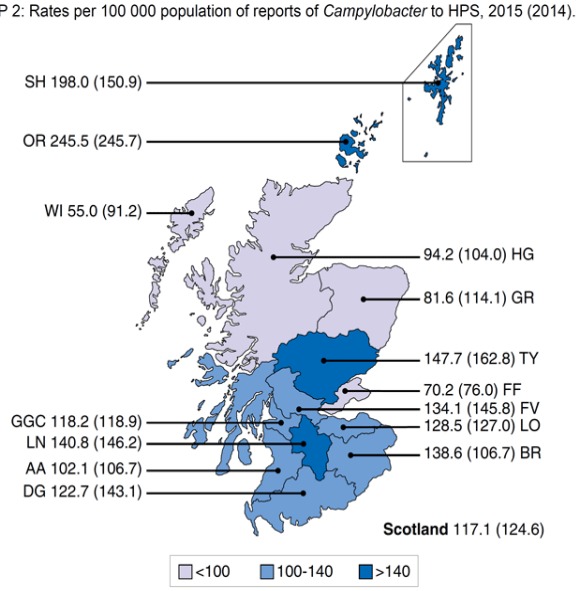
Source: HPS (NSS) – 2016

Food Poisoning: Campylobacteriosis

Campylobacter is one of the most frequently occurring bacterial agents of gastroenteritis. The true incidence of gastroenteritis due to Campylobacter is unknown. According to a WHO global report in 2012, in 27 European countries, the collective annual incidence of laboratory-confirmed Campylobacter infection in 2010 was 48.6 per 100,000. However, the annual rate in Scotland more than doubles that European incidence, with 117.1 per 100,000, in 2015 and even higher in 2014 (124.6/100,000).

In Orkney, and as the Map 2 shows below, the incidence rates are high. Again due to the small population base, a small number of cases can influence rates substantially for the island boards.

MAP 2: Rates per 100 000 population of reports of *Campylobacter* to HPS, 2015 (2014).



Source: HPS (NSS) – 2016

Strategies to tackle not only this situation, but also that of food poisoning in general, include regulation of industries (poultry, red meat and dairy), and hygiene practices like those displayed in the guide suggested by the Food Standards Agency (Figure 4.1).

On the positive side, over the first 8 months of 2016 there has been a substantial decrease in Campylobacter reports (13 cases) bringing down the incidence rate to about 93/100,000, well within the group of Health Boards with low incidence.

https://www.food.gov.uk/sites/default/files/campylobactor-infographic.pdf

Figure 4.1 Guidelines to prevent infection from Campylobacter

Source: Food Standards Agency 2015

4.2 Vaccination Programmes

"The two public health interventions that have had the greatest impact on the world's health are clean water and vaccines" (WHO)

Vaccination programmes aim both to protect the individual and to prevent the spread of these diseases within the wider population. As a public health measure, immunisations are very effective in reducing the burden of disease.

Immunisation uptake (sometimes referred to as coverage) refers to the proportion of the eligible population who have received the recommended doses of the relevant vaccines. Monitoring the proportion of the eligible population vaccinated is a key measure of the immunisation programme performance. It is of public health concern should immunisation rates decrease, as this makes the possibility of disease transmission more likely.

Flu Immunisation and Campaigns

The aim of seasonal influenza immunisation campaigns is to minimise flu related morbidity, mortality, and hospital admissions.

Over the last two seasons 2014-15 and 2015-16, Orkney has provided, in general, a higher coverage than Scotland, in most age groups and programmes, as Table 4.2 details.

Table 4.2 Flu vaccine uptake for Seasonal flu (adult and child) and NHS Staff- 2015/16 and 2014/15 and uptake for Scotland

Age/group	Orkney 15/16	Orkney 14/15	Scotland 15/16
Over 65s	75.4	76.1	74.3
All at risk (inc pregnant & carers)	50.5	55	47.8
Pregnant (not at risk)	51.6	46.4	48.2
Carers	51.6	53.3	47.9
Childhood			
2-3 years	48.6	57.2	51.1
4 years	52.2	58.9	40.7
5-11 years	60.5	51	27.1
NHS Staff			
Non-clinical uptake	44.7	56.2	
Clinical uptake	49.3	37.3	
Overall uptake staff	47.5	45.3	33.2

Source: HPS –Flu portal 02.03.16

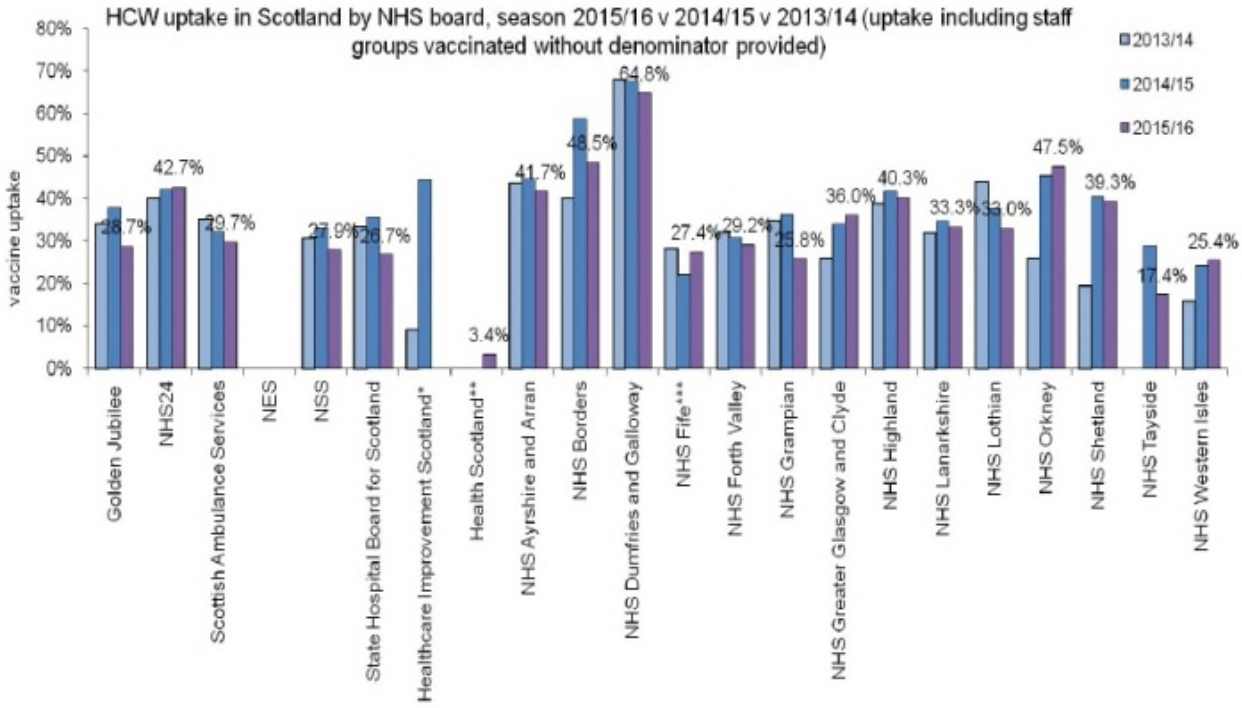
NHS staff uptake for 2014/15 was just over 36% nationally

Flu vaccine uptake of Healthcare Workers (HCW)

As seen below, the overall uptake from HCWs has improved from 45.3% in 2014-15 to 47.5% in 2015-16, above the national averages for both seasons (36.3% and 33.2% respectively for Scotland), but very much below that achieved by NHS Dumfries and Galloway which at 64.8% almost doubles that of Scotland (Figure 4.2).

Not achieving at least half of HCW who are at higher risk, particularly front-line workers, is clearly insufficient and should be a priority for Occupational Health in subsequent years.

Figure 4.2 Flu uptake rates in HCWs by Health Board (2014-15-16)

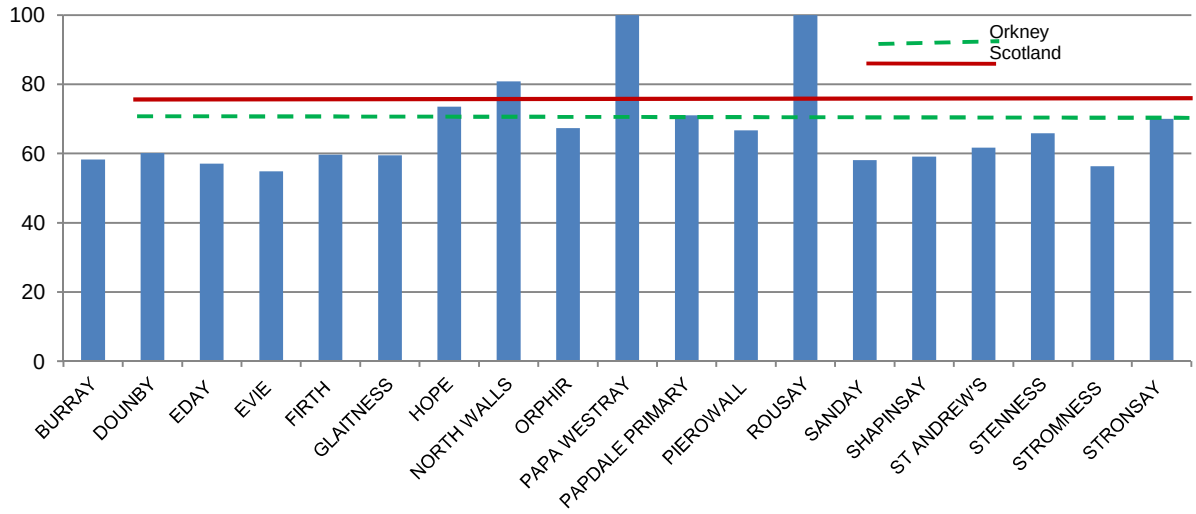


Source: HPS (NSS) – May 2016

Flu vaccine uptake in Primary schools

The statistics shown in Figure 4.3 include only primary schools with 5 or more eligible pupils. North Ronaldsay had only one and it is therefore excluded from the list.

