

Ayrshire and Arran Joint Health Protection Plan 2022 – 2024



Foreword

The Public Health etc. (Scotland) Act 2008¹ requires NHS Boards, in conjunction with Local Authorities, to co-operate with each other and with other relevant persons in exercising the functions conferred on them by the Act. This includes the protection of public health in the context of new health challenges which have arisen with modern living; for example, pandemics, new or emerging infectious diseases such as MERS-CoV, Ebola, COVID-19, Zika, and modern environmental hazards and nuisances.

Protecting public health means the protection of the community from infectious diseases, contamination or other hazards which constitute a danger to health. The front-line officers within Local Authorities and NHS Boards who must meet these challenges are Environmental Health professionals in Local Authorities and the professionals within the Health Boards' Public Health Departments. Under the legislation Local Authorities and NHS Boards must designate sufficient numbers of competent persons, officers and other staff for the purposes of carrying out the functions of the Act.

A major joint initiative for Local Authorities and the NHS Boards is to produce a Joint Health Protection Plan (JHPP) providing an overview of health protection (communicable disease and Environmental Health) priorities, provision and preparedness for the NHS Board area. Guidance on the content of joint health protection plans has been published by the Scottish Government².

During the global COVID-19 pandemic, Joint Health Protection Plans were put on hold, to allow partners to focus on tackling the pandemic. The focus of this JHPP will be COVID-19 pandemic recovery, now that we are entering the endemic phase, where we learn to live with the virus. This JHPP will outline the ways in which Local Authorities, NHS and resilience partners worked together during the pandemic.

This plan has been produced by the Joint Health Protection Planning Group (JHPPG) comprising of representatives from NHS Ayrshire & Arran, the three Ayrshire Local Authorities (Environmental Health Services) and the Ayrshire Civil Contingencies Team (ACCT).

The JHPP is a public document available on the websites of NHS Ayrshire & Arran and the three Local Authorities⁵ and on request from the Director of Public Health or the Heads of Environmental Health at each of the Local Authorities.⁶

¹http://www.opsi.gov.uk/legislation/scotland/acts2008/pdf/asp_20080005_en.pdf

²<http://www.gov.scot/Topics/Health/Policy/Public-Health-Act/Implementation/Guidance/Guidance-Part1>

³<http://www.gov.scot/Publications/2016/02/8475/10>

⁴<http://www.gov.scot/Topics/Health/Healthy-Living/Public-Health-Reform/PHOB-Minutes>

⁵www.nhsaaa.net; www.east-ayrshire.gov.uk; www.north-ayrshire.gov.uk; www.south-ayrshire.gov.uk

⁶ Director of Public Health, NHS Ayrshire & Arran, Afton House, Ailsa Hospital, Dalmellington Road, Ayr KA6 6AB

Regulatory Services Manager, East Ayrshire Council (EAC), Environmental Health and Trading Standards, Civic Centre South, 16 John Dickie Street, Kilmarnock, KA1 1HW

Senior Manager (Protective Services), Place Directorate, North Ayrshire Council (NAC), Cunninghame House, Irvine KA12 8EE

Trading Standards and Environmental Health Manager, South Ayrshire Council (SAC), Burns House, 16 Burns Statue Square, Ayr KA7 1UT

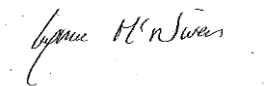
Signatories

NHS Ayrshire & Arran

Name: Mrs Lynne McNiven

Designation: Director of Public Health

Signature



East Ayrshire Council

Name: Elaine Cavanagh

Designation: Regulatory Services Manager, Environmental Health and Trading Standards

Signature

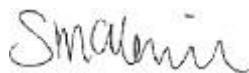


North Ayrshire Council

Name: Scott McKenzie

Designation: Senior Manager (Protective Services), Place Directorate

Signature:



South Ayrshire Council

Name: Morton Houston

Designation: Service Lead – Trading Standards and Environmental Health

Signature:



