

Public Health Report 2017-18



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1.0 Introduction

Major changes are occurring in Scotland with the national public health reform programme involving the development of a new body, Public Health Scotland, and the publication of Public Health Priorities for Scotland.



These priorities although primarily focused around health improvement also acknowledge the importance of maintaining a strong structure in Scotland for health protection and healthcare public health underpinned by health intelligence.

It is a time of great opportunity and ambition for Scotland and here locally in Orkney. The collaboration of Scottish Government with local government, through COSLA, in public health reform activities reinforces the broad societal approach needed to improve population health and reduce inequalities and the importance of broader social determinants in the creation and maintenance of health and well-being. A national public health organisation, Public Health Scotland is planned for 2019.

Within the health service work enabling health boards to come together on a once for Scotland basis continues as well as clinical and public health activities at a regional level as outlined in the regional discussion papers. Locally, close working continues with Orkney Islands Council, Police Scotland, and Third Sector organisations through the community planning forum. An area of ongoing concern locally and nationally that requires collaborative working is addressing the issue of obesity in the population and its health implications.

This annual report provides a snapshot of some of the work undertaken over the past year, and highlights the need for ongoing close collaborative work utilising local plans such as the Integrated Joint Board's (Orkney Health and Care) strategic commissioning plan and primary care improvement plan to drive change.

My thanks go to all those who have contributed to the report and to the staff and volunteers working across many agencies to improve the health and well-being of the people of Orkney.

Dr Louise Wilson
Director of Public Health

2.0 Priority 1: A Scotland where we live in vibrant, healthy and safe places and communities



What do we know about the changing population and health in the county? The trend in an ageing population is well known, and the general health of the population as measured by life expectancy is good compared with Scotland. Some indicators in relation to premature mortality are poorer for Orkney in 2017 than for Scotland – when trends before had been better. Whilst this may be due to the small numbers involved in calculating the rates we need to see if this is a temporary or new pattern for population health in the islands so that appropriate action can be taken.

2.1 Demographics and health

Population Estimate

The population of Orkney was estimated to be 22,000 in 2017, an increase of under 0.7% from 2016. The trend, within Orkney as elsewhere in the Scotland, is currently towards an ageing population with an estimated 23.1% of the Orkney population over the age of 65 (18.7% Scotland), and 16.1% under 16 (16.9% Scotland).

Migration to and from Orkney

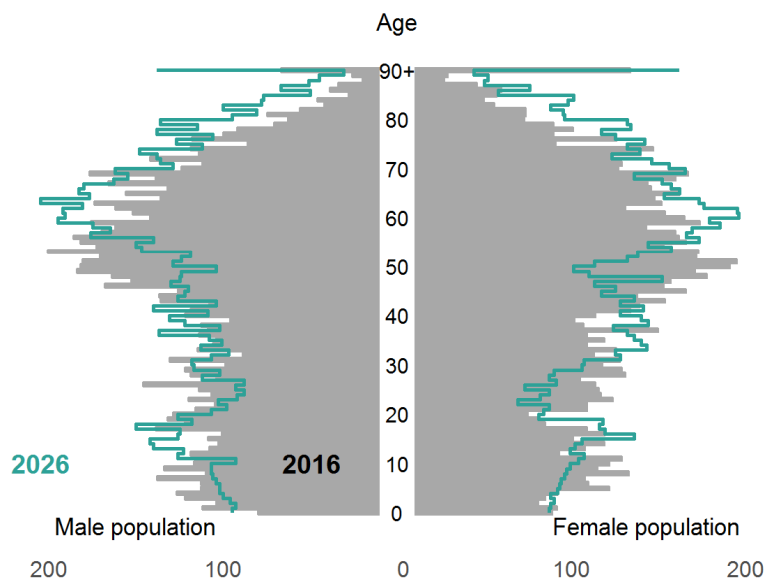
The number of residents in Orkney is partially determined by the number of people who leave or move to the islands. The most recent figures from the National Records Scotland on migration based on council areas for 2016-17 show 781 people migrated in to the islands and 577 migrated away from the islands.

Population projections

In the long-term the population of Orkney is projected to increase by 0.5% over the period 2016-2026 compared with a projected increase of 3.2% for Scotland as a whole. Figure 2.1 shows the expected change in population by age from 2016 to 2026.

Figure 2.1 Population pyramid for Orkney Islands 2016 and 2026

Orkney Islands
Projected population profile, 2016 and 2026



Source: National Records of Scotland 2018

It can be seen that in general the number of children and working age adults is projected to decrease in contrast to the increase in older people. This shift in age distribution is well known locally and being factored in to how services will need to change for future health needs.

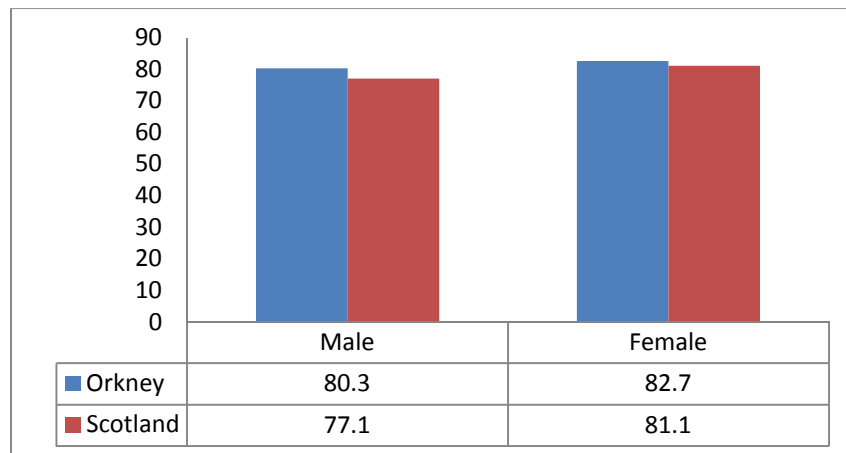
Births

In 2017 there were 184 live births recorded for Orkney, an increase of 3.4% from 2016. The number of births in Scotland, 52,861, fell by 3.0 % over the same period. The standardized birth rate increased from 10.0 per 1000 population in 2016 to 10.3 in 2017. In Scotland the rate overall decreased from 10.1 to 9.7.

Life expectancy

The latest life expectancy data is from 2016. Life expectancy at birth in Orkney is greater for females (82.7 years) than males (80.3 years), and both were greater than the Scottish average (females 81.1 males 77.1 years) (Figure 2.2). Life expectancy in Orkney at age 65 is greater for females (21.1 years) than males (19.7 years).

Figure 2.2: Life expectancy in years at birth in Orkney Islands and Scotland, 2014-16



Source: National Records of Scotland 2018

Premature mortality

In 2017 there were 276 deaths at all ages recorded for Orkney, a 23.8% increase from 223 deaths in 2016. One quality indicator 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 first time in 9 years of reported data the under 75 age-standardized death rate for all causes of death in Orkney has been greater than the Scottish rate (Table 2.1). Due to the small numbers involved year to year variability is expected.

Table 2.1 Death rates (All causes) under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population.

Year	Orkney	Scotland
2009	323.5	477
2010	371.3	467.4
2011	346.7	456.1
2012	341.2	445.3
2013	345.9	437.5
2014	336.5	423.2
2015	378.5	440.5
2016	285.1	439.7
2017	432.1	425.2

Source: NHS NSS 2018

When we look at mortality for under 75 year olds for specific diseases we can see that whilst in general the mortality rate from all heart disease in Orkney has been lower than the Scottish rate it rose above the Scottish rate in 2017 (Table 2.2).

Table 2.2 Circulatory Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

Year	Orkney	Scotland
2009	81	117.2
2010	61.7	113.8
2011	77.5	106.7
2012	83.6	104.2
2013	50.5	101.5
2014	95.7	94
2015	82.1	98.5
2016	53.5	96.1
2017	111.6	94.6

Source: NHS NSS 2018

When we look at the mortality rate from all types of cancer we see a rate below the Scottish rate up to 2017 when it has risen above the Scottish rate (Table 2.3).

Table 2.3 Cancer Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

Year	Orkney	Scotland
2009	108.9	178.9
2010	132.9	174.5
2011	137.6	174
2012	104.1	172.7
2013	123.0	170.2
2014	114.4	165.8
2015	132.5	167.1
2016	76.3	160.0
2017	157.4	154.7

Source NHS NSS 2018

When we look at the mortality rate from respiratory system disease we see a year to year variability for Orkney with the rate again above the Scottish rate in 2017 (Table 2.4).

Table 2.4 Respiratory System Death rates under 75 (per 100,000 population): age-standardised using the 2013 European Standard Population

Year	Orkney	Scotland
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
2015	25.2	42.5
2016	34.1	43.3
2017	45.3	39.0

Source: NHS NSS 2018

2.2 Climate change

Climate change is a major public health issue. Climate change threatens the earth, and us. Oceans have warmed, sea levels risen, snow and ice decreased, and the concentration of greenhouse gases have increased.



UK climate projections identify hotter drier summers and milder wetter winters as key trends (Table 2.5).

Table 2.5: Climate change implications

- an increase in summer heat waves, extreme temperatures and drought;
- increased frequency and intensity of extreme precipitation events;
- a reduced occurrence of frost and snowfall;
- a rise in sea levels (depending on emissions scenario – central estimates of sea level rise in Edinburgh are 10-18 cm by 2050 and 23-39 cm by 2095).

Source: <http://ukclimateprojections.metoffice.gov.uk/21679>

The key climate change risks and opportunities for Scotland have been set out in the UK Climate Change Risk Assessment 2017: Evidence Report – Summary for Scotland, Key elements are reproduced in Table 2.6.

Table 2.6: UK Climate change Risk for Scotland

Natural environment and natural Assets – Climate change poses risks to Scotland’s soils, natural carbon stores, agriculture, wildlife and coastal habitats and seas. More action is needed to manage these risks. More evidence is also needed to fully characterise other climate change risks and opportunities that are likely to be important for Scotland, including changes in agricultural and forestry productivity and land suitability, as well as impacts on freshwater and marine ecosystems.

Infrastructure - Infrastructure in Scotland is exposed to a range of climate hazards. Impacts on some assets have the potential to cascade on to others as part of interdependent networks. Flooding poses the greatest long-term risk to infrastructure performance from climate change, but the growing risks from heat, water scarcity and slope instability caused by severe weather could be significant.

People and the built environment - There are potential health benefits from warmer winters in Scotland, but more action is needed to manage current risks to people from cold temperatures through addressing fuel poverty.