Figure 4.3 Flu uptake rate by primary schools 2015-16



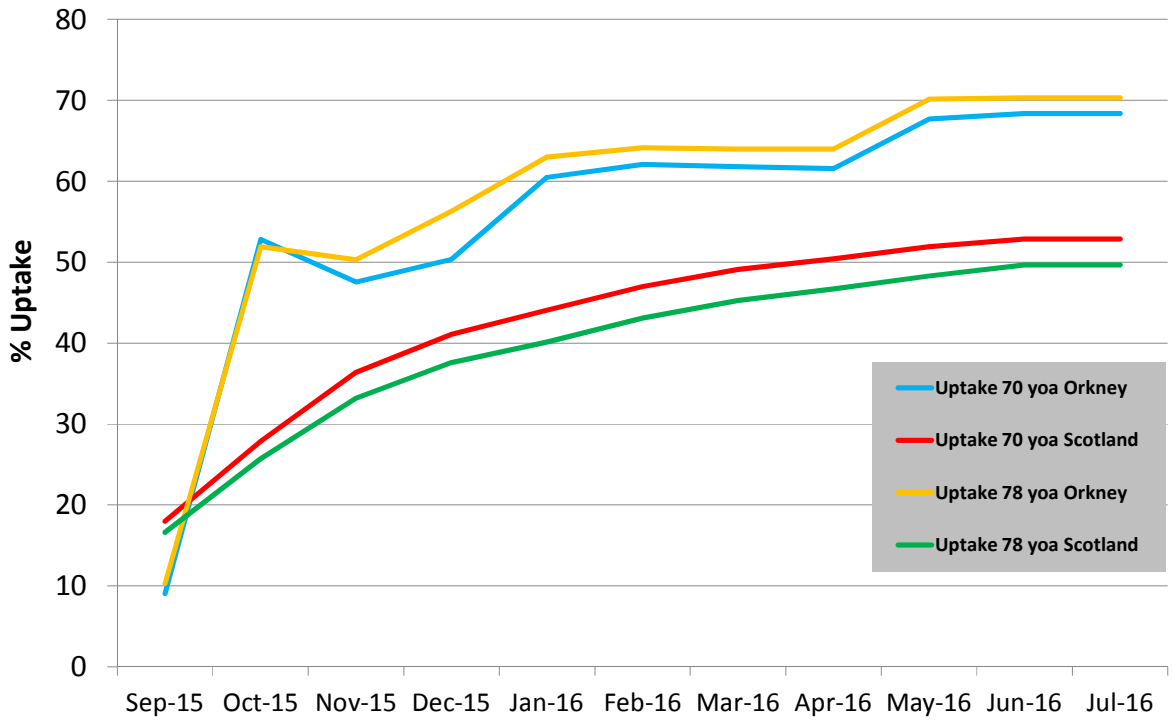
Source: HPS –Flu portal 02.03.16

Shingles (Herpes Zoster)

Herpes zoster or shingles is characterised by a painful vesicular skin rash. The disease is caused by reactivation of latent varicella zoster virus. The main complication of shingles is post-herpetic neuralgia (PHN), a long-lasting neuropathic pain after the rash has resolved.

In 2013, the Scottish Government confirmed the introduction of the shingles immunisation programme to provide protection against shingles. It is now part of the routine vaccination programme for people aged 70 with a catch-up programme in place to vaccinate those over 70 and under 80 years of age over the next few years. The aim of the vaccine programme is to reduce both the incidence and severity of shingles and significantly reduce the incidence of PHN.The vaccine is less effective as people get older and so it is not recommended to be given to people aged 80 and over. Figure 4.4 shows better a higher percentage uptake in Orkney compared with Scotland overall.

Figure 4.4 Trend of Uptake of Shingles vaccine at ages 70 & 78 in Orkney and Scotland (2015-16)



Source: Health Protection Scotland. (HPS) Herpes Zoster vaccine uptake automated extract as at 01/08/2016

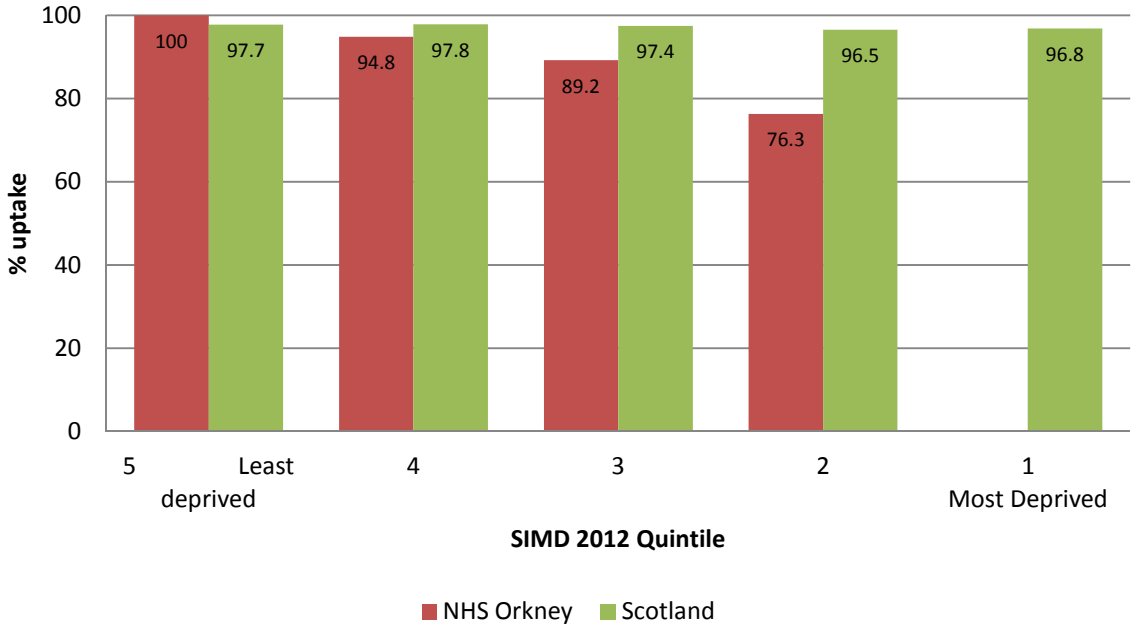
Childhood Immunisations

Children in Scotland are protected through immunisation against many serious infectious diseases. Vaccination programmes aim both to protect the individual and to prevent the spread of these diseases within the wider population. As a public health measure, immunisations are very effective in reducing the burden of disease.

Immunisation uptake (sometimes referred to as coverage) refers to the proportion of the eligible population who have received the recommended doses of the relevant vaccines. Monitoring the proportion of the eligible population vaccinated is a key measure of the immunisation programme performance. It is of public health concern should immunisation rates decrease, as this makes the possibility of disease transmission more likely.

The World Health Organization (WHO - European Region) recommends that on a national basis at least 95% of children are immunised against diseases preventable by immunisation and targeted for elimination or control. These include diphtheria, tetanus, pertussis, polio, Hib, measles, mumps and rubella. In Scotland a target of 95% uptake of one dose of the Measles, Mumps and Rubella (MMR) vaccine by five years of age (with a supplementary measure at 24 months) was introduced in 2006 to focus efforts on reducing the number of susceptible children entering primary school. Figure 4.5 shows uptake by 12 months of age by national Scottish Index of Multiple Deprivation (SIMD). There are no areas in Orkney in the most deprived SIMD band nationally. Table 4.3 is the national vaccination schedule at November 2016.

Figure 4.5 DTP/Pol/Hib vaccine uptake by 12 months of age by SIMD 2012 in Orkney compared to Scotland (green), 2015



Source: *SIRS, 15 February 2016*
Scottish Index of Multiple Deprivation (SIMD) 2012 quintile

Table 4.3 The routine childhood immunisation schedule (NHSScotland 2016)

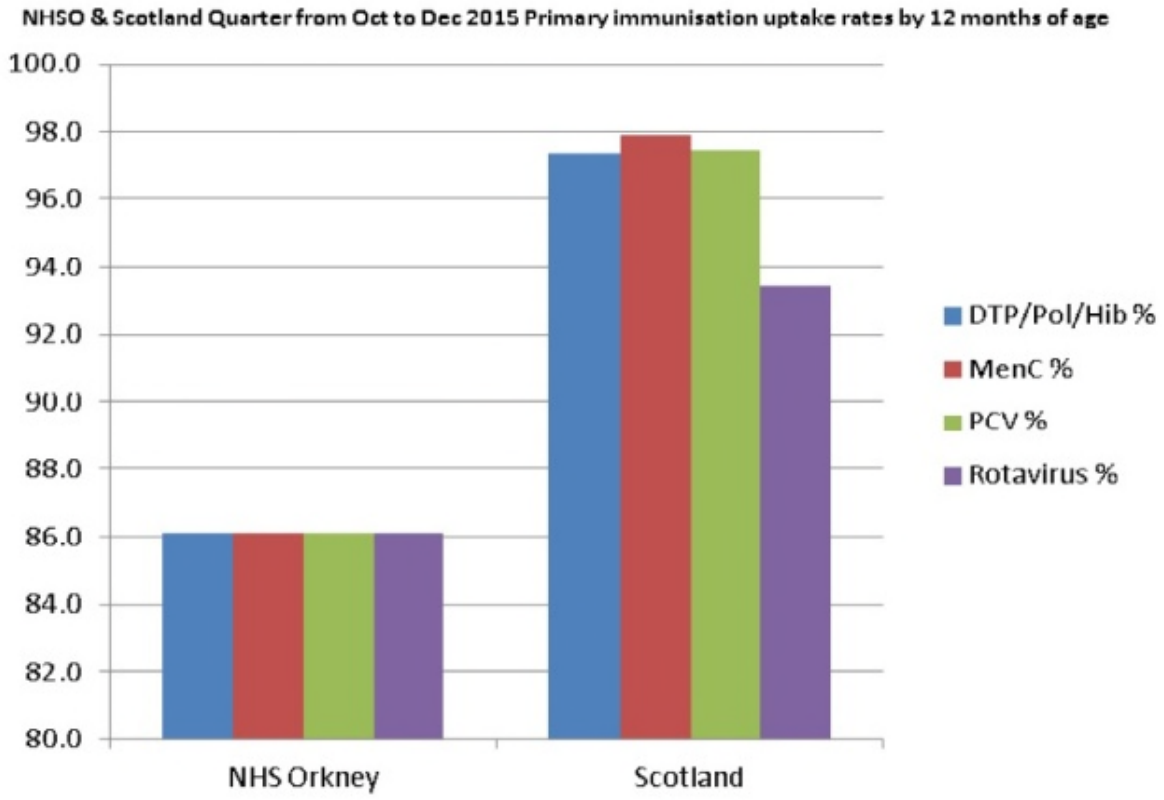
Age	Vaccine	Usual site
2 months	DTaP/IPV/Hib	Thigh
	PCV	Thigh
	Rotavirus	By mouth
	Men B	Left Thigh
3 months	DTaP/IPV/Hib	Thigh
	Rotavirus	By mouth
	Men C	Left Thigh
4 months	DTaP/IPV/Hib	Thigh
	PCV	Thigh
	Men B	Left Thigh
1 year	Hib/Men C	Upper arm Thigh
	PCV	Upper arm Thigh
	Men B	Left Thigh
	MMR	Upper arm Thigh
2 to 11 years - annually	Flu	Both nostrils
3 years 4 months	DTaP/IPV	Upper arm
	MMR	Upper arm
Girls 11 to 13 years	HPV	Upper arm
14 years	Td/IPV	Upper arm
	Men ACWY	Upper arm

DTaP/IPV/Hib: Diphtheria, tetanus, pertussis, polio & *Haemophilus influenzae* type b; **PCV**: Pneumococcal; **Men B, C**: Meningococcal group B, C; **MMR**: Measles, mumps & rubella; **HPV**: Human papillomavirus; **Td/IPV**: Tetanus, diphtheria & polio; **Men ACWY**: Meningococcal ACWY.