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Prepared by

Hazel Henderson, Consultant in Public Health,
NHS Ayrshire & Arran;
Elvira Garcia, Consultant in Public Health – Health Protection Lead,
NHS Ayrshire & Arran;
Catherine Boyd, North Ayrshire Council,
Elaine Cavanagh, East Ayrshire Council;
Brian Lawrie, South Ayrshire Council;
Lorette Dunlop, Head of Resilience,
NHS Ayrshire & Arran;
Naomi Kane, Ayrshire Civil Contingencies Co-ordinator;
Emily Tweed, Public Health Registrar, NHS Ayrshire & Arran;
Emma Walker, Senior Programme Manager - Health Protection,
NHS Ayrshire & Arran

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Lead reviewer

Lynne McNiven
(Director of Public Health)

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Arrangements**

NHS Ayrshire & Arran Board
Committees of East, North and South Ayrshire Councils
IJBs – North, South, East Ayrshire HSCPs

Amendment record

Review date	Comments	Date of next review

Abbreviations

ACCT	Ayrshire Civil Contingencies Team
ADTC	Area Drugs & Therapeutics Committee
ALRP	Ayrshire Local Resilience Partnership
AMG	Antimicrobial Management Group
AMT	Antimicrobial Management Team
ATS	Asymptomatic Testing Sites
BBV	Blood Borne Virus
CBRN	Chemical, Biological, Radiological and Nuclear
CCA	Civil Contingencies Act
CEL	Chief Executive Letter
CfA	Caring for Ayrshire
CMO	Chief Medical Officer
COMAH	Control of Major Accident Hazards
CPD	Continuing Professional Development
CPH	Consultant in Public Health
CPHM	Consultant in Public Health Medicine
DMB	Defence Munitions Beith
EAC	East Ayrshire Council
ECOSS	Electronic Communication of Surveillance in Scotland
ED	Emergency Department
EHO	Environmental Health Officer
EPH	Environmental Public Health
ESA	Employment and Support Allowance
EU	European Union
FSA	Food Standards Agency
FSS	Food Standards Scotland
GDC	General Dental Council
GIZ	Gastrointestinal Infections and Zoonoses
GMS	General Medical Services
GP	General Practitioner
GSS	Glasgow Scientific Services
HAI	Healthcare Associated Infection

HCV	Hepatitis C Virus
Hep B	Hepatitis B
HGC	Healthcare Governance Committee
HIV	Human Immunodeficiency Virus
HPN	Health Protection Nurse
HPNS	Health Protection Nurse Specialist
HPS	Health Protection Scotland
HPT	Health Protection Team
HPV	Human Papilloma Virus
HSCP	Health and Social Care Partnership
HWL	Healthy Working Lives
IB	Incapacity Benefit
ICM	Infection Control Manager
IMT	Incident Management Team
INEG	Infection Network Executive Group
IPCT	Infection Prevention & Control Team
ISD	Information Services Division
IT	Information Technology
JCVI	Joint Committee on Vaccination and Immunisation
JHPP	Joint Health Protection Plan
JHPPG	Joint Health Protection Planning Group
LE	Life Expectancy
LFDs	Lateral Flow Devices
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, and Queer (or questioning)
MACR	Major Accident Control Regulations
MCN	Managed Care Network
MDT	Multi Disciplinary Team
Men ACWY	Meningitis ACWY
Men B	Meningitis B
Men C	Meningitis C
MERS-CoV	Middle East Respiratory Syndrome – Novel Coronavirus
MIP	Major Incident Plan
MIST	Major Incident Support Team

MLO	Military Liaison Officer
MoD	Ministry of Defence
MoU	Memorandum of Understanding
MSM	Men who have sex with men
MTUs	Mobile Testing Units
NAC	North Ayrshire Council
NHS A&A	NHS Ayrshire & Arran
NIPCM	National Infection Prevention Control Manual
NSS	National Services Scotland
PAG	Problem Assessment Group
PCOIC	Prevention & Control of Infection Committee
PCR	Polymerase Chain Reaction
PCV	Pneumococcal Conjugate Vaccine
PDP	Personal Development Planning
PDR	Professional Development Review
PHS	Public Health Scotland
PrEP	Pre exposure prophylaxis
PWS	Private water supplies
REPIR	Radiation Emergency Preparedness and Public Information Regulations
SAC	South Ayrshire Council
SALRP	Scottish Alliance and Local Resilience Partnership
SDA	Severe Disablement Allowance
SEPA	Scottish Environment Protection Agency
SEISS	Scottish Environmental Incident Surveillance System
SFRS	Scottish Fire & Rescue Service
SHBBV	Sexual Health and Blood Borne Virus
SHPIR	Scottish Health Protection Information Resource
SHPN	Scottish Health Protection Network
SHPN-GIZ	Scottish Health Protection Network – Gastrointestinal Infections & Zoonoses
SIDSS	Scottish Infectious Disease Surveillance System
SIMD	Scottish Index of Multiple Deprivation
SLWG	Short Life Working Group