Business and industry - Flooding and extreme weather events which damage assets and disrupt business operations pose the greatest risk to Scottish businesses now and in the future. This could be compounded by a lack of adaptive capacity. New regulations or other government intervention made necessary by climate change also pose an indirect risk to businesses

International dimensions - Climate change will impact upon water security, agricultural production and economic resources around the world. These impacts can compound vulnerability in other countries, which can in turn exacerbate risks from conflict, migration, and humanitarian crises. The main risks arising for the UK from climate change overseas are through impacts on the food system, economic interests abroad, and increased demand for humanitarian aid.

Source:<https://documents.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Scotland-National-Summary.pdf>

We need to combat climate change by addressing greenhouse gases and moving towards a low carbon future – promoting policies which address issues such as

- greater use of public transport;
- reducing overall vehicle use, and improving engine efficiency; and
- reducing the amount of energy we use.

A national taskforce to advise on how Scotland achieves a carbon-neutral economy has been launched in 2018. The Just Transition Commission will look at how to

maximise opportunities of decarbonisation, in terms of fair work and tackling inequalities, while delivering a sustainable and inclusive labour market.

Whilst carbon dioxide is the most commonly referred to Greenhouse gases others include methane, nitrous oxide, water vapour and ozone. The Greenhouse Gas (GHG) Protocol (<http://ghgprotocol.org/standards>) defines GHG emissions and sets the global standard for how to measure, manage, and report.

GHGs are classified as either:

Direct GHG emissions, those which come from sources owned or controlled by the reporting entity, or

indirect GHG emissions those which are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

These emissions are further differentiated into 3 scopes (Table 2.7). These definitions and standards are accepted and used across sectors internationally.

Table 2.7 Classification of GHG emissions

Scope 1:	All direct GHG emissions (e.g. emissions from combustion in owned or controlled boilers, furnaces and vehicles)
Scope 2:	Indirect GHG emissions from consumption of purchased electricity, heat, steam and cooling for own use (energy indirect).
Scope 3:	Other indirect emissions, such as the extraction and production of purchased material, consumables and fuels, transport related activities in vehicles not owned or controlled by the reporting entity electricity- related activities (e.g. transmission and disruption losses) not covered in Scope 2, outsourced activities, waste disposal etc. (NB Transport related activity includes official business travel relating to that directly paid for by an organisation. Does not included business travel recharged by contractors.)

Source: ScotPHN report 2017 *Scope 3 emissions in the health sector: the case for action*

NHS Boards, have a statutory duty under Part 4 of the Climate Change (Scotland) Act 2009 to contribute to climate change mitigation as well as adapt to the impacts of a changing climate and act sustainably.

In the course of delivering services, the health sector contributes significant amounts of direct and indirect GHG emissions.

This includes:

Scope 1 emissions: generated from gas, oil, coal or other fuels burnt in boilers; emissions from company owned vehicles such as fleet and NHS patient transport services and incinerators owned and operated by the organisation;

Scope 2 emissions: generated from the consumption of purchased energy such as electricity for use in buildings or other health service assets) and;

Scope 3 emissions: generated in the production of materials used for building and healthcare infrastructure, the procurement of goods and services used in the delivery of health services, patient, visitor and staff travel (where the vehicle is not owned or leased by the health service).

Tackling scope 3 emissions requires an understanding of how the relative contribution of pharmaceuticals and medical devices to the carbon footprint varies across services.

Low carbon procurement is an important mechanism for reducing the carbon footprint in the health sector, but public bodies, including the NHS, must ensure that procurement requirements do not hinder the ability of companies to compete in the market.

Our existing economy has been described as one of “take, make and dispose” and we need to move to a more circular economy where we make better use of valuable products and materials. Reusable products and reduced packaging play a role, as does reduced pharmaceutical waste – a strong link to local and national work on realistic medicine.

As an organisation NHS Orkney undertakes work relating to climate change and reducing emissions, and the new hospital build will be to a high quality from an environmental perspective. However more needs to be done in conjunction with community planning partners to address this long term issue.

Health for people depends on a healthy climate.

#ClimateChange

WHAT CAN WE DO ABOUT CLIMATE CHANGE?

We can do a lot to protect ourselves, our families, and future generations.

Our transport systems are inefficient, polluting and drive CO₂ into the atmosphere, which directly harms the environment and our health.

The same can be said of our energy and food systems. The livestock sector is responsible for significant greenhouse gas emissions.

CLEAN ENERGY

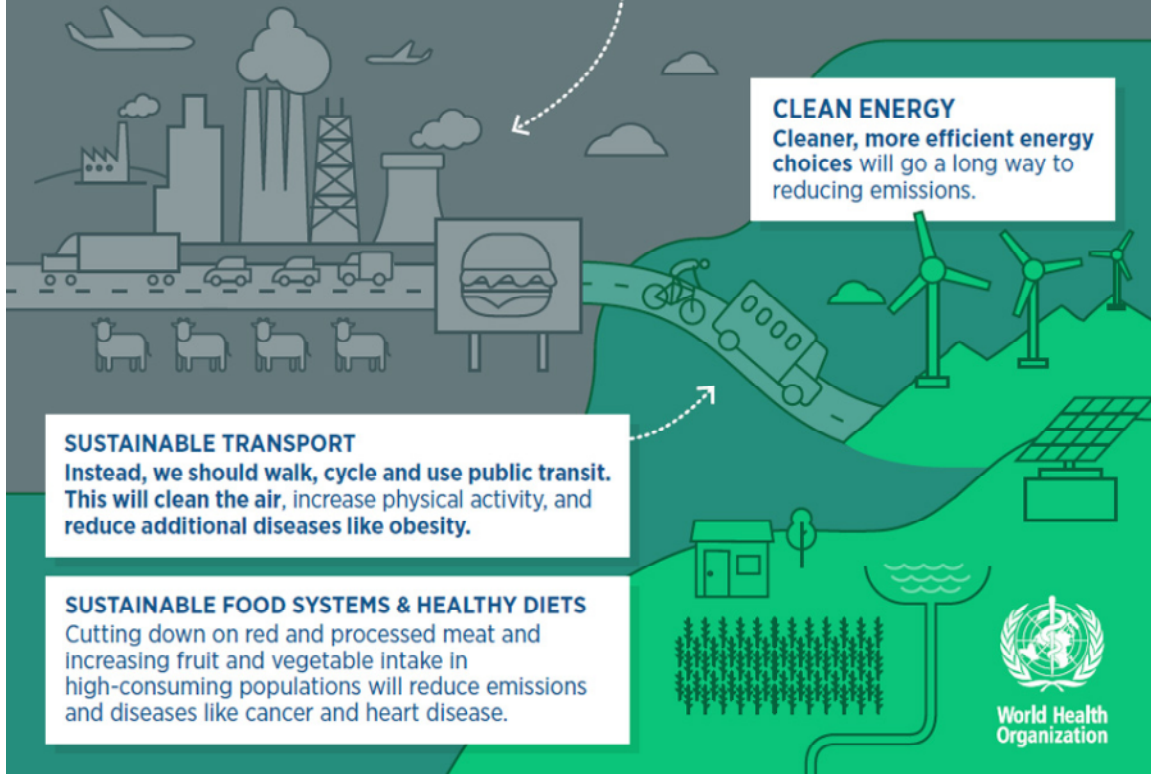
Cleaner, more efficient energy choices will go a long way to reducing emissions.

SUSTAINABLE TRANSPORT

Instead, we should walk, cycle and use public transit. This will clean the air, increase physical activity, and reduce additional diseases like obesity.

SUSTAINABLE FOOD SYSTEMS & HEALTHY DIETS

Cutting down on red and processed meat and increasing fruit and vegetable intake in high-consuming populations will reduce emissions and diseases like cancer and heart disease.



2.3 The Delhi Declaration

At the World Rural Health Conference April 2018 stakeholders of rural health and primary care came together to address current and future challenges in rural health. The conference challenged the international community to reaffirm the principles of the Declaration of Alma-Ata, which in 1978 highlighted the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world.

The 2018 conference culminated in the adoption of the Delhi Declaration calling for people living in rural and isolated parts of the to be given special priority if nations are to achieve universal health coverage. The Declaration identifies six areas as priorities to achieve “Health For All Rural People” : equity and access to care, rural proofing of policy, health system development, developing and educating a workforce fit for purpose, realigning the research, and people and communities.

The full declaration can be read on the World Health Organization website:

<http://www.who.int/hrh/news/2018/18DelhiDec.pdf?ua=1>

NHS Orkney should seize opportunities to be part of the research community addressing rural health issues.

3.0 Priority 2: A Scotland where we flourish in our early years



3.1 Adverse Childhood Events

Adverse Childhood Experiences (ACEs) are stressful events occurring in childhood including

- domestic violence
- parental abandonment through separation or divorce
- a parent with a mental health condition
- being the victim of abuse (physical, sexual and/or emotional)
- being the victim of neglect (physical and emotional)
- a member of the household being in prison
- growing up in a household in which there are adults experiencing alcohol and drug use problems.

An ACE survey with adults in Wales found that compared to people with no ACEs, those with 4 or more ACEs are more likely to

- have been in prison
- develop heart disease
- frequently visit the GP
- develop type 2 diabetes
- have committed violence in the last 12 months
- have health-harming behaviours (high-risk drinking, smoking, drug use).

ACES can be reduced by

- preventing household adversity
- supporting parents and families
- building resilience in children and wider communities
- enquiring about ACEs routinely in health and social care services to respond appropriately
- encouraging wider awareness and understanding about ACEs and their impact on health and behaviour
- using encounters with adults in services such as homelessness services, addiction, prison or maternity services, to also consider the impacts on their children or future children.

In Orkney, the Orkney's Children Services Strategic Plan "Clear and Connected" outlines key actions being undertaken in relation to practice, culture and systems. Children's Services are commissioned by the Integrated Joint Board called Orkney Health and Care, and a health needs analysis is being undertaken in 2018 to support commissioning of services through the new strategic commissioning plan.

3.2 Children's Rights

NHS Boards have responsibilities under the Children's and Young People (Scotland) Act 2014 to secure better, or further effect, the United Nations Convention on the Rights of the Child (UNCRC) requirements. The UNCRC sets out the civil, political, economic, social and cultural rights of every child, regardless of their race, religion or abilities

These rights are not only relevant to services for babies, children and young people but relate more widely to organisational policy, resource distributions and adult services as they affect dependent children, and young people. The family is the core unit of society which cares for children and policy affecting families is particularly important.

The current Government is ambitious in advancing human rights to improve lives and it is being recognised that addressing human rights should be explicit in policy and public sector activity. Health is being understood more in terms of a rights based approach and must address those left behind in terms of health.

A more explicit consideration of the UNCRC, for example, highlighting which articles of the UNCRC are relevant to a child or family service development or strategic priority should be considered by NHS Orkney.