Uptake in Orkney

The most recent published data (Figure 4.6) in March 2016 showed uptake in NHS Orkney for some vaccinations at around 86% (for cohorts of children at 12 months) falling below the recommended rate of 95% and below the Scotland average. It is important to recognise that the small number of children in the cohort means the uptake rates in NHS Orkney are more liable to fluctuate.

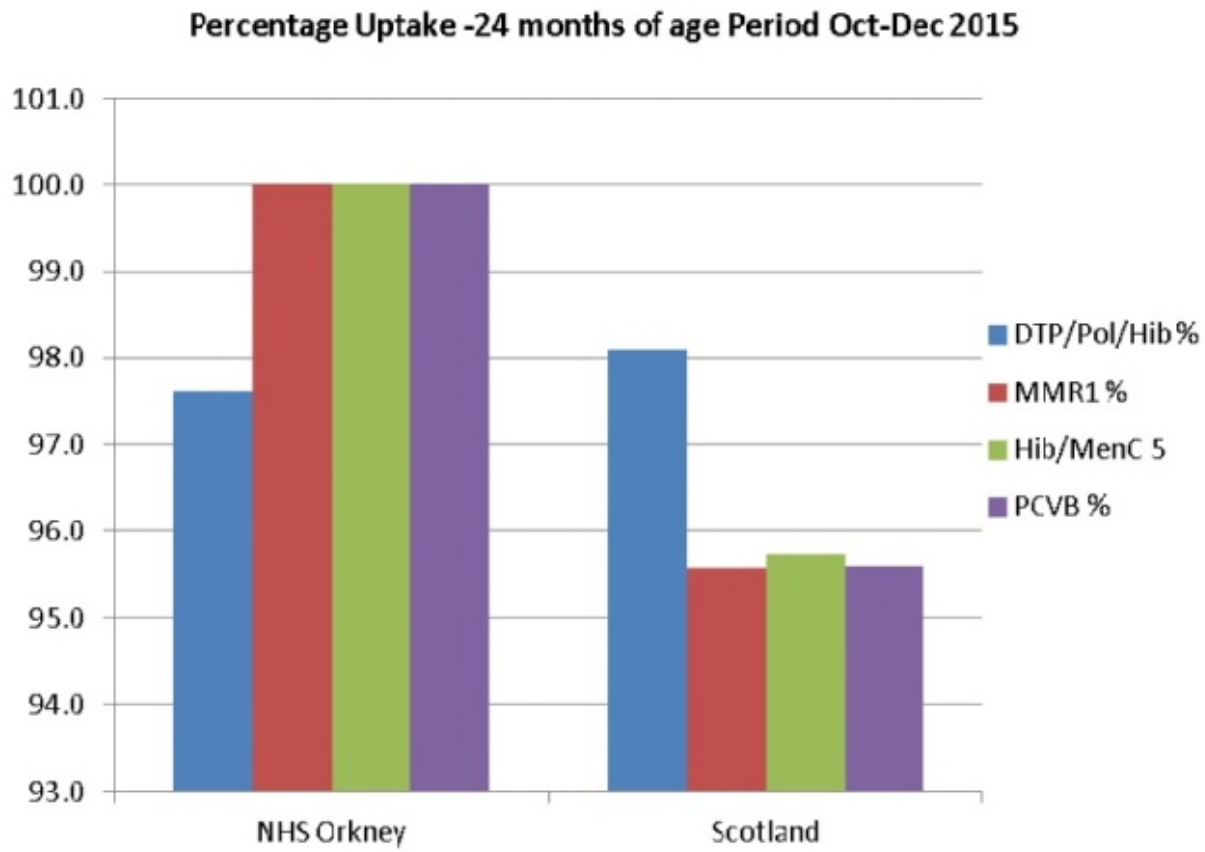
Figure 4.6 Primary immunisation uptake rates by 12 months of age (Oct – Dec 15)



***Source*:** SIRS, 15 February 2016

Effects of that fluctuation can also be seen when analysing rates at 24 months of age (Figure 4.7).

Figure 4.7 Immunisation uptake rates by 24 months of age (Oct – Dec 15)



***Source*:** SIRS, 15 February 2016

Given the data however, it was agreed, this was a priority for a public health review by the Public Health Directorate. The review identified specific components of practice and local procedures within the programmes that could be improved. These components included unnecessary data reporting steps leading to delays in recording, as well as multiple local systems which impacted on efficiency and accuracy of the call and recall of children for vaccination.

NHS Orkney has the smallest cohorts of children in the target population for vaccination out of all Scotland NHS Boards. Small numbers can routinely cause wider fluctuation in the data that informs uptake rates, which should be interpreted with this in mind. Engagement with the NHS Scotland CHI and Child Health Transformation project may offer opportunities to streamline data collection.

HPV vaccination in girls in S2 and S3 school years

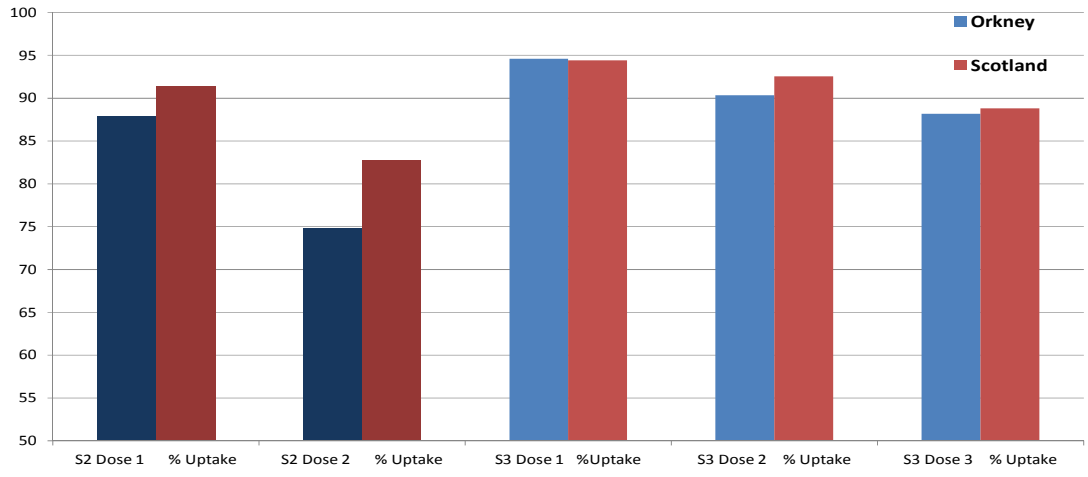
Although most infections are asymptomatic and self-limiting, genital infection by human papilloma virus (HPV) is associated with genital warts and anogenital cancers in both men and women (cervical cancer).

HPV vaccines are highly effective at preventing the infection of susceptible women with the HPV types covered by the vaccine.

In Scotland as in the UK there are two vaccination schedules depending on the age of the girls. These are a two-dose schedule for girls aged between nine years old and below 15 years of age, and a three dose schedule (for girls aged 15 years and above).

A small number of dose 2 vaccines given to the S2 cohort in 2014/15 were not recorded on CHSP School/SIRS by the extract date, and that affects the lower performance for S2 (as displayed below), NHS Orkney still scores slightly lower than Scotland for S3 school girls (Figure 4.8).

Figure 4.8 Annual HPV immunisation uptake rates in Orkney and Scotland for girls in S2* (aged 12-13) and S3 (aged 14-15) in school year 2014/15



***NHS Orkney report that data on a small number of dose 2 vaccines given to the S2 cohort in 2014/15 were not recorded on CHSP School/SIRS by the extract date.**

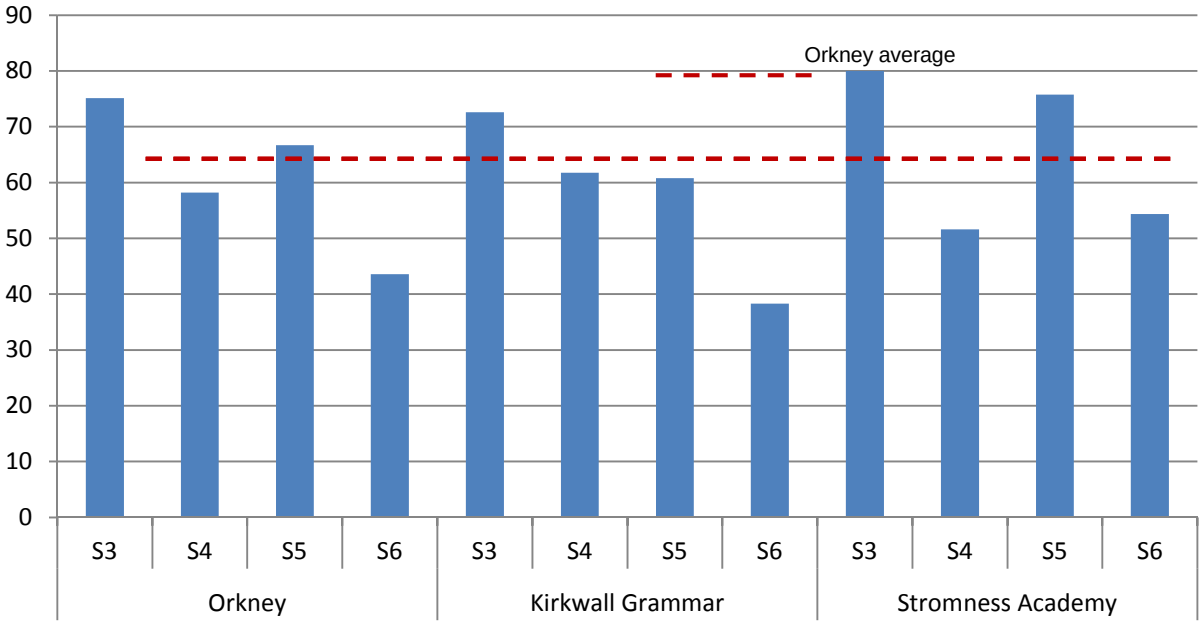
Source: CHSP School/SIRS

Men ACWY vaccine uptake in secondary schools

Meningitis vaccination from 14 years of age changed from a third dose/booster of Men C to the Men ACWY vaccine which protects against meningitis and septicaemia

caused by four strains of meningococcal bacteria: Men groups A, C, W and Y. There has been a catch up programme to include S3, S4, S5, and S6 pupils from secondary schools in Orkney. The uptake rates, as for March 2016, are shown in Figure 4.9, and the pattern of a drop in uptake in S6 is seen in other areas as well.