SOPs	Standing Operating Procedures
STAC	Scientific and Technical Advice Cell
StR	Speciality Registrar
SW	Scottish Water
TB	Tuberculosis
VAM	Variant and Mutations
VOC	Variant of Concern
VTP	Vaccination Transformation Programme
WHO	World Health Organisation
WTE	Whole Time Equivalent
WTW	Water Treatment Works

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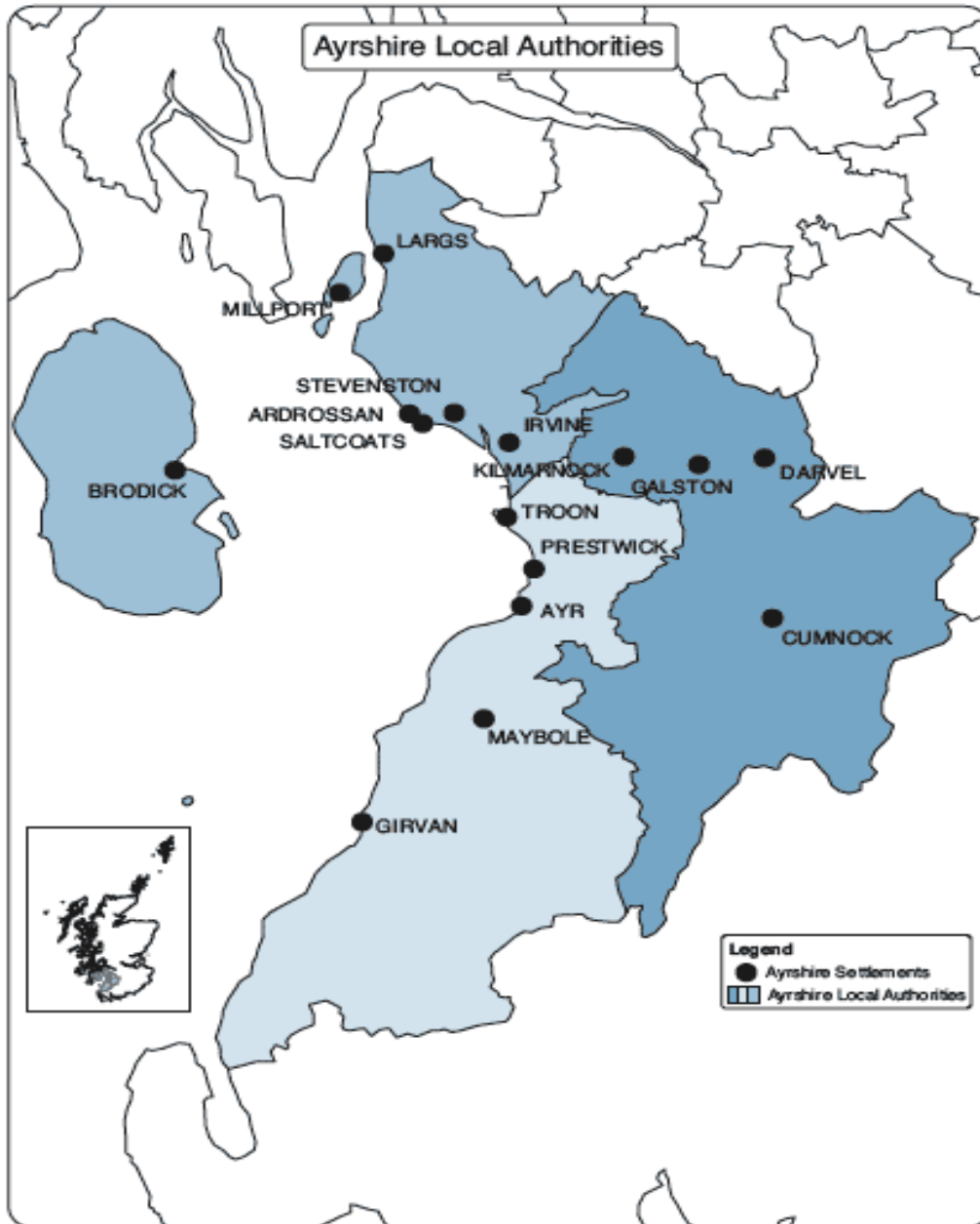
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1. Overview of Ayrshire and Arran