A rights based approach can be used to challenge the status quo or current practice, to benefit the public we are serving, particularly those most disenfranchised.

3.3 Maternal and Infant Nutrition

Actions from the Maternal and Infant Nutrition Framework have continued during 2017, successes have included health visiting staff successfully being re-accredited with Stage 3 Unicef Baby Friendly status. The Maternity Department has also continued efforts working to maintain their Stage 3 accreditation.

Maternity ward staff run five volunteer led breastfeeding cafes which offer breastfeeding support and encourage visibility of breastfeeding in wider community settings across Orkney mainland. Efforts are underway to establish a peer support buddy scheme, once trained the peers supporters will offer social and breastfeeding support through phone, text and home visits. Wheelie walks recommenced in July 2017 for mums and dads with babies and young children. These walks take place one lunch time per week and are planned to run until later in the year.

Efforts to increase local uptake of the Healthy Start Scheme have utilised service improvement approaches. This has involved awareness raising at various educational settings and with a wide range of services and organisations who are likely to meet with eligible families. A scoping exercise was also carried out with parents to support increased accessibility and effectiveness of efforts. All pregnant mums are now supplied with healthy start vitamins at their first maternity appointment, and a consistent supply of children's vitamin drops are now available at the Public Health Department.

The public health department purchased access to online training to support early years practitioners in using Setting the Table guidelines. Of the 29 local registered childminders, 15 signed up to and completed this training course. The course has also been widely publicised through relevant partner organisations.

Work is carried out in line with national treatment guidance and local referral pathways for women who are overweight or obese in pregnancy. Maternity staff will be working with Dietetics and Health Promotion to improve communication with parents in order to increase engagement with programmes and services available to prevent and reduce harms associated with poor nutrition and weight concerns pre-conception, during pregnancy and post natal period.

A number of options are being explored and discussed between maternity staff, The Pickaquoy Centre and the Health Promotion Department to increase availability and access to appropriate physical activity options for pregnant mums and families with young children.

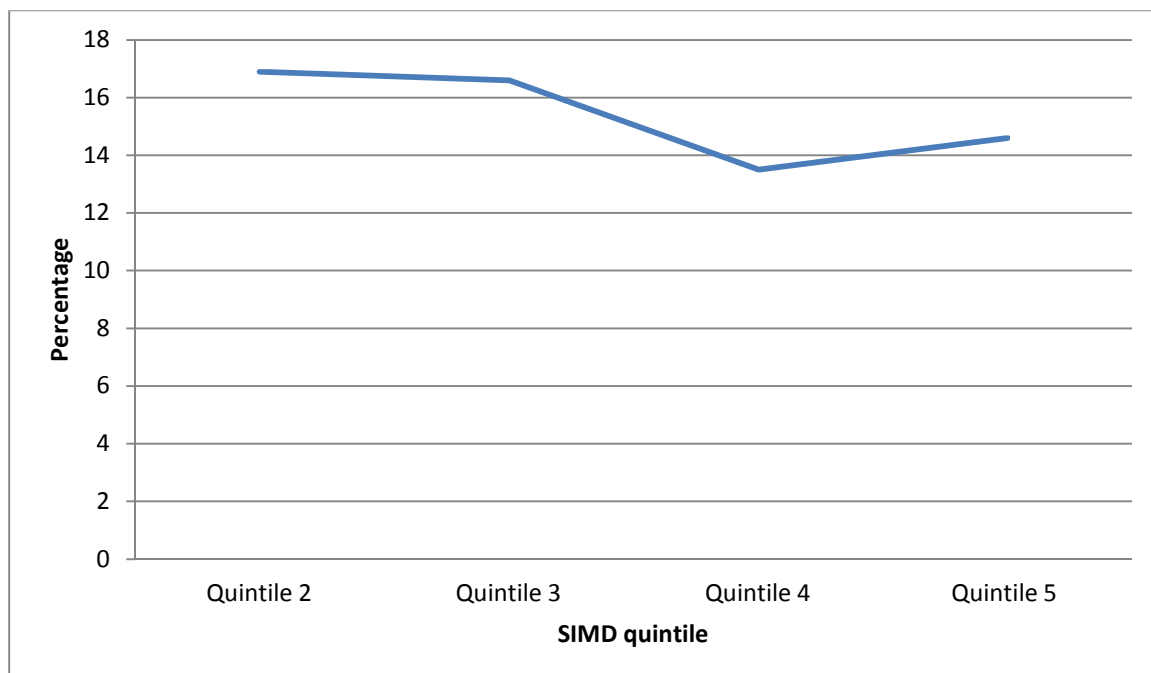
4.0 Priority 3: A Scotland where we have good mental wellbeing



Although Orkney usually reflects well in surveys and research into the happiest places in Britain or the best place to live in the UK, mental health and wellbeing remains a Public Health issue. Whilst certain measures such as the percentage of people prescribed medication for anxiety, depression or psychosis sit lower than the national average in Orkney, other measures such as suicide rates are similar to the national average over time (Millard et al., 2016).

Deprivation and inequality are linked to poor mental health and wellbeing (Mental Health Foundation, 2009). However, in Orkney, the percentage of people prescribed medication for anxiety, depression or psychosis is spread more evenly throughout the Scottish Index of Multiple Deprivation (SIMD) data quintiles as shown in Figure 4.1, suggesting that traditional markers for deprivation may not be enough to successfully target work to improve mental health and wellbeing. The drawbacks of utilizing the SIMD deprivation quintiles are recognized in rural areas.

Figure 4.1 – Percentage of people on medication for anxiety, depression and psychosis in Orkney by SIMD quintile (Quintile 5 least deprived)



In 2016, the Health Improvement Team developed the 'It's Ok to say I'm not Fine' poster which featured local well known people from predominately traditionally stereotyped professions as tougher or more stressful. In 2017/18, a poster presentation based on the success of this, including the work with our third sector partners around this, was presented at the NHS Scotland national event and the Faculty of Public Health national event.

This year, the WHO endorsed suicide awareness day posters were distributed to local businesses and candles were placed in participating shops front windows. To follow this, a poster was developed to encourage the Orkney population to care for their mental wellbeing based on the recommendations from the NHS Inform website. Local organisations were approached to showcase their community based activities which support each of the domains identified from the NHS Inform website. Due to intellectual copyright issues around the phrase "mind your head" the work could not be used as originally intended. However a strong focus on mental health and wellbeing is being carried forward in our inequalities focused health and wellbeing pilot "The Well Programme".

As NHS Orkney develops its approach to mental health services it will be important to consider actions across all levels of care.

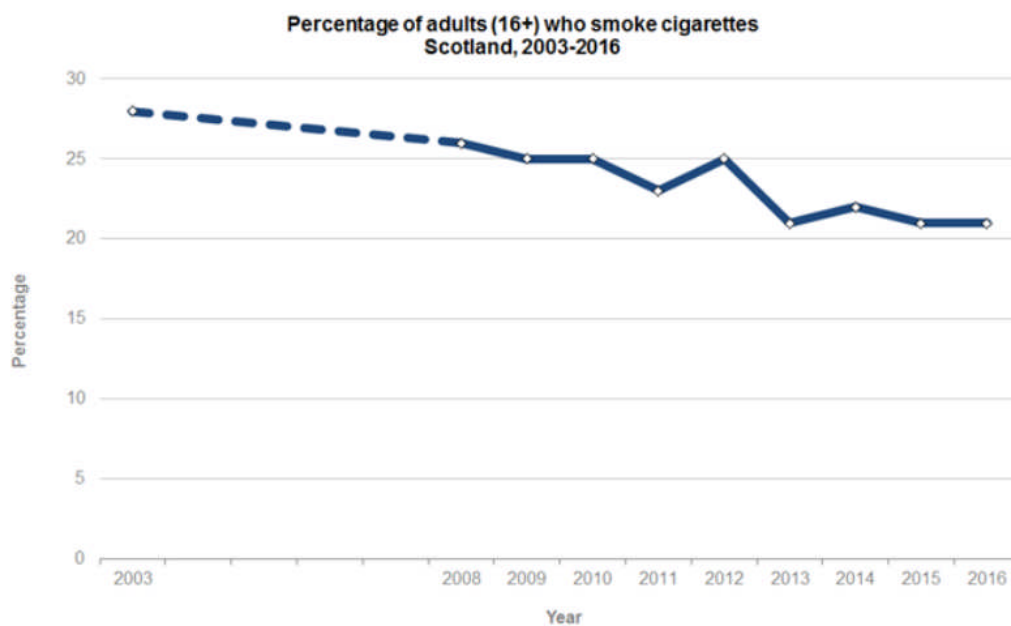
5.0 Priority 4: A Scotland where we reduce the use of and harm from alcohol, tobacco and other drugs



Smoking Cessation

Overall the number of people smoking in Scotland has fallen as shown in Figure 5.1.

Figure 5.1 Percentage of adults who smoke cigarettes in Scotland from 2003-2016



Source: NHS NSS

Orkney has slightly lower rates of smokers per population compared to the national average. In 2014, Orkney's prevalence of adult smokers was 19.4% compared to the national average of 20.2%.