Figure 4.9 Men ACWY Uptake rates by school and year compared to the Orkney average, March 2016

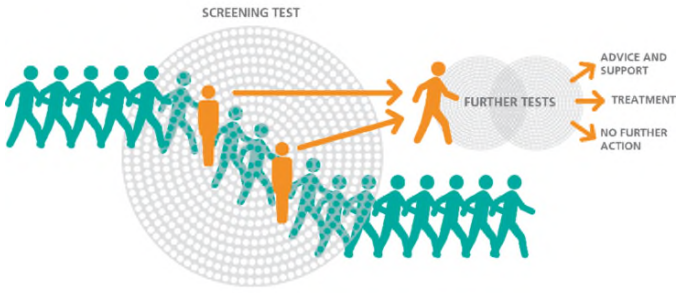


Source: HPS (NSS)

4.3 Screening Programmes

Screening is the process of identifying healthy people who may be at increased risk of a disease or condition. The screening provider then offers information, further tests and treatment as appropriate. It can be helpful to think of screening like a sieve. In Figure 4.10, a large group of people accept the offer of a screening test.

Figure 4.10 Illustration of a screening test



This image shows how the screening process can be compared with putting people through a sieve. The sieve represents the screening test and most people pass through it. This means they are at low risk of having the condition screened for. The people left in the sieve are at higher risk of having the condition. A further investigation can then be offered to them.

At each stage of the screening process, people can make their own choices about further:

- tests
- treatment
- advice
- support

The public needs to have realistic expectations of what a screening programme does. Screening can:

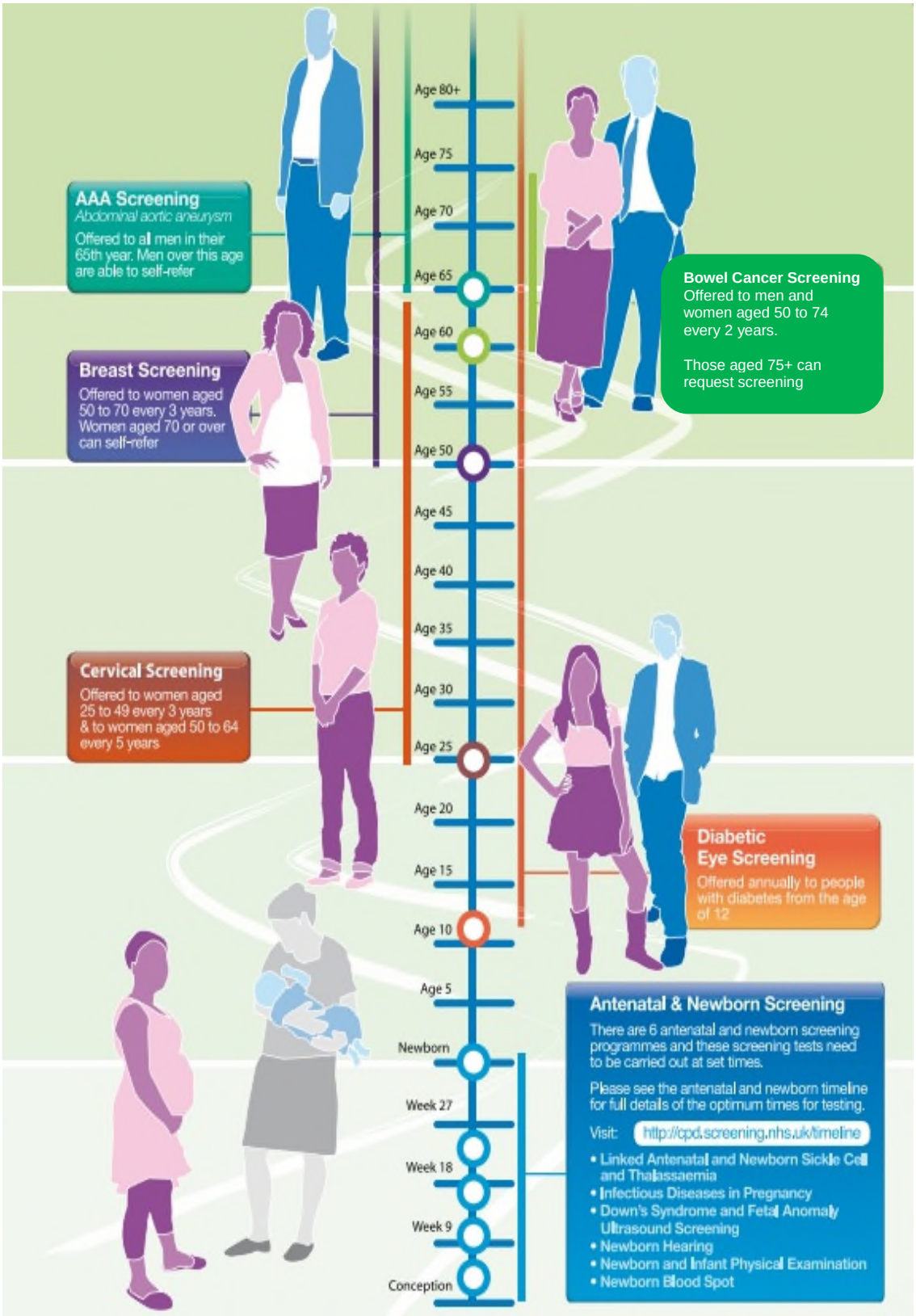
- save lives or improve quality of life through early risk identification
- reduce the risk of developing a serious condition or its complications

Screening, however, does not guarantee protection. Receiving a low risk result does not prevent the person from developing the condition at a later date. In any screening programme there are false positive and false negative results:

- false positive: wrongly reported as having the condition
- false negative: wrongly reported as not having the condition

Screening programmes in Scotland include long established cancer screening programmes like mammography for breast cancer, cervical smears for cancer of the cervix, and bowel cancer screening, and other programmes offered to adults like abdominal aortic aneurysm (AAA) screening and retinopathy screening for those with diabetes. In addition, there are a number of tests and screening procedures undertaken in the antenatal and newborn periods for babies born in Orkney. Figure 4.11 illustrates the timeline of these programmes.

Figure 4.11 NHS Screening Timeline



Abdominal Aortic Aneurysm (AAA) Screening

An Abdominal Aortic Aneurysm (AAA) is a swelling of the aorta, the main artery in the body, as it passes through the abdomen. As some people get older, the wall of the aorta in the abdomen can become weak and balloon out to form an aneurysm. The condition is most common in men aged 65 and over and usually there are no symptoms.

Large aneurysms are uncommon but can be very serious as, when the wall of the aorta stretches, it becomes weaker and it can rupture, leading to life-threatening internal bleeding which in 80% (8 out of 10) of cases, results in death.

The Scottish AAA screening programme aims to reduce deaths associated with the risk of aneurysm rupture in men aged 65 and over by identifying aneurysms early so that they can be monitored or treated. The screening test is a simple ultrasound scan of the abdomen which takes around 10 minutes. Men aged 65 are invited to attend AAA screening and men aged over 65 who have not previously been screened can self-refer into the screening programme. Most men have a normal result and are discharged from the screening programme. Men with detected small or medium sized aneurysms are invited for regular surveillance screening to check the size of the aneurysm. Men with large aneurysms are referred to vascular specialist services. NHS Orkney joined the Grampian, Orkney and Shetland Collaborative Abdominal Aortic Aneurysm (AAA) Screening Programme at its inception in October 2012.

The process of screening include the identification of males aged 65 who are eligible for screening to offer them the screening programme by means of an invitation. In addition, those aged 66 and over can request to be included in the programme. Both, those who accept the offer and those who self-refer, undergo a scan of the abdomen with a portable ultrasound machine to measure the diameter of the aorta, the results of which are available to the participant at the point of testing:

- Normal: the aorta is not enlarged and there is no aneurysm. No further tests, nor treatment nor monitoring are required
- Small aneurysm: enlargement between >=3.0 cm and < 4.4 cm. Participants will be monitored and invited to a yearly surveillance scan.
- Medium aneurysm: enlargement between >=4.5 cm and < 5.4 cm. Participants will be monitored and invited to a quarterly surveillance scan.
- Large Aneurysm: Men with an enlargement >=5.5 cm are referred to Vascular Services for rapid surgical assessment and if required appropriate surgical reparation.

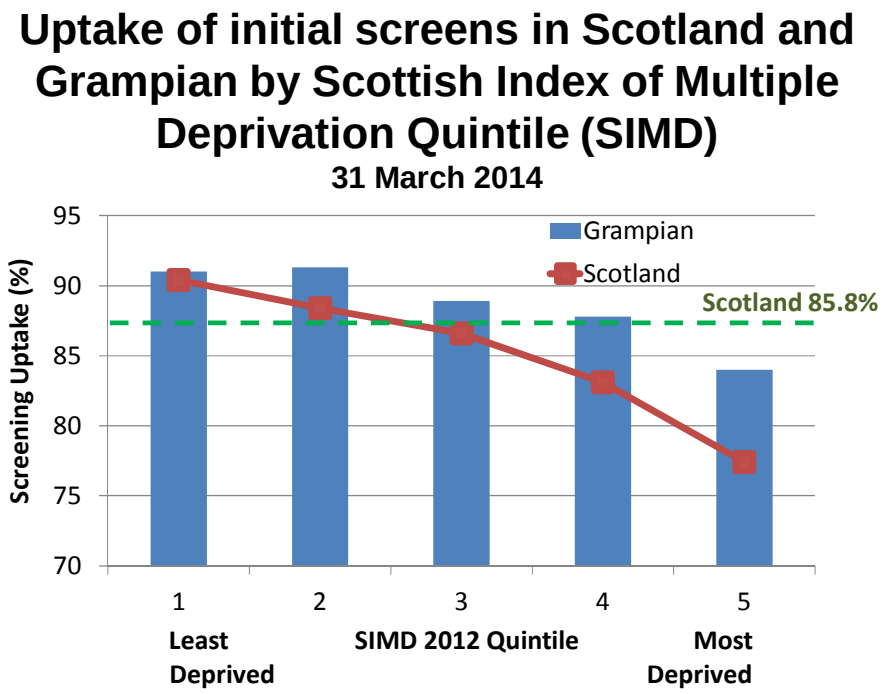
Since October 2012 to October 2014 (latest data from the Collaborative) NHS Orkney had 518 participants, of whom 76 self-referred. Of these 594 eligible men, screening was offered to 85% (505), below the minimum criteria of 90%. Out of

these 505 offers 413 were accepted; that means that the uptake has been 81.8%, well above the required standard of 70%, but lower than Scotland as a whole at 85.5%. Work is being undertaken in the collaborative to ensure a better invitation rate for Orkney.