1.1 Demography and geography of the population

Figure 1: Ayrshire Local Authorities



Ayrshire and Arran consists of three coterminous local authority areas - East Ayrshire, North Ayrshire and South Ayrshire. It is located in the south west of Scotland bounded by Inverclyde, Renfrewshire and East Renfrewshire to the north, Lanarkshire to the east and Dumfries and Galloway to the south. It covers an area of 3,369 square kilometres and is a mix of rural and urban developments.

(<http://www.scotlandscensus.gov.uk>).

Table 1 shows the population in each of the three local authority areas and the change in population between the 2001 and 2020 population estimates. The population estimate in NHS Ayrshire & Arran has decreased slightly between 2011 and 2016 and has further decreased between 2016 and 2020. This decrease is seen across all local authority areas.

Table 1: Populations of East, North and South Ayrshire compared to Scotland, 2001, 2011, 2016 and 2020

Area	Population 2001 ¹	Population 2011 ²	Mid-2016 Population Estimate ³	Mid-2020 Population Estimate ⁴
Scotland	5,062,000	5,295,400	5,404,700	5,466,000
East Ayrshire	120,200	122,700	122,200	121,600
North Ayrshire	135,800	138,200	135,890	134,250
South Ayrshire	112,100	112,800	112,470	112,140
NHS Ayrshire and Arran	368,100	373,700	370,560	367,990

Source (1 & 2): www.scotlandscensus.gov.uk/en/censusresults/downloadablefiles.html

Source (3): Tables A & B at <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2016>