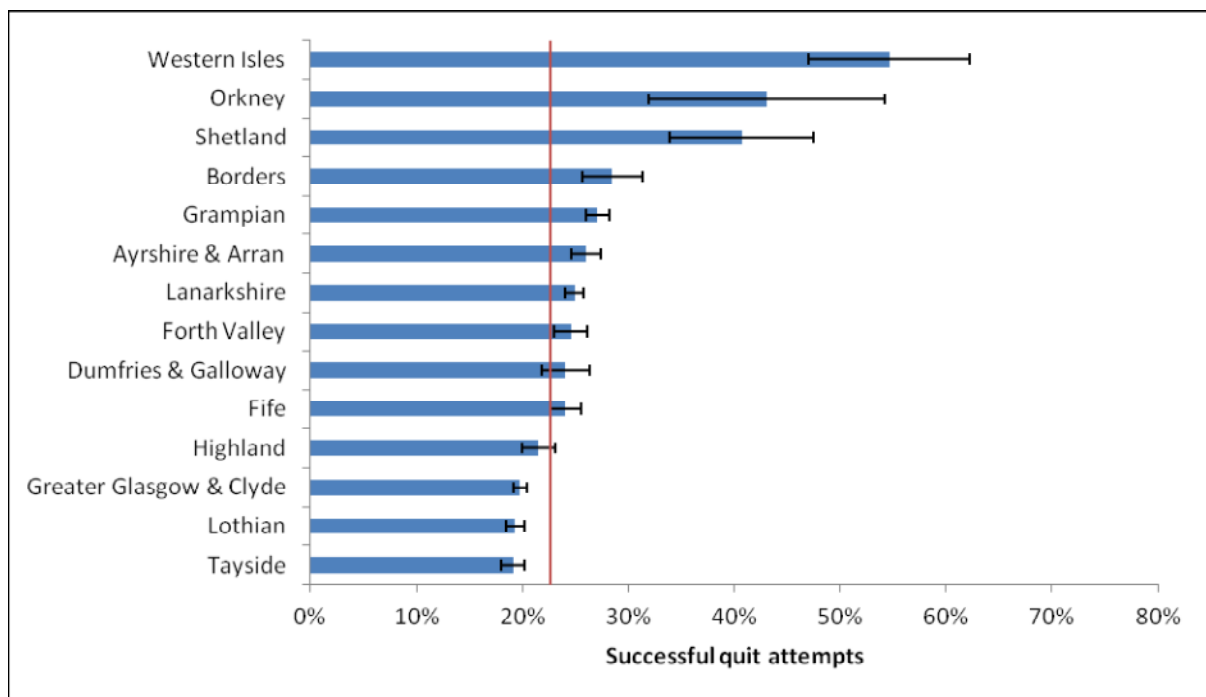
The national trend of decreasing numbers of quit attempts through cessation services has affected most boards and it is disappointing that NHS Orkney has not achieved higher quit rates to date. NHS National Services Scotland in their review of this data suggest there are likely to be a combination of factors resulting in the fall in quit attempts recorded including the use of e-cigarettes which could be viewed as a step towards quitting and therefore could explain the continued drop in percentage of the population who smoke despite fewer recorded quit attempts occurring.

This trend in decreased use of smoking services coupled with slightly lower rates of smokers in Orkney, may have contributed to the poor uptake of services in Orkney.

Nevertheless a refresh of the approach to engaging with those who smoke to boost quit rates has been undertaken and initial results from this are promising.

For those who engage with the service in Orkney the results are good.

Figure 5.2 Percentage of successful 12 week quit attempts (95% confidence intervals by NHS Board 2016-17



In the past year, work has continued to support the health of the population of Orkney by promotion of smoking cessation support, reduction of exposure to second hand smoke and work to prevent the uptake of smoking. This includes working with maternity services to improve support for pregnant women and their families to create a smoke free environment for children and working with hospital staff to improve access to smoking cessation support during in-patient admissions to the smoke free hospital.

During the summer 2017, a smoking cessation media event was launched to promote the smoking cessation service locally. This included client stories in local media outlets and social media postings around World No Tobacco Day. Other measures to improve the service's visibility and accessibility included having a smoking cessation advisor clinic at Dounby GP practice and Stromness Academy.

To improve the accessibility of Orkney's smoking cessation service, Public Health have trained another member of staff in smoking cessation support delivery.

Support to stop smoking in the community is also delivered through local pharmacies. Public Health Orkney have equipped local pharmacies with carbon monoxide monitors or updated their carbon monoxide monitors to support this service delivery.

Young people not starting smoking is important for Public Health. As well as having clinics in one of the local secondary schools, tobacco intervention lessons were delivered to all secondary 1 pupils in the largest secondary school in Orkney.

All staff interacting with patients across the health system need to understand that they have a role in helping individuals stop smoking – as part of the health promoting health service ethos. NHS Orkney needs to continue to work on embedding the principles of the health promoting health service.

Alcohol

During 2017/18, the Public Health Department was involved heavily in the reporting for the alcohol brief interventions (ABI) target, a shared target for the health board and integration authority which overall was not met. Having previously been an area of good performance for the board this was concerning. On review, this was due largely to decreased delivery of ABIs in general practice where the bulk of delivery occurs. Work has continued to develop the levels of staff trained in Orkney to deliver ABI's including the NHS dental service, the smoking cessation advisors within Public Health and the Orcades Practice via specially developed training through video conferencing. Within the last year, there have been 13 training sessions on ABI's delivered by the Public Health team, with 62 participants trained in total. Delivery on the ABI target and aligned activities has been transferred to the local Alcohol and Drug Partnership (ADP) in line with the funding stream.

NHS Orkney achieving its target is reliant on recording methods which allow for prompt reporting in lieu of an Orkney wide IT system which automatically captures this data. Public Health has supported areas implementing ABI's to develop a suitable system for recording and reporting.

To support alcohol prevention work locally, Public Health Orkney was, in partnership with our ADP colleagues, involved in the annual 'Safer Islander' event which holds workshops at Kirkwall Grammar School around personal safety and alcohol.

6.0 Priority 5: A Scotland where we have a sustainable, inclusive economy with equality of outcomes for all



The causes of inequalities in our society are complex and result in significant effects on our health and wellbeing (Figure 6.1).

Figure 6.1 Inequalities in society



Source: Health Scotland

The health board has a key role in addressing inequalities and can tackle these through a range of actions (Figure 6.2).

Figure 6.2 Role of health boards in addressing inequalities



Source: Health Scotland

The Fairer Scotland Duty, Part 1 of the Equality Act 2010 is now in force in Scotland and places an overarching requirement on relevant public authorities to do more to tackle persistent inequalities of outcome caused by socio-economic disadvantage. The aims of this duty include improvements to key strategic decision making in the context of inequality that will lead to better outcomes for those experiencing socio-economic disadvantage.

There is an expectation that public bodies will actively consider what more they can do to reduce the inequalities of income in any major strategic decision they make and also publish a written assessment showing how they have done this.

It is important that NHS Orkney and relevant partners embrace this approach in their decisions making.

Having work that is of good quality is important for health. A Healthy Working Lives Local Advisor for Orkney was appointed this year. Previously the service had been commissioned from NHS Highland. The Healthy Working Lives team provides free and confidential support and advice to employers with the aim of creating a healthier workforce. The advice and services offered support employers to implement health, safety and wellbeing policies and practices as well as helping employers to understand how is best to engage with their workforce in order to impact on protecting and improving their employees' health, safety and well-being.

In order to recognise the efforts that organisations are making to improve their employees' health, safety and well-being, the Healthy Working Lives National Team developed the Healthy Working Lives Award programme. Taking part in this programme can promote health and safety and protect employees from workplace hazards by putting systems in place to identify problems before they arise. It can help reduce absence rates and support employees returning to work and create a healthier, more motivated and productive workforce. The awards can also raise the organisation's profile among clients and stakeholders through supporting the organisation to set higher standards of employees' health, safety and wellbeing.

Healthy Workplace Training for Managers was delivered to 55 people locally between April 2017 and March 2018. Mentally Healthy Workplace Training for Managers is a free of charge course aimed to prepare managers to promote positive mental health and wellbeing and it offers practical examples of how to support employees experiencing mental health problems.

A welfare reform group is also active in Orkney and public health participate in this, and support the local work around mitigating any adverse impact of legislative changes in welfare reform. Further work is needed to support staff in key services to be confident in raising the issue around financial issues and being able to signpost to support services.

7.0 Priority 6: A Scotland where we eat well, have a healthy weight and are physically active



Local and national work evidences the growing percentage of the population within Orkney and Scotland who are overweight and obese. The problems that arise for individuals who are overweight and who are obese are not just health related but can affect an individual's life in far reaching ways such as the ability to secure and maintain employment as well as negatively affecting mental health and well-being. In addition to the effect of being overweight or obese on an individual, the rising economic cost of obesity to services, including the NHS, is significant. Priority 6 must be a key driver for services commissioned by the Integrated Joint Board and tackling the issue of a healthy weight needs to be considered from a whole systems perspective including the community planning partnership. Ensuring the approach to long term conditions includes addressing weight management and physical activity must form part of NHS Orkney's future service planning.

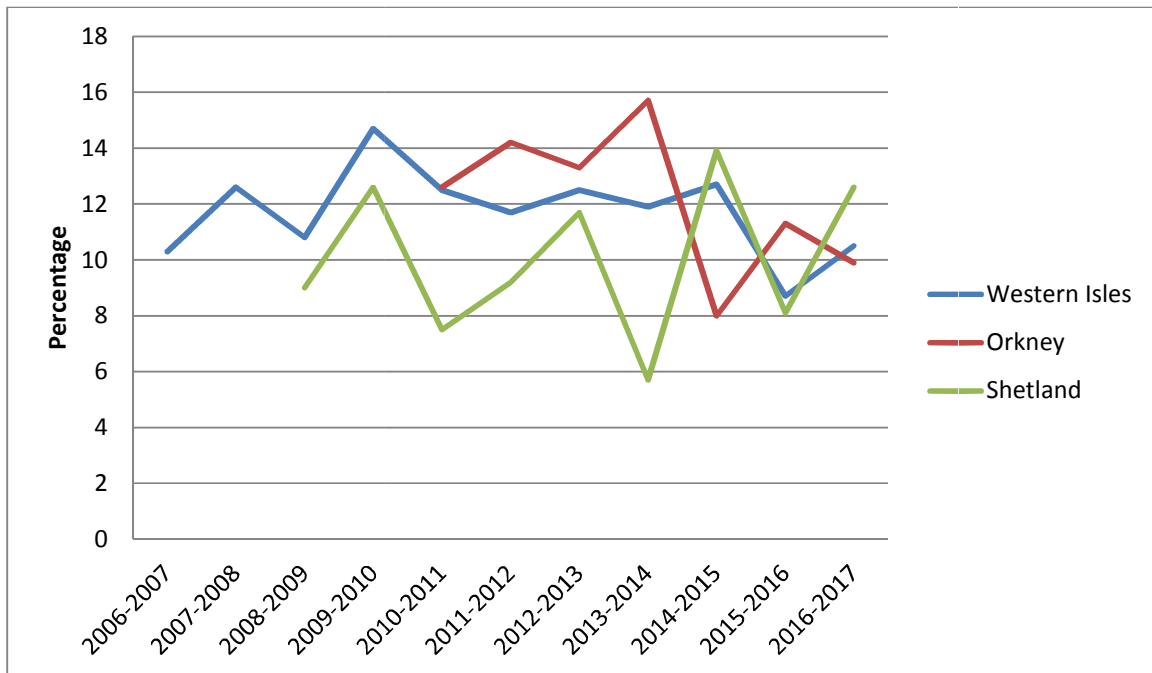
Orkney began reporting to NHS NSS regarding the body mass index (BMI) of Primary One children in 2010. Figure 7.1 shows the trend in the percentage of overweight children compared to Shetland and the Western Isles and Figure 7.2 shows the trend in relation to obesity.