We do not have the statistics specific for Orkney concerning any inequalities in offer and/or uptake of screening, but we do have a picture of Grampian and Scotland (see Figure 4.12) and there is a decrease in the screening uptake in both with increasing deprivation.

As for the results of the screening as expressed in aneurysms detected, during the first two years, the Collaborative detected 10 aneurysms in participants from Orkney (2.42%), of which 3 were large, no medium sized and 7 small aneurysms. The three large aneurysms detected were referred to vascular services where they have received further treatment. Survival rates following surgery in the Collaborative have been a 100%.

Figure 4.12 Uptake of initial screens by deprivation quintile



Diabetic Retinopathy Screening

Diabetes can affect the small blood vessels in the body like those found in the retina of the eye. When this happens it can affect your sight, resulting in Diabetic Retinopathy, the most common cause of blindness in the working age population.

In order to minimise risk of sight loss, systematic screening is offered to all of the eligible diabetic population (aged 12 years and over) in Orkney. This involves digital photography of the back of the eye, and if changes are identified treatment is initiated if appropriate.

The Scottish Diabetic Retinopathy Screening Collaborative, known as the 'DRS Collaborative', brings together staff from all NHS boards in Scotland to facilitate the delivery of the Scottish National Diabetic Retinopathy Screening Programme. The DRS Collaborative provides NHS boards with quarterly national and local key performance indicator data and submits a quality and performance report to the Scottish Standing Committee for screening programmes.

Recently, Healthcare Improvement Scotland published a revision of the Diabetic Retinopathy Screening Standards, updating the 2004 *Clinical Standards for Diabetic Retinopathy Screening*. The diabetic retinopathy screening standards cover the following areas: governance and leadership; call-recall; attendance and uptake; the screening process; referral; and treatment.

Each of the key standards outlined above have been assessed according to the scope or criteria, and format required by Healthcare Improvement Scotland. In 2015, in general the DRS programme in Orkney is performing well within standards. Table 4.4 shows the number of patients in the programme and uptake of screening and Figure 4.13 compares uptake in Orkney with other areas.

Table 4.4 Diabetic Retinopathy screening performance

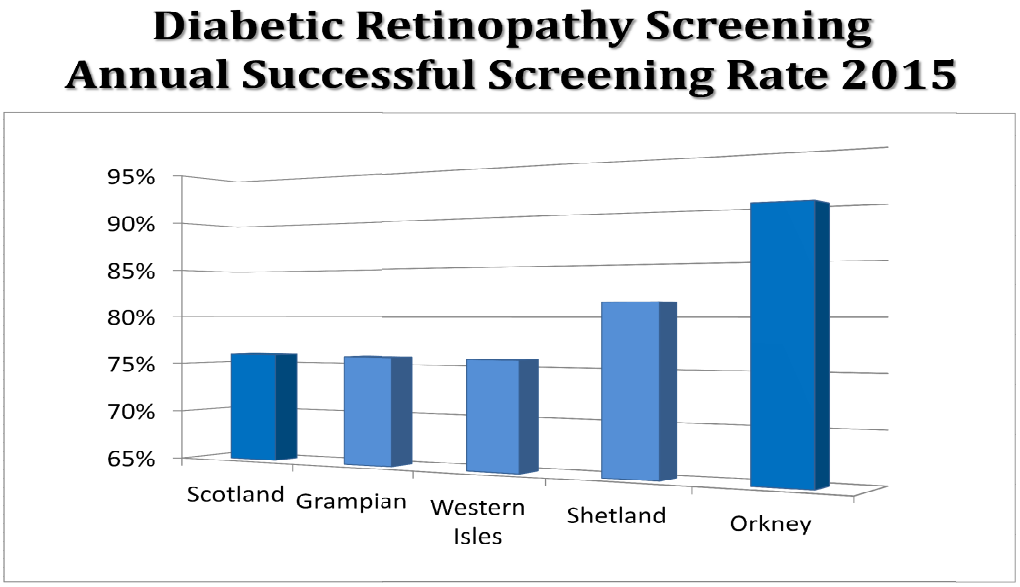
NHS Orkney Performance on Diabetic Retinopathy Screening (2015)

Indicator	2015 (to Q4)
Diabetic patients	1220
Patients excluded	173
Patients to be screened	1047
Offered screening	1057
Receiving screening	955
Offered screening (%)	101%*
Uptake (%)	91.2%
Excluded (%)	14.2%

* Percentage >100 due to inclusion of people attending without invitation

Source: Scottish DRS Collaborative, 2016

Figure 4.13 Uptake of diabetic retinopathy screening

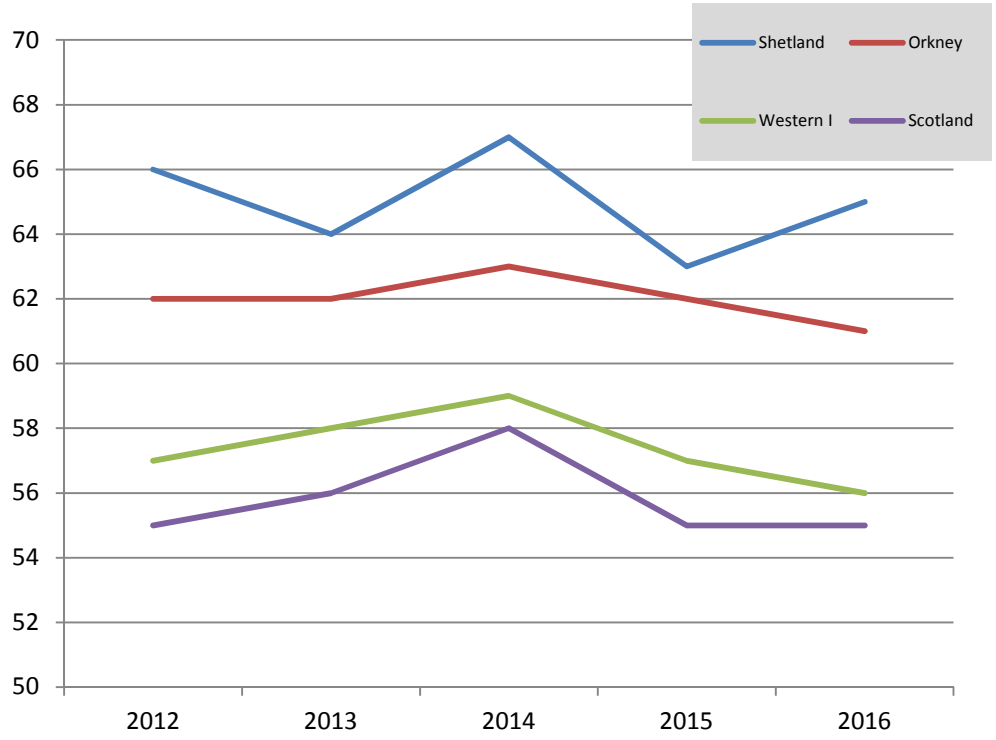


Bowel (Colorectal) Cancer Screening

The NHS Bowel Cancer Screening Programme offers screening every 2 years to all men and women aged 50-74 who are registered with a GP. People aged 75 or over can request a screening kit. Initial screening is via a faecal occult blood test (FOBt) which is completed at home using a kit that people received in the post. This kit is a clean, simple way for you to put small samples of your bowel motion (poo) on a special card which is then posted safe, secure and free of charge to the Bowel Screening Centre laboratory for testing. Those with a normal FOBt result will be re invited into the screening programme in 2 years if they fall within the age range. Patients with an abnormal FOBt will be offered an appointment with a Specialist Screening Practitioner who will assess them for suitability to have a colonoscopy.

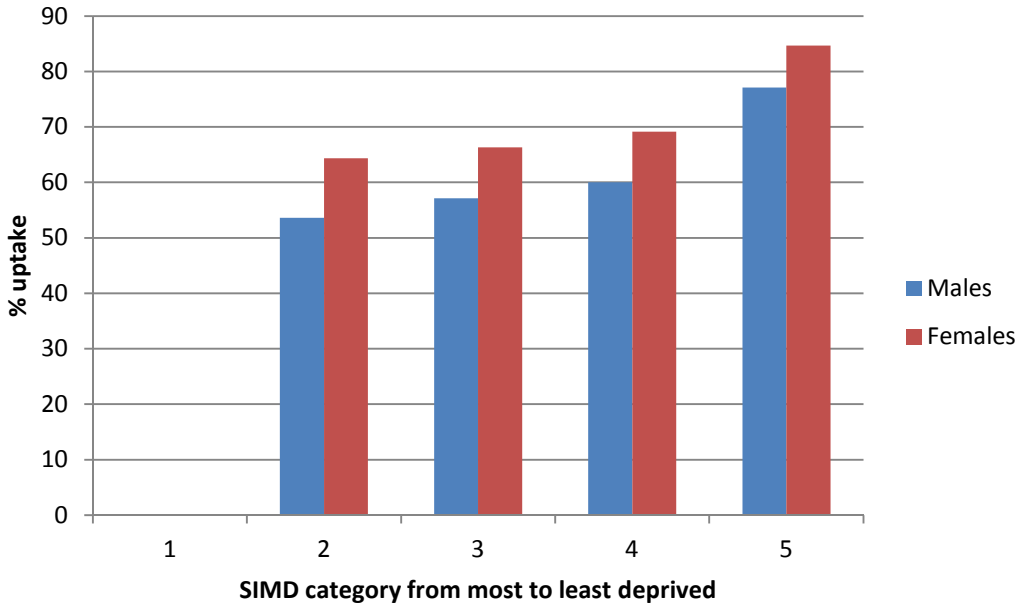
Comparatively speaking, Orkney is the second best health board in relation to screening uptake and exceeds the Scottish average, and these results have been consistent throughout the last five years, as the Figure 4.14 shows.

Figure 4.14 Trends in the uptake of Bowel Screening as percentage of Persons by selected comparable HBs and Scotland



The data for Orkney shows a greater uptake for women compared with men, and a greater uptake in the least deprived areas using the SIMD classification (Figure 4.15).

Figure 4.15 Uptake of bowel screen by sex and deprivation category for Orkney



As shown in the series of graphs below, there are some key points to highlight:

- Women take up screening in higher numbers (66.9%) compared to men (57.6%)
- This difference remains when data is considered at practice level
- One practice in particular, Rousay, performed higher than some others, which was linked to the General Practitioner's engagement with the programme (Figure 4.16, 4.17, 4.18)

We are exploring the most effective way to share Rousay good results throughout all practices in Orkney.