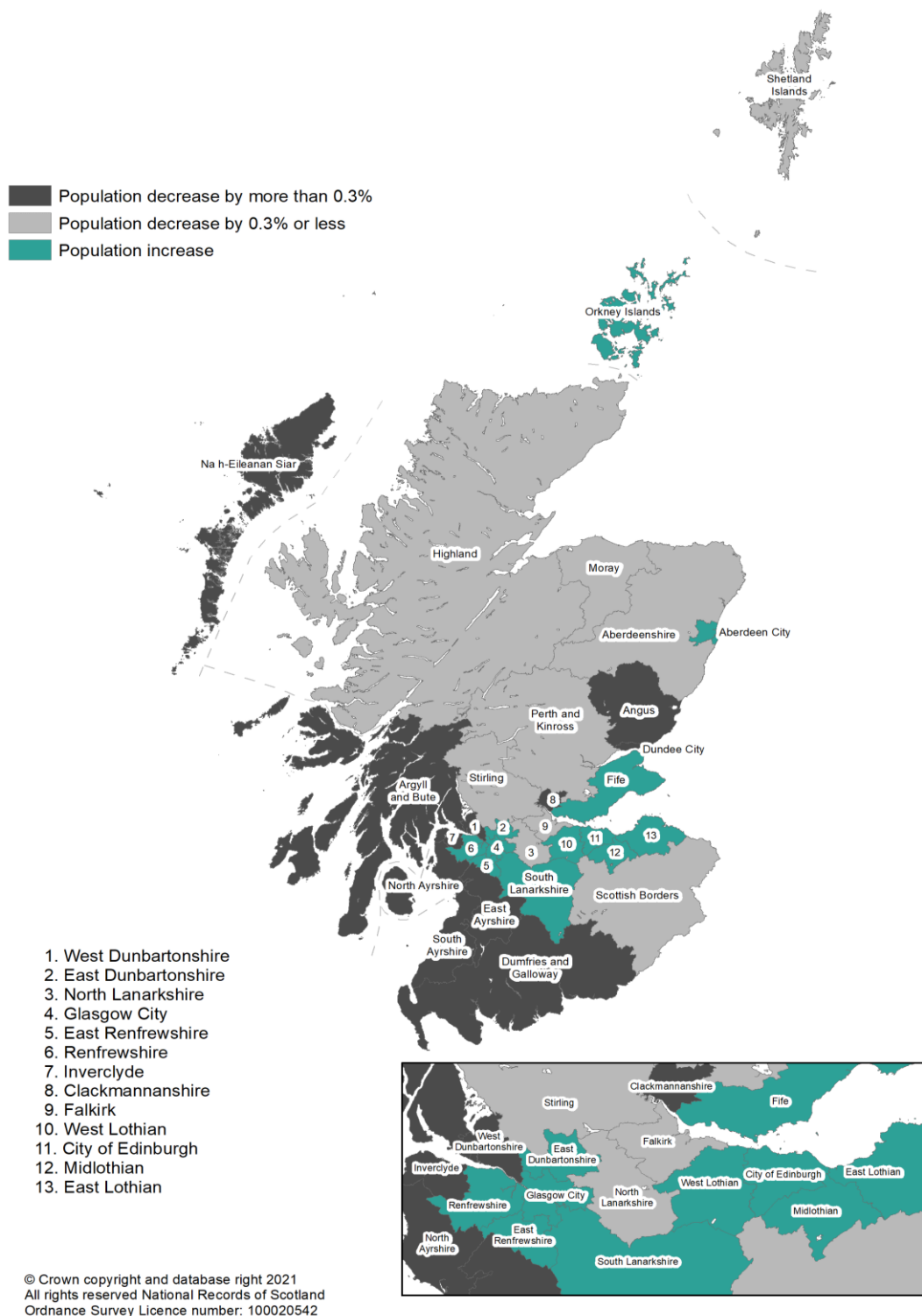
(1 & 2) Population data are rounded to the nearest hundred.

Source (4): <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2020>

According to the mid-2020 population estimate, both South and North Ayrshire will have a percentage population change of -0.4%, whereas East Ayrshire will have a percentage population change of -0.3% when compared to the mid-2019 population for each area.

Figure 6 highlights that all three local authorities within NHS Ayrshire and Arran have experienced a population decrease by more than 0.3% between the mid-2019 and the mid-2020 population estimates.