Figure 7.1 Percentage of overweight Primary 1 children by health board



Source: NHS NSS

Figure 7.2 Percentage of obese Primary 1 children by health board



Source: NHS NSS

This shows that the levels of Primary one at risk of being overweight in Orkney has remained high over the last four years in comparison to the other boards, however the levels of primary one children at risk of obesity have been more in keeping with the levels in other island boards. Overall, this means Orkney’s children are more at risk of being overweight and obese which presents a challenge for all of us in Orkney.

Children tend to consume foods and drinks high in fat and/or sugar more often than adults:

Half eat sweets or chocolates every day

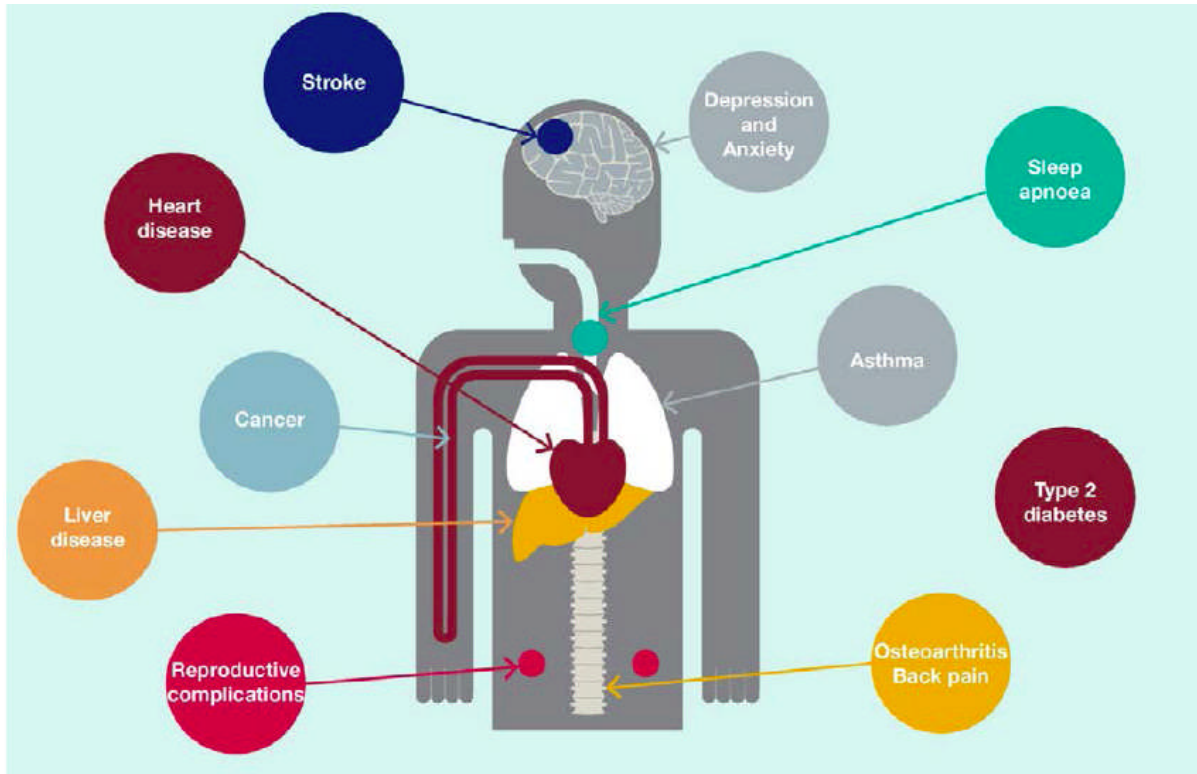
A third eat crisps every day

A third drink sugary soft drinks every day

Source: Scotland’s Public Health Priorities 2018

We know that obesity is a significant component of the development of many illnesses (Figure 7.3)

Figure 7.3 Obesity and harm



Source: Public Health England

Whilst work continued over the last year in Orkney to support healthy eating messages and promote physical activity, nationally the healthy weight agenda has been moved forward with the consultation on and publication of the 'A Healthier Future' strategy.

Locally, the Public Health department successfully secured funding through the NHS Orkney endowments fund to support the delivery of 'Confidence to Cook' session. Whilst Public Health had trained local partners to deliver this course, the local roll out of delivery had been restricted by funding issues. On securing this funding, more training to train courses were delivered to partner organisations by the Public Health department and the fund has been used over the past year to deliver onward sessions within groups in the local community.

The 'Confidence to Cook' programme aims to improve nutrition on a budget and is intended to be delivered by trainers who have established rapport with the most vulnerable individuals and groups within the community. It is intended that Confidence to Cook sessions are delivered to increase an individual's abilities and

resilience, through increased food, nutrition and cooking knowledge, and practical skills.

Changes in society and some technological advances have created an environment in which it difficult for people to maintain a healthy weight. This creates a challenge for Orkney to tackle the ‘obesogenic’ environment that has created such vast, and rising, obesity issues in the county. In order to have a significant effect on this issue, a wide range of agencies will have to work in partnership at all levels.



Source: *A Healthier Future: Framework for the Prevention, Early Detection and Early Intervention of Type 2 Diabetes 2018*

An increased focus is required in 2018 both nationally and locally on the prevention and early detection of Type 2 diabetes and work is underway to identify key areas to further develop locally (Figure 7.4).

Figure 7.4 Framework for diabetes



Source: *A Healthier Future: Framework for the Prevention, Early Detection and Early Intervention of Type 2 Diabetes 2018*

Physical Activity

The promotion of physical Activity has continued in Orkney over the past year. Regular health walks which are led by volunteer walk leaders continue regularly throughout Orkney. This year, a health walk in Sanday was added to the list. In May 2017, the Public Health department organised Health Walks Week with the support of the health walk volunteers. Health walk week had walks running every day across a variety of locations in Orkney to encourage increased general participation and new volunteers to get involved in health walks. Health walks were also promoted through a variety of events and partner organisations throughout this year. To further encourage walking, Orkney's Public Health team was involved in supporting the development of Orkney Wayfaring and the Public Health office remains a site for this project.

Encouraging physical activity within an elderly population can have numerous health and wellbeing benefits. Public Health Orkney worked with partners in one of the local care homes to increase the physical activity of the residents within this care home. This small scale pilot has produced more encouragement of physical activity for residents and preliminarily results have been a positive change for the residents.

NHS Orkney is committed to looking after their staff's health. As such, the Public Health department have organised two step count challenges, one for individuals and one for teams. This was available and participation was encouraged from staff working within NHS Orkney and also Orkney Islands Council and third sector. Public Health Orkney also partnered with the Chartered Society of Physiotherapy to promote office based stretches and exercises to desk based staff across NHS Orkney.



8.0 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). The programme is now in year 6. Table 8.1 shows the number and percentage of patients by stage of diagnosis with breast, colorectal and lung cancer in Orkney for the years 2016 and 2017 combined. The NOSCAN data refers to the North of Scotland cancer network data of which NHS Orkney is a member.

Table 8.1 Breast, Colorectal, Lung combined

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 2016 and 2017 combined.

Area of Residence	Stage 1		Stage 2		Stage 3		Stage 4		Stage Not Known		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
NHS SCOTLAND	6,129	25.3%	6,165	25.4%	4,307	17.8%	6,230	25.7%	1,415	5.8%	24,246	100.0%
NOSCAN	1,461	23.9%	1,613	26.4%	959	15.7%	1,518	24.8%	568	9.3%	6,119	100.0%
NHS Orkney	9	14.3%	20	31.7%	7	11.1%	16	25.4%	11	17.5%	63	100.0%

Note that Orkney has a high percentage of cancers where the stage is not known at 17.5% and this relates in part 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. Due to the small numbers involved there can be marked year to year fluctuation in the data for Orkney.

Breast cancer: For the two-year period, 2016-17 the most common stage of disease at diagnosis for breast cancer in Scotland was stage 2 which accounted for 44.4% of all patients. During this period the percentage of patients in Scotland with breast cancer diagnosed as stage 1 disease was 40.8% and in Orkney 18.2%. Our performance in this element varies with whether the breast screening van is in Orkney.

Colorectal cancer: For the two-year period, 2016-17, the most common stages of disease at diagnosis for colorectal cancer in Scotland were stage 2 and 3 which accounted for 24.9% of all patients each. During this period the percentage of patients in Scotland, with colorectal cancer diagnosed with stage 1 disease was 15.9% and in Orkney 13%. Note the small numbers diagnosed in Orkney can have significant impact on percentages diagnosed at each stage.

Lung cancer: For the two-year period, 2016-17, the most common stage of disease at diagnosis for lung cancer in Scotland was stage 4 which accounted for 46.1% of

all patients. During this period the percentage of patients in Scotland, with lung cancer diagnosed with stage 1 disease was 17.4% and in Orkney 11.1%.

Detect Cancer Early baseline data and Year 2016-17 comparison.

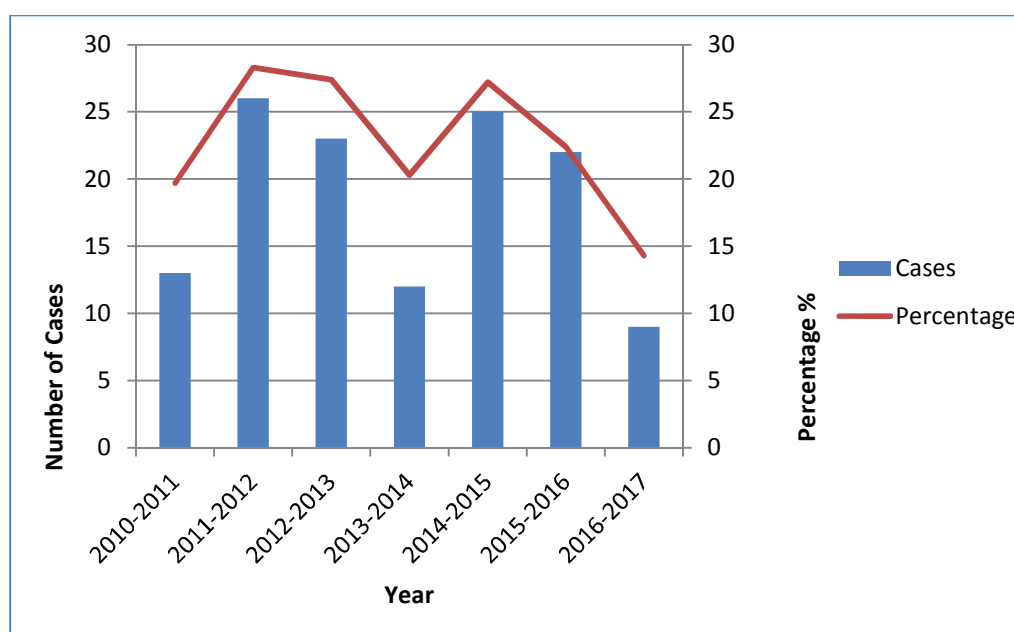
In Scotland, there was an 8.4% increase in the percentage of people diagnosed at stage 1 for breast, colorectal and lung cancer (combined) between the baseline and years 2016-17. A 27.5% decrease in stage 1 diagnosis has occurred in Orkney (Table 8.2). Note, however, the small number of individuals involved.