Uptake of screening by GP practice

Figure 4.16 Uptake of Bowel Screening as a percentage (95% CL) of Persons in Orkney by Practice

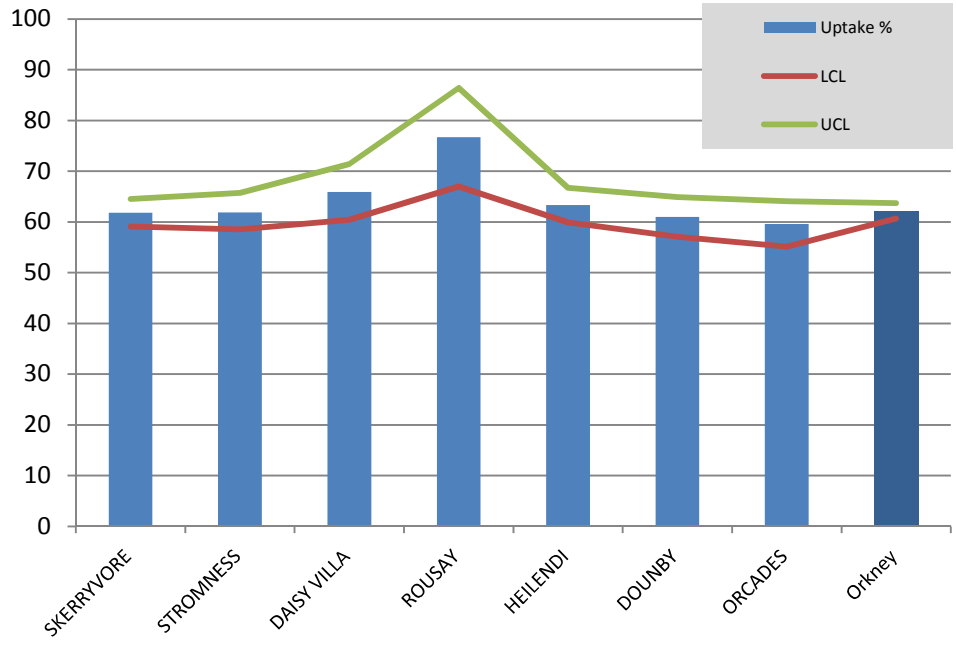


Figure 4.17 Uptake of Bowel Screening as a percentage (95% CL) of Males in Orkney by Practice

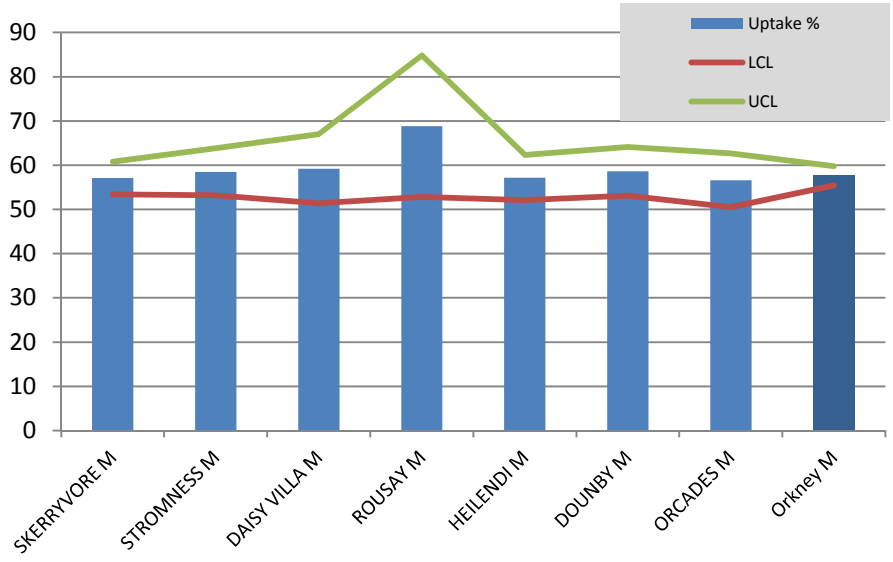
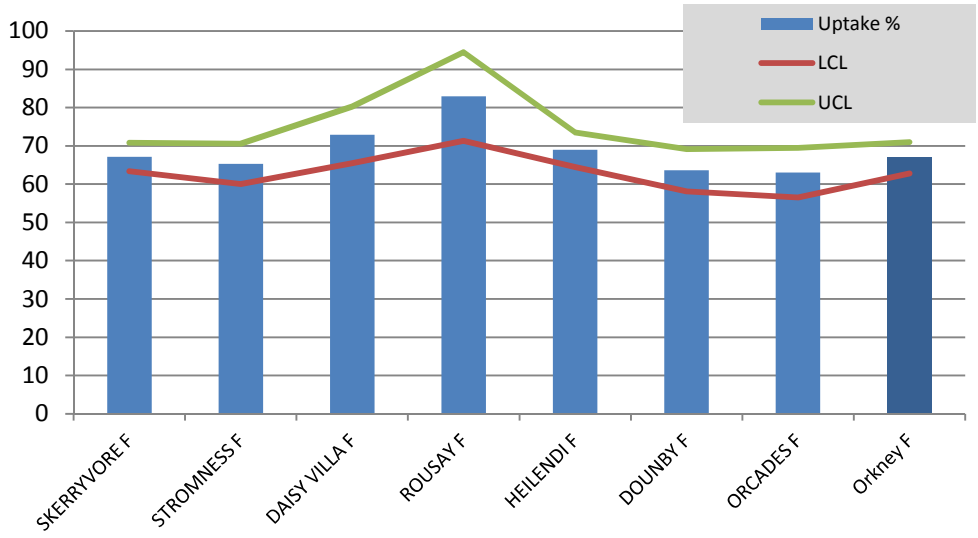


Figure 4.18 Uptake of Bowel Screening as a percentage (95% CL) of Females in Orkney by Practice



Breast Cancer Screening

In Orkney, like in the whole of Scotland, women aged 50-70 years are invited for a routine screen once every three years. Women over 70 years are also screened three-yearly but on request. Up until 2007/08, the screening method used in Scotland consisted of two mammographic views at first screen and one view at

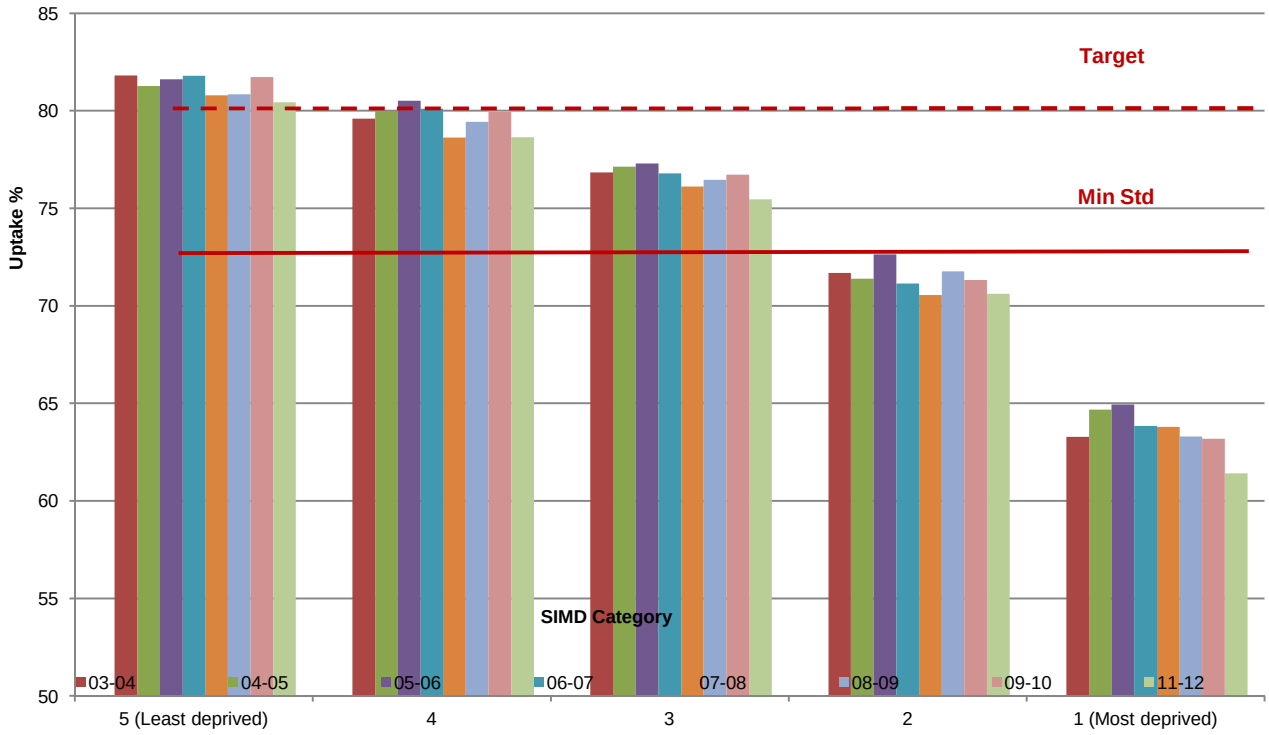
subsequent screens. Since 2010 the Scottish Breast Screening Programme (SBSP) has implemented the two view screening at every screening appointment.

Over the last five years (2010-15) the uptake of Breast Screening in Orkney (84.7%) has not only exceeded the desired standards, but has done so consistently without the decrease seen over the years in Scotland as a whole (Figure 4.19).

Figure 4.19 Uptake rate by NHS Board of Residence (2010-2015, three-year periods)

However, and like in many other screening programmes, these don't reach every stratum of society with due equity, and although we do not have currently a specific picture for Orkney, that of Scotland shows a clear decline of uptake for those most deprived, and with more need (Figure 4.20).

Figure 4.20 Uptake (%) of Breast Cancer screening by deprivation category, 2003-2012



This emphasises the need to ensure not only breast screening and other screening programmes but also other health promotion programmes are working to reduce health inequalities.