Figure 2: Population change by council area, mid-2019 to mid-2020



Source: Figure 2 at <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2020>

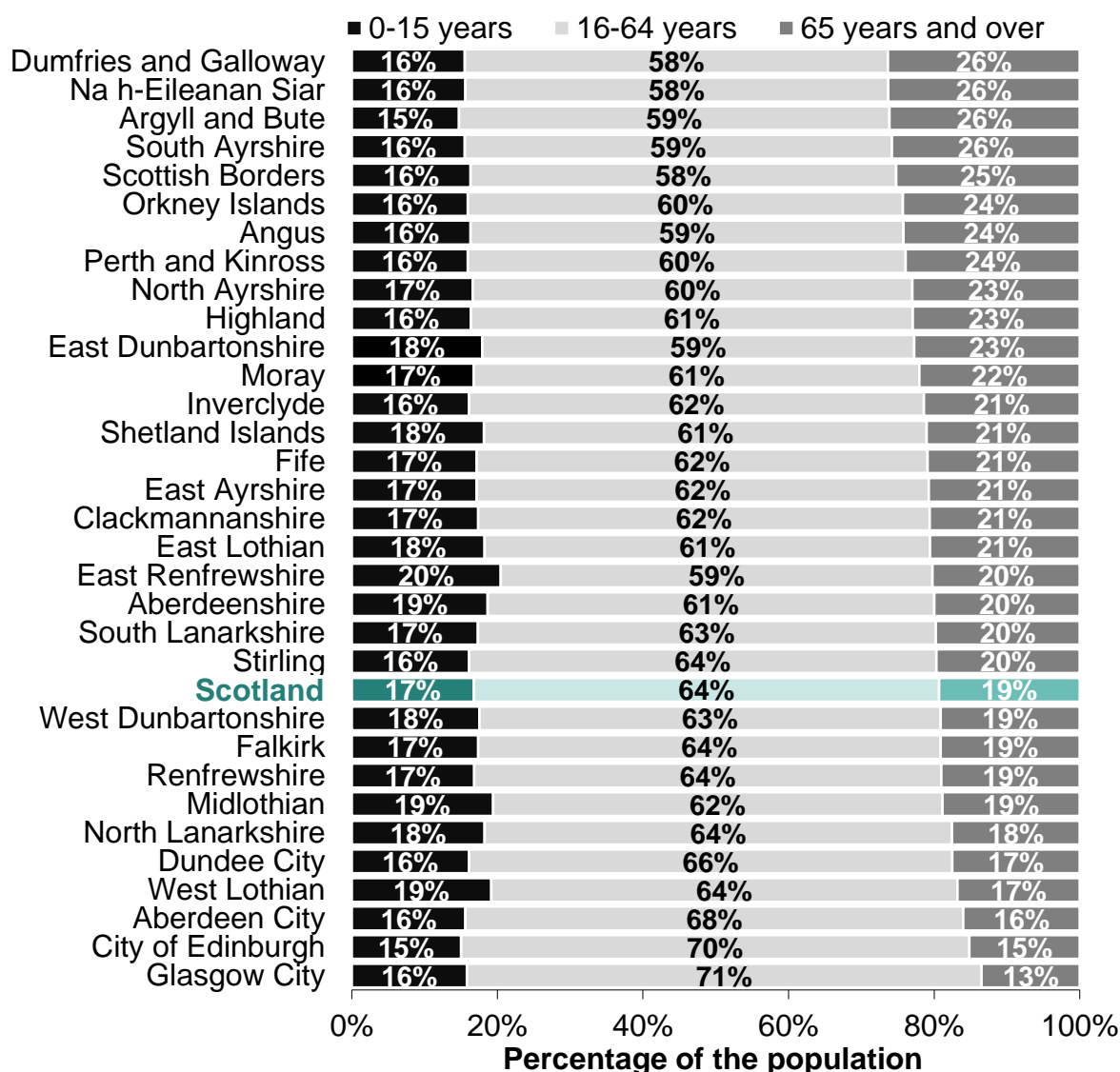
East Ayrshire covers an area of 1,262 square kilometres from Lugton in the north to Loch Doon in the south. It has an estimated population of 121,600 people living in urban, rural and isolated communities, with a population density of 96 persons per square kilometre (Scottish average=70).

North Ayrshire is situated around 25 miles south-west of Glasgow. Its total area is some 885 square kilometres (441 sq km mainland, 444 sq km islands) with a total coastline of 140 miles (42 miles mainland, 98 miles islands). A high percentage (85%) of the area is classified as rural. North Ayrshire has a total estimated population of 134,250. Its population density is 152 persons per square kilometre which is above the Scottish average but below that of nearby Glasgow City (3,640).

South Ayrshire has an extensive coastline and covers an area of 1,222 square kilometres. The north-west part of South Ayrshire is the most densely populated. South Ayrshire has a total estimated population of 112,140. The five main towns of South Ayrshire make up approximately 80% of the total population. Overall population density is 92 persons per square kilometre.

Figure 9 highlights the age structure of the three council areas within NHS Ayrshire and Arran. South Ayrshire has the largest percentage of people aged 65 years or older at 26%, followed by North Ayrshire then East Ayrshire at 23% and 21% respectively. All three local authorities have a larger 65 year old and over population percentage than Scotland as a whole. People aged 0-15 years old make up 17% of both North and East Ayrshire's populations. This is the same as the 0-15 year old population of Scotland overall. East Ayrshire has the largest proportion of 16-64 year olds at 62%.

Figure 3: Age structure of council areas, mid-2020 (ordered by percentage aged 65+)



Figures are rounded so may not add up to 100%.

Source: Figure 9 at <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2020>

1.2 Minority ethnic population

Table 2 provides an overview of ethnicity in Ayrshire and Arran. The 2011 Census grouped information on ethnicity into two broad categories: White ethnic groups and Minority ethnic groups.