Table 8.2 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 2010-11 to year 2016-17

Area of Residence	Baseline 2010 - 2011		Year 6 2016 - 2017		
	Number	%	Number	%	% Change
NHS SCOTLAND	5,581	23.3%	6,129	25.3%	8.4%
NOSCAN	1,328	22.7%	1,461	23.9%	5.4%
NHS Orkney	13	19.7%	9	14.3%	-27.5%

A distinct pattern is seen in the rolling year approach to data reporting (Figure 8.1) which relates primarily to the presence of the breast screening van on island. Work will continue to promote the national screening programmes.

Figure 8.1 Stage 1 cases and % stage 1 by combined years.



Although the uptake of screening programmes is generally good we need to maintain focus on the screening programmes associated with the detect cancer early programme, and encourage uptake in those who are not currently engaged in the programmes.

9.0 Sexual Health

Orkney has continued to work towards the five outcomes of the Sexual Health and Blood Borne Virus Framework for 2015-2020, 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, continues to offer STI testing, access to contraception, including emergency contraception, pregnancy testing, sexual health related advice and information. This year had the highest level of attendances at this clinic since it started in 2010 and there has been a steady increase over the past four years, which hopefully reflects improved local knowledge and acceptability of the service. For the past four years, the Nordhaven Clinic has maintained a website and Facebook page which communicates up to date and reliable information on sexual health related topics to the public. Orkney's needle exchange service is also accessed through the Nordhaven Clinic, guaranteeing good access to health advice and testing through this service.

The condom by post service continues to be available through the Nordhaven Clinic website. When condoms are ordered through this service, they can be delivered free of charge to any Orkney residential address in a plain envelope with no NHS markings. This is to allow equitable access for condoms across Orkney in a discrete and confidential manner. The HIV Self testing kits by post runs in a similar manner and allows access to HIV home testing. This kit gives clients a result on their HIV status in 15 minutes. In May, a representative from NHS Orkney Public Health department was invited to speak at a HIV Scotland event in Edinburgh to discuss the use of HIV self testing kits in Scotland and share the experiences of areas who have implemented new projects such as Orkney which at the time was the only NHS board in Scotland to utilise self testing kits in this way. This is an example of the innovative work which occurs across our health board.

Information in regards to sexual health, local campaigns and national developments or news in relation to sexual health have been cascaded throughout this year to statutory and third sector bodies via a monthly e-mail newsletter. This aims to maintain communication and promote services locally.

Education, NHS and third sector staff have continued to be trained in SHARE and Lovebug training locally. The Lovebug programme, a locally developed sexual health programme designed to complement the SHARE programme delivered in schools. The Lovebug programme has been developed into a pack for partner agencies during 2017 and this was promoted at the 'Growing up in Orkney' conference.

NHS Orkney Public Health department secured funding to develop a local based film encouraging women to attend for their cervical screening tests. This film received interest and discussion on social media outlets locally and led to the Public Health department sending a representative to the Faculty of Public Health conference to deliver a presentation to share experiences and learning from this initiative. Again we were able to showcase our local work at a national conference.

The sexual health strategy group decided to focus on training needs in relation to sexual health locally during 2017/18. The group completed a rapid training needs analysis based on the outcomes of the SH and BBV Framework 2015-2020. The group is continuing to work on the actions developed from this analysis.

Nationally, there have been many progressions in sexual health in the last year. These include the offer of HPV vaccination for men who have sex with men and the availability of PrEP on the NHS in Scotland. Public Health Orkney, the Nordhaven Clinic and our partners have worked diligently to ensure Orkney is not only maintaining its services in line with the national picture but also developing its services to ensure the best possible outcomes for the population of Orkney.

Over the next couple of years, there are likely to be other developments in service within Orkney to improve the sexual health and wellbeing for the people of Orkney such as more local access to forensic services in the event of rape and sexual assault and termination of pregnancy services.



NORDHAVEN CLINIC

OFFERING A RANGE OF FREE SEXUAL HEALTH ADVICE AND TREATMENT

Opening Hours:

Monday to Friday 9:00am - 5:00pm

Please call 01856 888 917 to make an appointment.

Or come along to our drop in session on a Wednesday afternoon between 3:30pm and 5:30pm, no appointment necessary.

This is an NHS Clinic - no charges are made for services provided



10.0 Health Protection

The health protection function is a key function of the public health department, and ensuring a robust service is a key priority locally. Health protection is a term used to encompass a set of activities within public health. It can be defined as protecting individuals, groups and populations from single cases of infectious disease, incidents or outbreaks, and non-infectious environmental hazards such as chemicals and radiation. As such it includes responsibility for immunisation programmes and for some aspects of resilience planning. It encompasses everything from dealing with the spread of cases of Influenza to dealing with the possible health consequences of a chemical spillage.



It often needs to be working alongside colleagues in Environmental Services, Police, Fire and Rescue Service, Scottish Water, and occasionally with other agencies such as the Maritime and Coastguard Agency. So protecting the public's health is often achieved through a multi-agency response, but always led by Public Health.

In Orkney this presents a challenge in providing a robust 24 hours per day/7 day a week on call rota to allow for dealing with incidents which, in their nature, cannot be left to the next working day. This has been solved by innovative working across the island health boards. As the public health reform progresses changes in delivery of health protection may occur and Public Health Orkney is active in discussions around future delivery models.

10.1 Communicable diseases

The microbiology laboratories in the Balfour Hospital and in Aberdeen and Glasgow that deal with Orkney patients automatically report positive results to Public Health for a number of infectious diseases. Not all of these reports require specific action from Public Health, but many of them do require to be followed up in some fashion. In this reporting period there were 188 such reports, some of which are repeat testing of individuals and others representing old rather than new infection (Table 10.1).

Table 10.1 Top laboratory reports to public health

Diagnosis	Number of Reports
Campylobacter	43
Clostridium difficile	20
Cryptosporidium	11
Escherichia coli O157	2
Influenza	21
Norovirus	4
Scarlet Fever	4

Source: NHS Orkney PH department

The common infections

- Campylobacter is the commonest cause of food poisoning in the UK, and whilst it is usually a relatively mild illness it is associated with around 100 deaths per year in the UK. 80% of cases are caused by eating undercooked contaminated chicken, but the organism is also easily transferred from contaminated chicken to other foods.
- *Clostridium difficile* (C.diff) causes diarrhoea. It most commonly occurs in unwell, often older adults who require the prescription of broad spectrum antibiotics. These sometimes deplete the gut of its normal bacterial flora, and allow an overgrowth of the C.diff organism. The group of drugs called Proton Pump Inhibitors (PPIs), which significantly suppress the production of gastric acid, are also a significantly aggravating factor in the cause of a C.diff infection. PPIs are amongst the most commonly prescribed drugs worldwide and are commonly mis-prescribed for people with mild or temporary symptoms. Reducing the incidence of C.diff infections requires a much more thoughtful use of broad spectrum antibiotics and PPIs. It is possible to spread C.diff from patient to patient in the presence of poor infection control practice, and so this too is important in its control. It is a serious illness with around 6% of cases resulting in death. Not all reports to public health are toxin producing C.diff the cases which are of most concern.
- Cryptosporidium is a protozoan, not a bacterium, and so it is entirely unaffected by antibiotics. It is a cause of diarrhoea and sometimes respiratory symptoms. Since it is commonly associated with otherwise normal cattle, it is not surprising that the infection is seen from time to time in Orkney, where most cases are sporadic and associated with farming activities. If outbreaks of Cryptosporidium infection occur they are often caused by contaminated drinking water. Since the organism is highly resistant to chlorine disinfection of the water supply, Scottish Water go to considerable lengths to ensure adequate

filtration of water so as to avoid contamination of drinking water, which is a particular risk in farming communities such as Orkney.

There are a range of water issues that occur each year and public health is involved in these assessing any risk to health and providing advice. The following incidents were dealt with by Public Health during this reporting period (Table 10.2).

Table 10.2 Types of incidents dealt with over the year

Type	Date
Sickness at school	May 2017
Sickness at care home	May 2017
Water issue on island	May 2017
Sickness bug in tour group	Aug 2017
Water issues on island	Sept 2017
Norovirus in schools	Sept 2017
Norovirus in care home	Oct 2017
Sickness in schools	Nov 2017
Water issues on island	Nov 2017
Water issues on site	Jan 2018
Water issues on island	Jan 2018
Water issues on island	Feb 2018
Water issue on site	Mar 2018
Meningococcal disease	Mar 2018

There are also a significant numbers of cruise ships carrying many thousands of people to the Islands and a risk of a health or environmental issue is always present. This provides a significant challenge to Public Health and our colleagues in Environmental Services in Orkney Islands Council.

10.2 Vaccination Programmes

Childhood programme

Over many years the childhood immunisation programme has grown in complexity and the number of diseases targeted. It currently provides protection against the following illnesses:

Diphtheria
 Pertussis (Whooping Cough)
 Tetanus
 Mumps
 Polio
 Haemophilus Influenza
 Pneumococcal Disease



Meningitis B
 Meningitis C
 Measles
 Rubella
 Rotavirus
 Hepatitis B

The following tables (Table 10.3, 10.4, 10.5) show the reported immunisation uptake rates for the childhood immunisation programme. Normally a target of 95% is set for uptake rates and it can be seen in the 17-18 period better rates in general were obtained.

Table 10.3 Primary immunisation uptake rates (%) by 12months of age, by financial year

	Year to March 17	Year to March 18
DTP/Pol/Hib	92.3	97.0
Men C	91.8	N/A
Pneumococcal	92.9	97.0
Rotavirus	86.2	95.0
MenB	N/A	96.5

Table 10.4 12/13 Month booster immunisation uptake rates (%) by 24 months of age, by financial year

	Year to March 17	Year to March 18
MMR 1	90.4	95.5
Hib/MenC	90.4	95.0
Pneumococcal	90.9	94.5

Table 10.5 Pre-school booster immunisation uptake rates (%) by 5 years of age, by financial year

	Year to March 17	Year to March 18
DPT/Pol	88.9	95.9
MMR2	85.8	95.4

Source: *ISD Immunisation Scotland*

A key action undertaken in 2017 was the improvement of recording of immunisation and the Public Health department took over from Child Health the running of the supporting IT system the Scottish Immunisation Recall System (SIRS). Coupled with close working with primary care the performance figures for NHS Orkney now reflect a much better position in relation to immunisation uptake. Maintaining good uptake is critical as unimmunised children are at risk of some of the devastating and fatal consequences of these diseases.