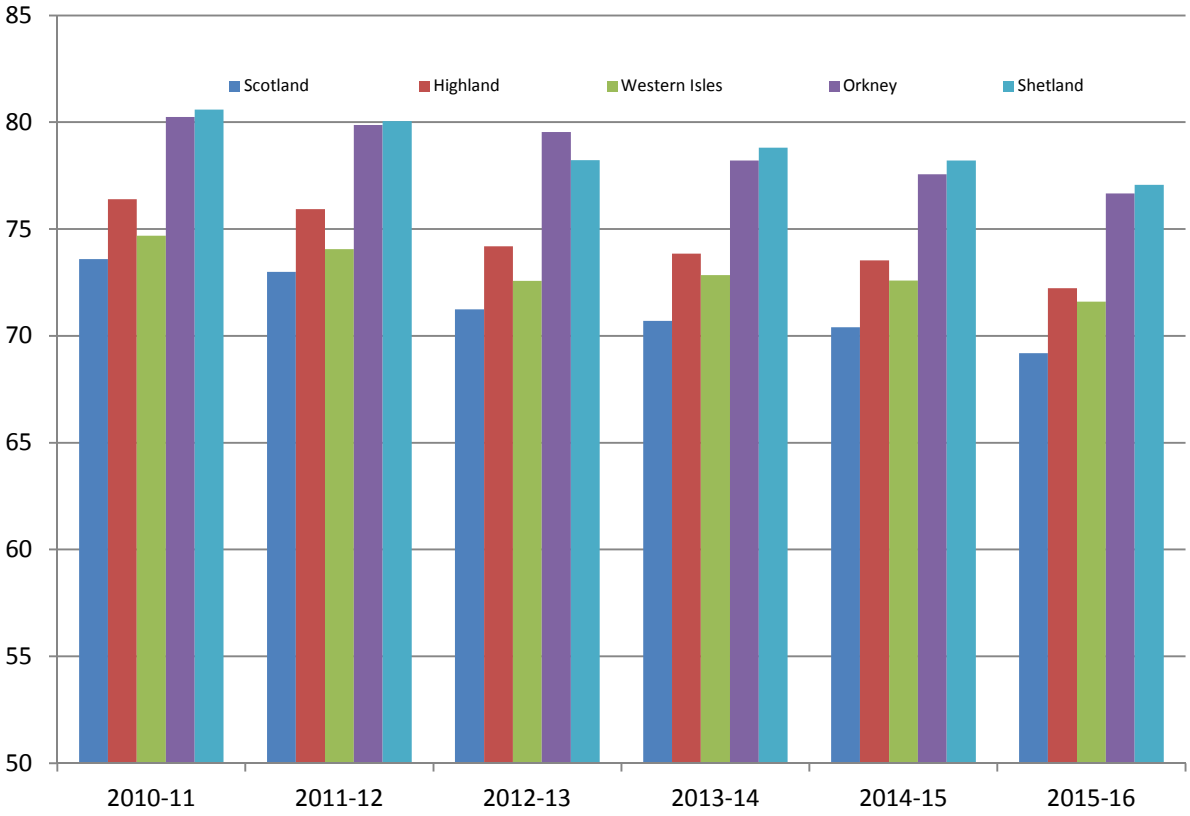
Cervical Screening

All women aged 25 to 49 in Orkney are offered a smear test every three years, in line with the national programme. Women aged 50 to 64 are invited every five years. Women, under the age of 25, who have already been invited for screening, may be invited again before they reach 25. Some women are also offered screening more frequently, up to the age of 70 years.

The smear test is then sent to a lab, which will keep it for 10 years in order to compare tests at different times. The individual will be contacted if the results suggest care should be changed in any way. The sample may also be tested again, including testing for HPV. This is so that the NHS can evaluate how well it's preventing cancer.

Over the years there has been a steady decline in the uptake of cervical smears everywhere in the UK. Whilst Scotland is not different, the downward trends in the northern isles (Orkney and Shetland) have been less marked with uptake over the 75% mark (Figure 4.21)

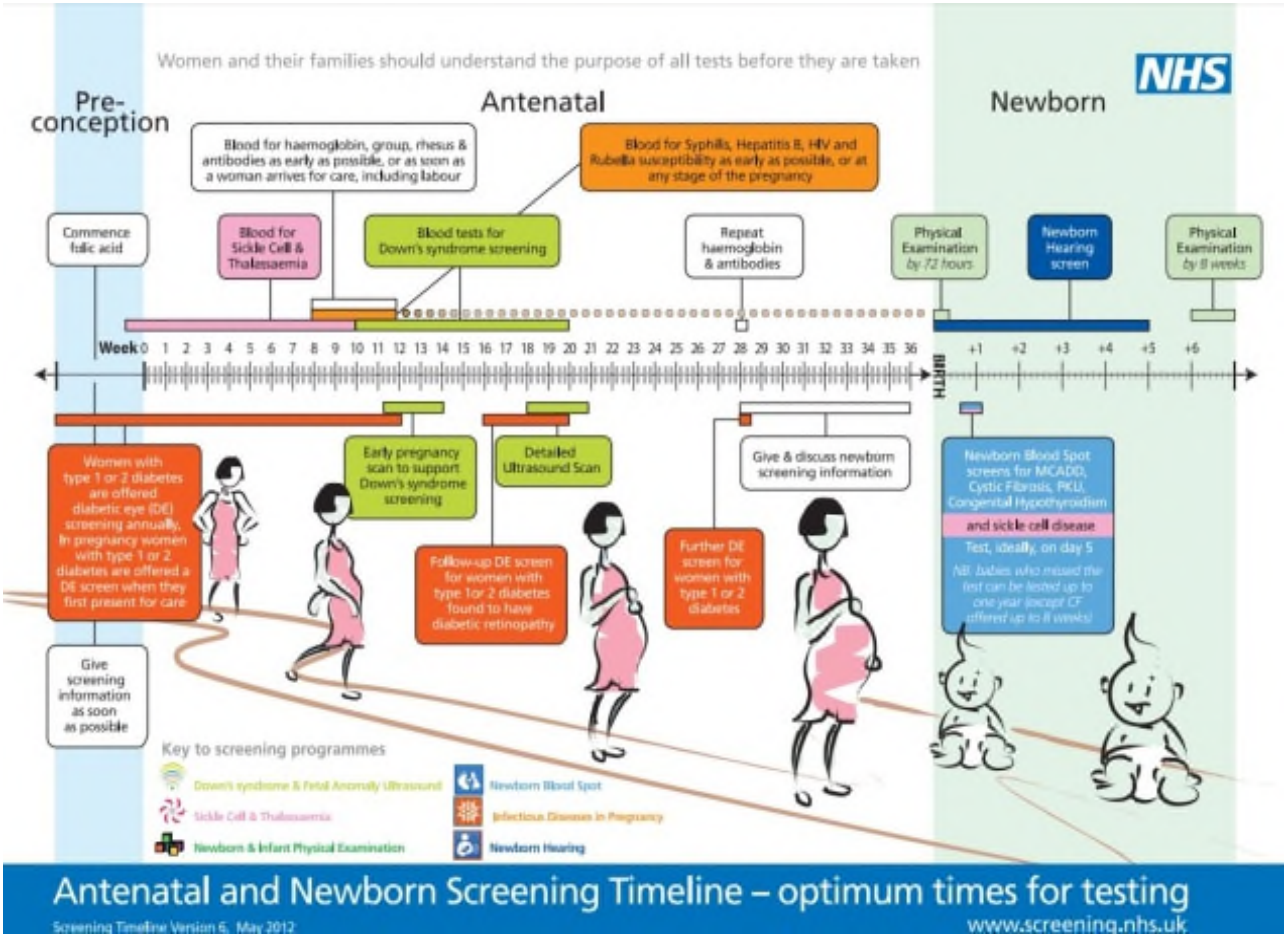
Figure 4.21 Trends in the % uptake of females aged 20-60 with a screening test taken within last 3.5 years by NHS Board of Residence: Apr 11 - Mar 16



Antenatal and Newborn Screening

These tests are offered to all pregnant women to assess the 'chance' of them or their baby having a particular health problem or disability. These are usually simple tests (for example, a blood test, ultrasound scan or questionnaire) (Figure 4.22). They do not provide a definite diagnosis but help the pregnant woman and her midwife decide whether further tests are required to make a diagnosis.

Figure 4.22 Antenatal and newborn screening



Newborn Blood Screening

Newborn blood spot screening identifies babies who may have rare but serious conditions. Most babies screened will not have any of the conditions, but for the small number reported, screening can point the way to early treatment which can improve their health or prevent severe disability.

Blood spot results are analysed and interpreted by the Scottish Newborn Screening Laboratory (SNSL). Results are sent to the Community Child Health Departments for input to the SIRS database.

The SIRS system supports the recording of newborn bloodspot screening; currently providing for up to 5 blood spot tests :

- Phenylketonuria – PKU
- Congenital Hypothyroidism – CHT
- Cystic Fibrosis – CF
- Medium Chain Acyl-CoA Dehydrogenase Deficiency – MCD

- Haemoglobinopathy – HBO (Sickle Cell Disorder - SCD)

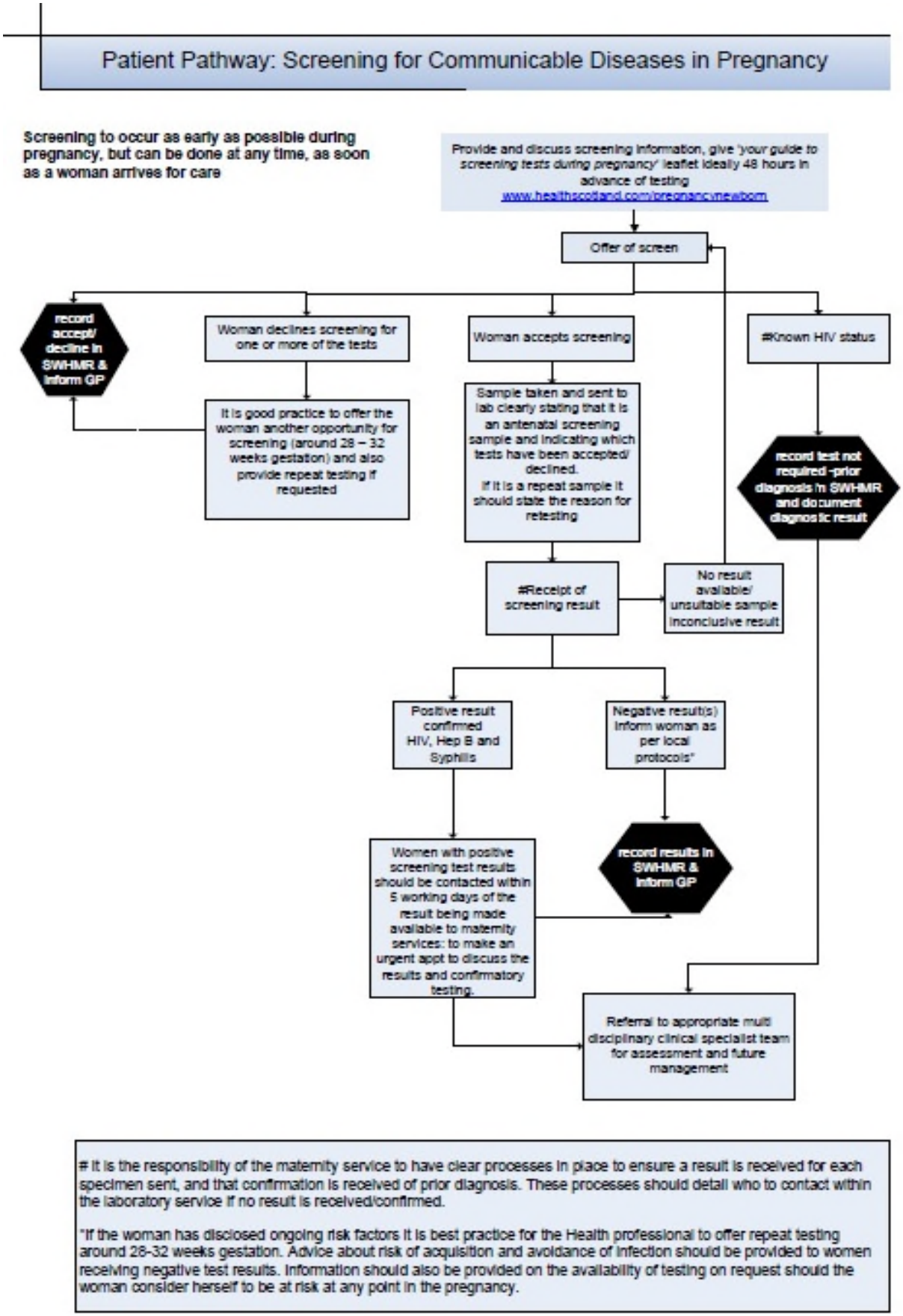
During 2015/16 in Orkney 187 babies had blood spot tests performed at the SNSL. Of these, 5 were sent for further Cystic Fibrosis DNA investigation and one for Sickle Cell Disease DNA testing, with normal results.