Table 2: Overview of ethnicity in Ayrshire and Arran compared to Scotland, 2011 Census

Ethnicity	Ayrshire & Arran		Scotland
	Number	Percentage	Percentage
All people	373,712	100.0%	100.0%
White – ethnic groups	369,392	98.8%	96.1%
Minority – ethnic groups	4,320	1.15%	3.9%

Source: <http://www.scotlandscensus.gov.uk/en/censusresults/downloadablefilesr2.html>

Minority ethnic groups make up 1.15% of the Ayrshire and Arran population; this is relatively small compared to 3.9% across Scotland. The Asian population is the largest minority ethnic group at 0.7% however this is a relatively small proportion compared to the national figure of 3% (**Table 3**).

Table 3: Minority ethnic groups in Ayrshire and Arran, population numbers and percentages 2011 Census

Minority ethnic group	Asian, Asian Scottish or Asian British	African	Caribbean or Black	Other ethnic groups	Mixed or multiple ethnic groups
Number	2,752	253	181	280	854
Percentage	0.7	0.1	0.0	0.1	0.2

Source: <http://www.scotlandscensus.gov.uk/en/censusresults/downloadablefilesr2.html>

As per 2011 census, only 1.5% of the population of Ayrshire & Arran have their country of birth outside the EU (4% in Scotland).

1.3 Deprivation in Ayrshire and Arran⁴

The Scottish Index of Multiple Deprivation 2020 (SIMD) indicates that there are significant differences in socio-economic status and deprivation levels across Ayrshire, and that there are areas with high multiple deprivation adjacent to areas with low multiple deprivation. SIMD 2020 data ranks the 6,976 data zones in Scotland from most deprived (1) to least deprived (6,976). Ayrshire and Arran has 502 data zones, and 153 of these are within the 20% most deprived areas in Scotland, or most deprived quintile.

⁴ Source: www.scotland.gov.uk/Topics/Statistics/SIMD

The most deprived data zone in Ayrshire and Arran is the Ayr North Harbour, Wallacetown and Newton South data zone in South Ayrshire, ranked 13th in Scotland. The least deprived data zone is in the Stewarton East data zone in East Ayrshire, ranked 6,920th in Scotland. In 2017, 14.95% of the population were income deprived, with 20.40% of children living in low-income families, and 6.96% of adults claiming Incapacity Benefit (IB)/Severe Disability Allowance (SDA)/Employment & Support Allowance (ESA) (income-replacement disability benefits), all of which were above the national average. Life expectancy (LE) for males in Ayrshire & Arran in 2019 was 75.73 years, and for females it was 80.35, close to the Scottish average (Ref: ScotPHO Health and Wellbeing Profiles 2022).

These data are also available for the individual local authorities, shown in table 4.

Table 4: Overview of deprivation in Ayrshire and Arran compared to Scotland, ScotPHO Health and Wellbeing Profiles 2022

Area	Male LE (years)	Female LE (years)	Income deprived (%)	Children in low-income families (%)	Adults claiming IB/SDA/ESA (%)
East Ayrshire	75.23	79.81	15.20	20.75	6.88
North Ayrshire	75.30	80.10	16.98	23.53	7.42
South Ayrshire	76.65	81.14	12.23	16.59	5.91

Source: <http://www.scotpho.org.uk/comparative-health/profiles/online-profiles-tool>

2. Health Protection Planning Infrastructure

2.1 Remit of agencies

NHS Ayrshire & Arran

The health protection remit for NHS Boards is described in the letter of 2 February 2007 from the Chief Medical Officer⁵ (CMO) and has been further clarified by the Public Health etc. (Scotland) Act 2008. NHS Ayrshire & Arran delegates this responsibility to the Director of Public Health with work carried out by the Health Protection Team (HPT). This team is comprised of Consultants in Public Health (CPH) and Consultants in Public Health Medicine (CPHM), Health Protection Nurse Specialists (HPNS), Health Protection Nurses (HPN), Senior Programme Manager and admin support with Specialty Registrars in Public Health (StR) working within the team for short attachments. The health protection remit covers communicable diseases, environmental hazards and the deliberate release of biological, chemical, radiological and nuclear hazards. The remit is delivered through the key functions of:

- surveillance
- investigation
- risk assessment
- risk management
- communication
- outbreak management
- emergency response and management
- audit, evaluation, education, training and research.