Teenage programme

Teenage girls are offered two doses of Human Papilloma Virus (HPV) vaccine in school, although the scheduling of this varies – for example in Secondary 3 in Orkney rather than Secondary 2 and this can make comparison with national uptake figures difficult. The HPV vaccine protects them from the common viruses that are

the cause of cervical cancer. The latest published data is for 2016/17 and was reported in last year's report.

In Secondary 3 all school pupils are offered a booster dose of Diphtheria/ Pertussis/ Tetanus vaccine and a vaccine against the meningitis types A, C, W and Y and the latest published data is for 2016/17 and was reported in last year's report.

There has been work undertaken to improve the performance of the school based programmes, including communications to raise awareness of when consent forms are being issued.

The 'flu programme

The increasingly complex 'flu programme now offers immunisation against several varieties of influenza virus to the following groups. The percentage uptake rate is in brackets after each group.

- Pre-school children aged 2 – 5 years (70.9%)
- All primary school children (73.3%)
- All people aged 65 years and older (74.3%)
- Adults and children aged six months or older with chronic heart disease, kidney disease, liver disease, neurological disease or diabetes (49.6: 59.1: 47.6: 55: 69.3% respectively)
- Adults and children aged six months or older who are immunosuppressed either because of a disease or because of medication (66%)
- People with no spleen or with a dysfunctional spleen (41.3%)
- Pregnant women (No risk 51%: At risk 71.4%)
- Unpaid carers and young carers (52.4%)
- People with morbid obesity (39.7%)
- Health and social care staff (35.4%)

Some of these uptake rates seem low, but are generally in line with experience across Scotland. Work in 2017 occurred to ensure improved recording of immunization in for example pregnant women.

The introduction of new vaccinations for adults in 2018 will require close communication with primary care and ensuring promotion of flu vaccination in 2018 will be important.

Pertussis vaccination in pregnant women

As well as 'flu immunisation, pregnant women are also offered pertussis (whooping cough) vaccination between 16 and 32 weeks of pregnancy. This is to offer

protection to the baby in its early weeks before the childhood immunisation programme commences. The published data for Orkney suggested that the uptake rate was 61.5%, which would be the lowest in Scotland, but this did not match with local expectation of the level of vaccine delivery and previous performance. On investigation an issue with the recording of the data in GP systems was identified and work undertaken to improve recording. Data for Q1 of 2017/18 now shows Orkney performing at a level of 73% compared with the Scottish figure of 74%.

Shingles vaccination

For shingles vaccination in 2017/18, vaccination coverage in the 70 years old routine group of patients was 63.08%, the highest in Scotland, with the Scottish average being 43.3%. Uptake was 66.27% for the 76 years old group of individuals, again the highest in Scotland with the Scottish average being 39.6%.

In conclusion, the very complex immunisation programmes would appear to be well delivered but further focus is required in relation to the flu programme to further increase uptake rates. A focus is required on maintaining the data quality so that reported figures accurately reflect the local situation.

A national vaccination transformation programme has commenced in Scotland, associated with the new primary care general practitioner contract, and work in 2018 will be undertaken to ensure NHS Orkney is linked to the national programme. Locally the primary care improvement plan which includes work relating to the vaccine transformation programme has been developed in partnership with local general practitioners.

10.3 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.

Abdominal aortic aneurysm

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.

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 latest data for March 2017 shows that 100% of the eligible population were sent an initial offer to screening before the age of 66. The percentage of those offered screening who were tested before the age of 66 and 3 months was 86.7 (Scotland 84.4%). Uptake in Orkney was 88.9% in the SIMD most deprived area and 93.8% in the least deprived area, with a low of 82.9% in the second most deprived area. Although deprivation may be more widely dispersed in rural areas and the SIMD a less useful measure it can still demonstrate an inequalities gradient for some measures.

Only 1 of 3 individuals with an aneurysm \geq 5.5 cm was seen by a vascular specialist within two weeks of screening compared with 74.6% in Scotland. Further focused work by the collaborative is required to ensure those with an aneurysm detected by screening are promptly seen by the vascular specialists.

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 sight, resulting in diabetic retinopathy, the most common cause of blindness in the working age population.

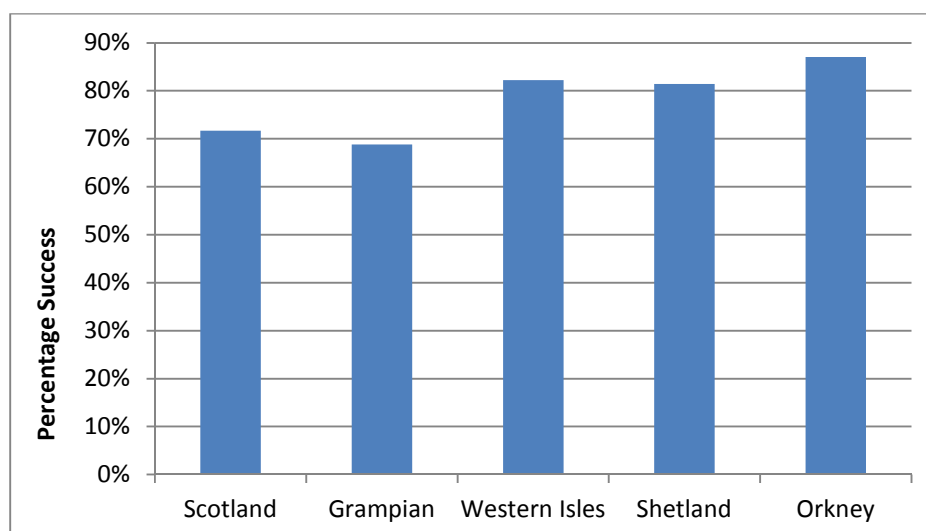
In order to minimise risk of sight loss, systematic diabetic retinopathy screening (DRS) is offered to all of the eligible diabetic population (aged 12 years and over) in Orkney. This involves digital photography of the back of the eye, and if changes are identified treatment is initiated if appropriate. In general the programme performs well in Orkney compared with Scotland but still falls short of the standard in some areas (Table 10.6, Figure 10.1).

Table 10.6 Diabetic Retinopathy Screening (2017)

Indicator	Orkney	Scotland	Standard
Diabetic patients	1283		
Patients to be screened	1099		
Offered screening	1079		
Offered screening (%)	98.6%	94.7%	100%
Uptake of screening	967		
Uptake (%)	88.0%	73.3%	80%
Successfully screened	957		
Successfully screened	87.1%	71.7%	80%

Source: DRS screening data

Figure 10.1 Diabetic retinopathy screening success rate by health board



Source: DRS screening data

Bowel (Colorectal) Cancer Screening

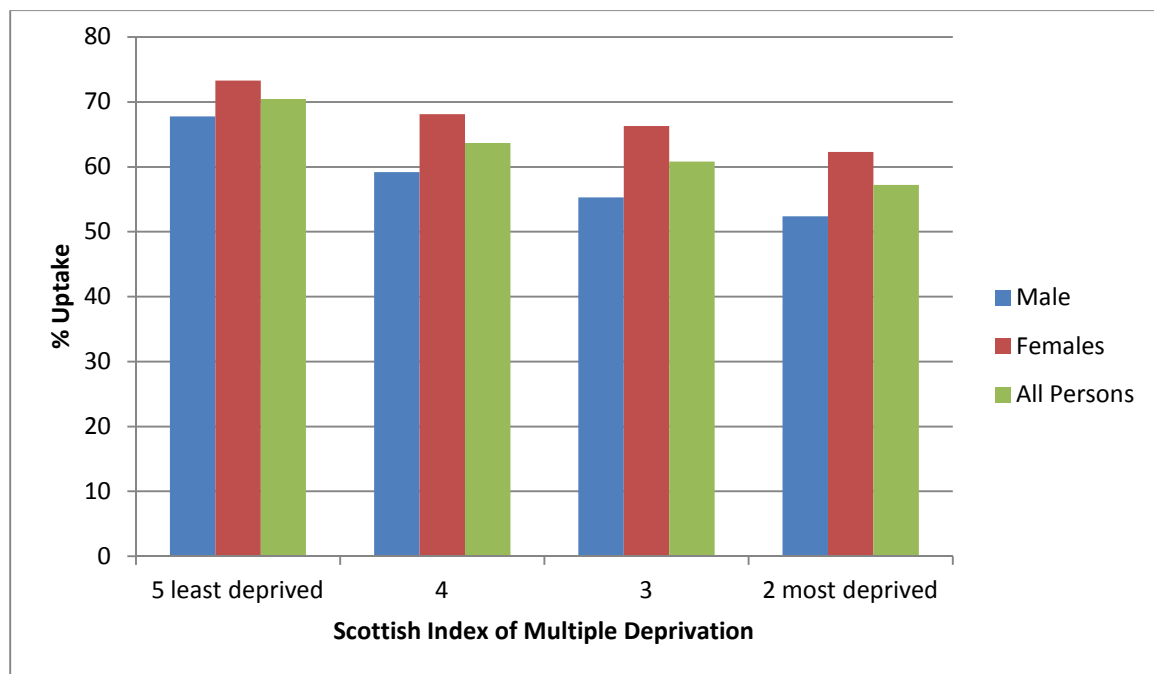
The NHS Bowel Cancer Screening Programme offers screening every 2 years to all men and women aged 50-74 who are registered with a GP. People aged 75 or over can request a screening kit. Initial screening is via a faecal occult blood test undertaken at home, and samples of a bowel motion are put on a special card and posted safe, secure and free of charge to the Bowel Screening Centre laboratory for testing. (Those with a normal result will be re invited into the screening programme in 2 years if they fall within the age range. Patients with an abnormal test will be

offered an appointment with a Specialist Screening Practitioner who will assess them for suitability to have a colonoscopy.

In the 2015-17 period NHS Orkney achieved an overall screening uptake of 61.3%, above the standard of 60%. There is a difference in uptake by sex with females having an uptake of 66.2% compared with 56.4% for males. Overall for Scotland the performance was 55.6%, with 58.7% uptake for females and 52.5% for males.

Using the Scottish Index of Multiple Deprivation shows an increased uptake rate for males and females in the least deprived areas of Orkney (70.5%) compared with the most deprived (55.7%) (Figure 10.2). Further work is required to promote uptake of bowel screening to reduce inequalities.