Communicable Diseases in Pregnancy Screening

The screening programme for communicable diseases in pregnancy is designed to offer women the opportunity for early identification of hepatitis B, HIV and syphilis thus allowing management interventions to be offered to the mother and to prevent mother to child transmission.

The latest guidelines issued in June 2016 by the NHS Scotland Screening Programme are displayed in the Figure 4.23 below.

Figure 4.23 Screening for communicable disease in pregnancy



Newborn Hearing Screening Programme (NHSP)

One to two babies in every 1,000 are born with permanent hearing loss in one or both ears. This increases to about 1 in every 100 babies who have spent more than 48 hours in intensive care. Permanent hearing loss will significantly affect a baby's development.

As most of these babies are born into families with no history of permanent hearing loss, finding out early can give these babies a better chance of developing language, speech, and communication skills. The hearing test is a simple test done in the first few weeks after birth, ideally when the mother is still in the maternity unit.

In Orkney, during 2015, the number of babies screened was 150. Overall 4 babies were referred for diagnostic testing.

4.4 Port Health

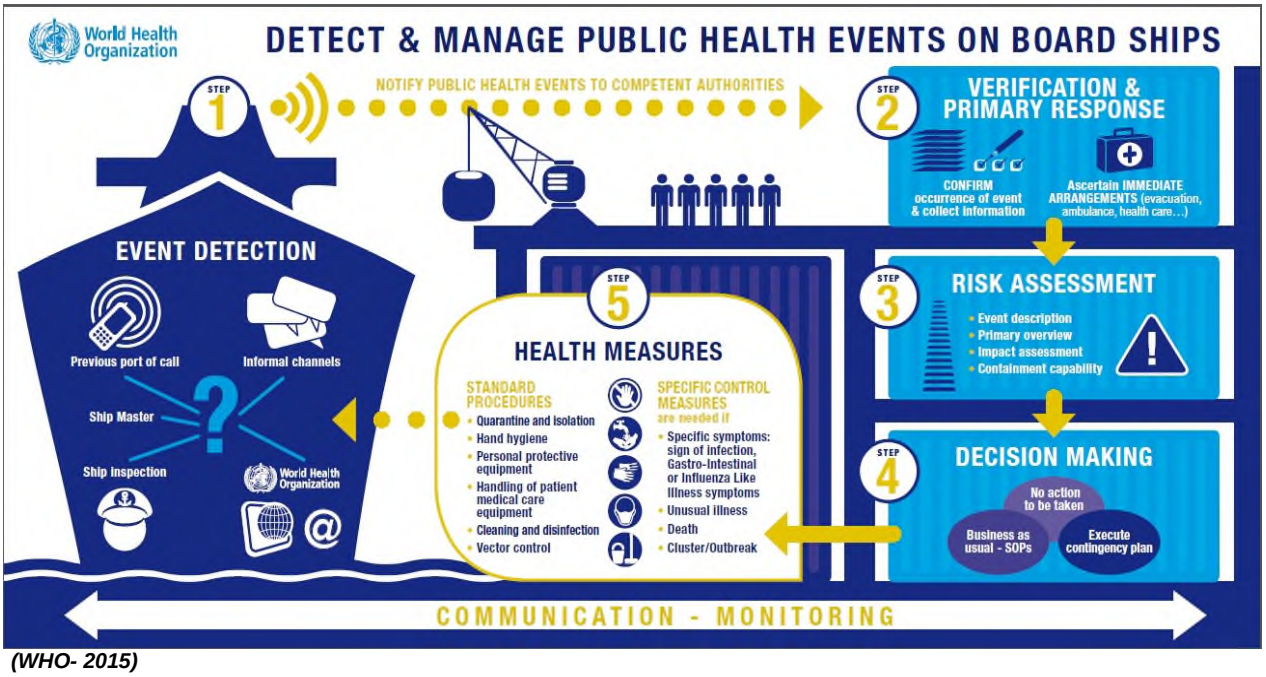
Orkney continues to be an extremely popular cruise ship destination, and in 2015 Orkney became the second busiest cruise port in the UK after Southampton, with over 90 cruisers docking during the 2015 season.

The recently closed season of 2016 has witnessed an even greater number of cruise visits with 120 scheduled cruise ships, usually docking for a day or less often arriving in the morning and then leaving in the evening.

This pattern of tourist visits to Mainland isle in general and Kirkwall town centre in particular, carries some distinctive risks, primarily concerning communicable diseases which may have originated on board or before embarkation, but which could pose a hazard once the ship touches port.

Figure 4.24 published by WHO (2015) on the management of public health events happening on board ships, illustrates the general process that is followed when a vessel identifies a potential public health issue.

Figure 4.24 WHO Guidelines



(WHO- 2015)

The great majority of cruisers visiting Orkney have a UK port as the origin, and a few have international itineraries. Normally the cruisers, before docking, send a Maritime Declaration of Health to both Port Health Authority and Environmental Health, who pass on any concerns to the Public Health department when necessary.

During the 2016 cruise season, which spans from March to September 2016, there were only a few issues. These included cases of flu, potential food poisoning and chickenpox. Prompt communication was established between the ships' medical officers and Orkney's port health officer, and public health practitioners and measures were put in place to minimise any health risk to the population.

For the next season, 2017, the number of cruise ships will be climbing up to around 150 ships and an estimated number of passengers of 127,000 (30% more than 2016 and over 50% from the previous year).This predicted steep increase in ships docking in Orkney, will require appropriate resource planning by all stakeholders involved and consideration of the environmental as well as financial impact.

4.5 Resilience and Business Continuity

Resilience is a specialist area led by Public Health that supports the health service to cope effectively with planned and unplanned events. It also involves working with

partnership agencies such as the Police Service of Scotland and Orkney Islands Council as well as utility providers to ensure delivery of an effective response to events that affect the wider community.

Resilience work includes the administration of the multi-disciplinary Resilience Planning Group. This group has met quarterly over the past year to help improve the Board's resilience and ability to respond and continue to provide essential services in the event of an emergency.

During 2015 there were six multi-agency exercises at the smaller airports across the outer isles which are listed in Table 4.5. In addition Exercise Bunting, a live exercise, took place at Kirkwall Airport on the 15th of September 2015. All exercises used simulated aircraft incidents to test the multi-agency response and "on site" plans. NHS Orkney was represented by GPs and Community Nurses.

Table 4.5

Westray	Exercise Rapide	7th April 2015
Sanday	Exercise Dragon	7th May 2015
North Ronaldsay	Exercise Monospar	4th June 2015
Stronsay	Exercise Fox	31st August 2015
Eday	Exercise Ragnavald	3rd February 2016
Papa Westray	Exercise Torf	8th March 2016

In autumn 2015, NHS Orkney participated in the national exercise Silver Swan. This scenario based exercise asked specific questions of participants on various aspects of dealing with a pandemic influenza outbreak in Scotland.

NHS Orkney also participated in regular meetings of the multi-agency Orkney Local Emergency Coordinating Group (OLECG) throughout the year to help ensure continuity of NHS Orkney services and to support the organisation in fulfilling its role as a Category 1 responder. There was also regular attendance at the Highlands and Islands Regional Resilience Partnership Working Group the North of Scotland Regional Resilience Partnership and NHSScotland Health Resilience Unit meetings. This assisted in ensuring compliance with national guidance as well as continuing to develop emergency preparedness.

Severe weather and weather warnings from the Met Office in winter 2015 led to additional meetings of OLECG to prepare for and then deal with consequences of situations such as power outages and the loss of telecommunications as quickly as possible.

On the 1st of March 2016 a full-time Resilience Officer was appointed to NHS Orkney.

On the 21st of March 2016 the Balfour Hospital suffered disruption to its internet services as a result of damage to the service provider's fibre optic cable. The Hospital Incident Management Team was stood up as well as OLECG to manage the situation. A debrief was undertaken by the Scottish Resilience Development Service given the scale of the impact across a range of public services and lessons learnt circulated through the wider resilience community.

On the 25th of March 2016 refresher decontamination training session was held with NHS Orkney staff that had previously been trained to wear decontamination suits and undertake decontamination procedures. This training was designed to deal with the spillage or release of hazardous chemicals, pathogens or radiological substances where members of the public were directly affected.

Work is ongoing to update key incident response plans and support continues to be offered to service managers as they prepare their departmental Business Continuity Plans. A central register of these plans including status and review dates is maintained by the Public Health Department thus ensuring that they are regularly reviewed to reflect departmental changes and changes in legislation.

During the reporting period there were several notifications to Public Health from cruise liners relating to passenger and crew illnesses including flu outbreaks and cases of gastroenteritis. These resulted in partnership responses from Public Health, Environmental Health Services and Port Authorities.

Acknowledgements

I would like to thank everyone who has worked in the public health department for their contribution to this annual report, which provides a snap shot of just some of the work being undertaken. In particular I would like to thank Suzanne Baird and Dr Jose Ortega for their help in compiling the report and Rose Rendall for formatting the final report. In 2016 Cindy Marsh and Dr Jose Ortega worked with the department as locum consultants in public health and some of the work they undertook is also reflected in this report.