Figure 10.2 Uptake of bowel screen by sex and deprivation category for Orkney



Source: ISD Scotland Bowel Screening KPI report 2018

Breast Cancer Screening

In Orkney, like the rest 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. The screening van will be present in Orkney in 2018.

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.

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. Performance for Orkney for 2016-2018 was 79% compared with 73.4% for Scotland. Again we see that uptake is higher in those areas categorized as least deprived using SIMD (Table 10.7) and more work is required to promote cervical screening to reduce inequalities.

Table 10.7 Cervical screening uptake by national SIMD category

SIMD	Orkney	Scotland
5 (least deprived)	84.1	77.8
4	80.4	76.1
3	76.9	73.2
2	69.7	70.7
1 (most deprived)	-	66.8

Source: ISD September 2018 (Orkney has no area classified national SIMD 1)

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. 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. 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.

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. 185 tests were undertaken in 2017-18.

Blood spot results are analysed and interpreted by the Scottish Newborn Screening Laboratory (SNSL). Results are now sent to the Public Health Department who have taken over running of the system from Child Health.

The 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 – MCADD
- Haemoglobinopathy – HBO (Sickle Cell Disorder - SCD)

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 2017-18, the number of babies screened was 137. Two parents declined the screening, one baby was referred for diagnostic testing, and no children were identified with hearing loss.

If a delivery is transferred to Aberdeen, some babies are offered screening during their time there.

10.4 Port Health

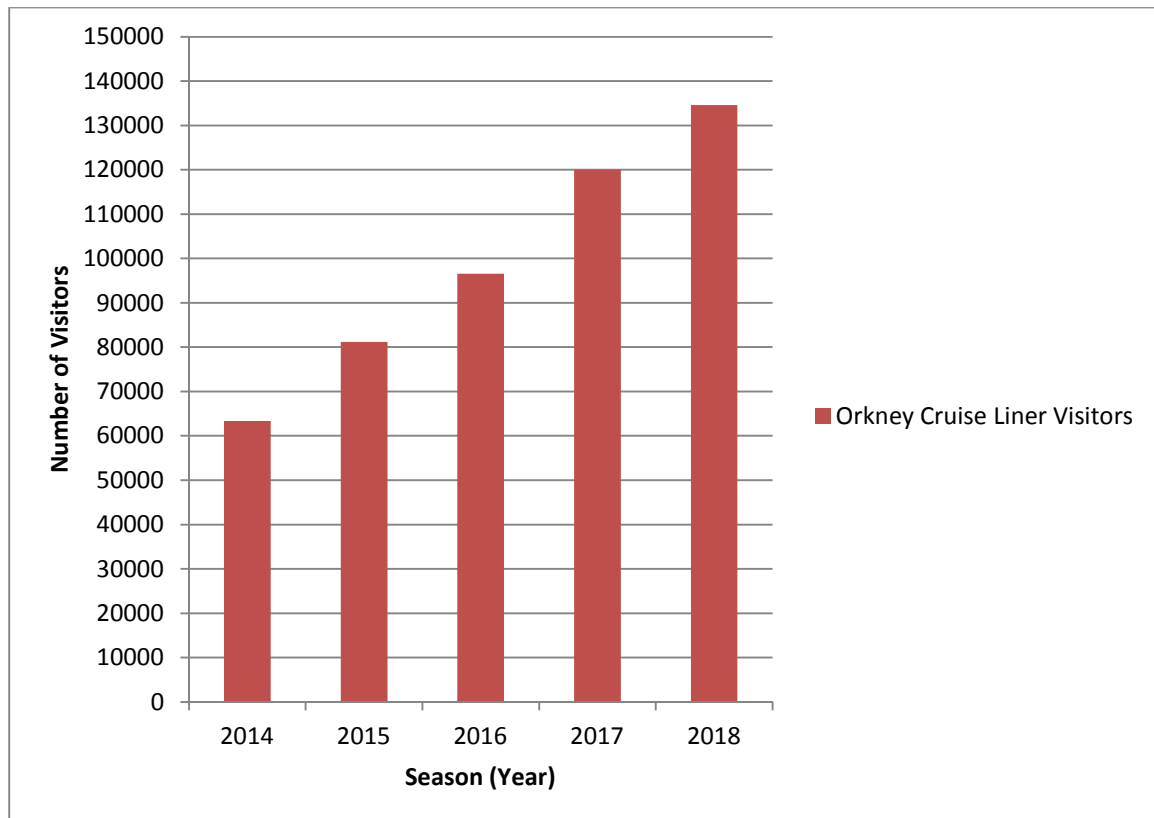
Port health is a major issue in Orkney. Table 10.8 shows the number of passengers disembarking the cruise liners visiting Orkney and berthing at either Kirkwall or Stromness.

Table 10.8 Cruise liner vessels and passengers

Year	2008	2016	2017	2018	2019
Vessels	73	126	145	143	154
Passengers disembarking	29,199	97,500	127,500	130,000	

While the number of vessels has doubled the number of passengers disembarking has increased dramatically from 29,199 in 2008 to an estimated 130,000 in 2018 an increase of 445% (Figure 10.3). This is due to an increase in the size of the vessels. There are 154 confirmed bookings for the 2019 season with cruise liner operators now being turned away in an effort to prevent further pressure on local infrastructure.

Figure 10.3 Orkney Cruise Liner Visitors



Whilst there is an economic benefit to the local economy, pharmacies are experiencing an increase in cruise liner passenger footfall seeking free consultations and over the counter medicines, sometimes in preference to accessing costly medical services onboard their ships. Where prescriptions have been issued by the liners' doctors and presented locally, difficulties have been experienced by pharmacies in establishing the medical credentials of prescription signatories particularly their GMC registration. This can be a time consuming process and often results in the pharmacist unable to dispense medication where qualifications and registration cannot be established. This is further compounded by multi-national nature of the cruise liner community with language barriers creating barriers in aligning the patient's medication request with the UK equivalent. This additional workload created by the cruise liner and tourist industry is impacting on the local pharmacies ability to dispense medication to local communities timeously.

Where prescriptions are refused passengers may be referred onto local GP services for emergency private appointments or may simply attend Accident and Emergency at the Balfour Hospital. This is creating additional pressures for independent practices and NHS Orkney as well as NHS 24 Out Of Hours service.

Similarly A & E are reporting an increase in passengers discharged from vessels with complex medical needs and co-morbidities requiring admission and ongoing medical care prior to repatriation. However the waiting time targets set by Scottish Government do not allow for any cost recovery process from Non-EU Nationals unless fully admitted for a period in excess of 4 hours.

With the cruise liner passenger age demographic and annual increases in passenger numbers, pressure on pharmacies and clinical services is likely to increase significantly over the coming years. This situation presents itself against a backdrop of finite NHS resources and budget constraints and unless we adopt a multi-agency collaborative approach with the cruise liner industry these pressures may become acute.

As a direct consequence of this increase in tourism and organised tours, the road network has seen an increase in traffic volume. In recognition of this risk and the risk created by the increase in liner traffic both Orkney Local Emergency Co-ordinating Group and the Regional Resilience Partnership are planning to hold a multi-agency cruise liner exercise in the future incorporating a care for people element.

10.5 Emergency Planning, Resilience and Business Continuity

Business Continuity

During the year under review Business continuity planning has been progressed across the organisation focusing initially on the critical clinical areas followed by all the remaining service areas.

Each business continuity plan (BCP) has an identified plan owner responsible for reviewing and updating the document with service managers now involved in the development and sign off process to promote ownership. The plan template walks staff through activation, call out cascades, risk assessment, the maintenance of the plans and communication arrangements as well as the response structures. They are designed to be user friendly, guiding staff to the action cards developed for the known risks. A testing programme is being developed which takes into account the BCPs that have actively been invoked during the review period and the learning that this has provided. The Practice Managers have had an input on Business Continuity

with several of the Board Administered Practice's sites having produced their own BCPs.

A number of independent practices now have their BCPs drafted, particularly those that will form part of the New Balfour Facility. Work is ongoing to support those practices that do not have BCPs in an effort to promote best practice.

Communications Resilience

It is well documented that the Outer Isles are not well served in terms of mobile phone coverage. This is partly due to the terrain and the lack of high ground for mast sites. Similarly Internet provision is patchy with poor download speeds and lack of continuity. Likewise the pager network is hosted on a fragile and ageing infrastructure.

Over the last few years a number of communication incidents have been the subject of structured debriefs run by Scottish Resilience Development Service. These debriefs consistently identify the fragile nature of communications systems and document the need to explore more resilient options. The Resilience Officer has been working with partners as part of a communications sub-group of Orkney Local Emergency Co-ordination Group (OLECG) to look at multi-layered communications solutions. Partners have recognised the need to make the communications systems across Orkney more robust to assist in the event of any emergency.

The Short Life Working group is looking at a multi-agency solution to identify funding streams and suitable satellite phones for deployment across twelve of the Outer Isles for use by emergency responders/members of the community located at accessible community points. Agreement has been reached with the Scottish Fire and Rescue Service that they will open and staff existing fire stations in the outer isles to act as communication hubs. This will allow services to co-locate pooling communications in an effort to maintain communication links and support the GPs and Nurse Practitioners with more resilient communications. It is also an excellent example of partners and communities coming together to develop a more resilient communication model for remote communities.

Cyber Crime

At around 0800 on Friday 12th May 2017 information was posted on social media and news websites relating to Health Boards being hit by a ransomware cyber attack. Within an hour NHS Orkney IT department issued the first of a series of e-mail notifications to staff warning of malware e-mails being sent to NHS mail users.

Initially incidents reported related to Boards in England however as the day progressed there were reports on social media that the cyber attack was global and had now spread to 12 Health Boards across Scotland.

The Board devised and implementing an action plan based on the information from various external partners. With anti-virus systems checked no viruses were detected in NHSO systems, however as a precautionary measure information was circulated across the organisation and GP practices. In addition all laptops off their docking stations were disabled until updates approved by Microsoft could be applied. This was to ensure that no user inadvertently downloaded the virus. The incident was the subject of a formal debrief with lessons learnt as well as publication of further national guidance.

This type of incident has provided the opportunity to further review our cyber security arrangements as well as incorporate the lessons learnt as we move forward with the new hospital and healthcare facilities project.

Brexit

NHS Orkney, in line with other health boards, is working closely with government to ensure any issues raised by Brexit negotiations are addressed to ensure as smooth as possible a transition to new ways of working. From a public health perspective mitigating the risk of exacerbating inequalities, ensuring a strong case for prevention, defence against infectious diseases and securing health-focused trade agreements are important.

Acknowledgements

I would like to thank everyone who has worked in the public health department in 2017-18 and the rest of the organisation 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 Carol Stewart for her help in compiling the report and Lauren Johnstone for formatting the final report.