The primary focus of the HPT over the last two years has been responding to the COVID-19 pandemic, while continuing to deliver the health protection function.

⁵ See [http://www.sehd.scot.nhs.uk/cmo/CMO\(2007\)02.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2007)02.pdf)

North, South & East Ayrshire Councils

The health protection remit lies within the Environmental Health and Trading Standards Services of North, South & East Ayrshire Councils and includes communicable disease, air quality, food safety and standards, occupational health and safety, pollution control, public health, private water supplies, pest control, animal health, tobacco control, the enforcement of the Smoking in Public Places legislation and the built environment (the condition of Housing), with Port Health included in the north and south of the area. In the main, this is statute-led and includes monitoring, inspection, surveillance, sampling, investigation and resolution of enquiries and complaints.

The Public Health etc. (Scotland) Act 2008 has placed responsibilities on Local Authorities, in the area of mortuaries and the disposal of bodies, it enables Scottish Port Health Authorities to implement the International Health Regulations at ports, it makes provision relating to the use of sunbeds: and it amends the law on statutory nuisances to include insect infestations, artificial light nuisance and water on land. It also enables Local Authorities to offer fixed penalties, as an alternative to prosecution, to persons who fail to comply with abatement notices.

2.2 Multi-agency planning infrastructure

The NHS and the Local Authorities are an integral part of the West of Scotland Regional Resilience Partnership. It is through this forum that civil contingency (emergency planning) issues are addressed across the wider partner organisations, including the emergency services, military and the voluntary organisations.

2.3 Civil contingency plans

There are a number of key plans within Ayrshire and Arran on which the NHS and the Local Authorities either individually or jointly lead. A full list of plans including review and exercise dates and access details are shown at Annex A.

3. Priorities for Health Protection Including Emerging Issues

3.1 National priorities for Public Health

The Scottish Government and COSLA agreed six Public Health Priorities in June 2018. The intention is that these priorities are shared across the whole public health and that they facilitate collaborative working. The priorities are listed below.

1. A Scotland where we live in vibrant, healthy and safe places and communities.
2. A Scotland where we flourish in our early years.
3. A Scotland where we have good mental wellbeing.
4. A Scotland where we reduce the use of and harm from alcohol, tobacco and other 5 drugs.
5. A Scotland where we have a sustainable, inclusive economy with equality of outcomes for all.
6. A Scotland where we eat well, have a healthy weight and are physically active.

Health protection activities aim to reduce the risk and impact of infection and environmental hazards, contributing to the achievement of the Public Health priorities in Scotland.

3.2 COVID-19

During 2020-22, the primary priority within health protection in Scotland has been responding to the COVID-19 pandemic. Vaccination, testing, contact tracing, surveillance and outbreak management have been the main focus. Additional staffing has been funded by the Scottish Government to allow dedicated teams to work in these areas, including the Test and Protect workforce. As of the 1st of May 2022, all Test and Protect staff entered redeployment or are being returned to their substantive posts.

The response to COVID-19 remains for 2022-24 and the local HPT is responsible for monitoring and managing any outbreaks that occur, particularly in high-risk settings e.g. Care Homes, Prisons and other closed settings. The ‘Variant and Mutations (VAM) Plan’ will outline what the responsibilities and requirements of local HPTs will be should a new variant of concern (VOC) of COVID-19 arise, such as surveillance, interviews of cases and contacts, management of outbreaks in the community and/or vaccination. There is an expectation that Public Health Scotland (PHS) will coordinate this from a national perspective but that local HPTs will coordinate the response locally. There is also an expectation that Health Boards will provide mutual aid to other Health Boards should a VOC arise in one geographical area but is not currently impacting another area. COVID-19 continues to generate a significant volume of work for the HPT and will continue to be a challenge throughout the duration of this JHPP.

3.3 Other local priorities

3.3.1 Pandemic influenza and other emerging threats

Local pandemic influenza plans were updated in line with the new national guidance issued in November 2011⁶ and informed by lessons learned during the 2009 influenza A (H1N1) pandemic.

Local HPTs remain vigilant to the possibility of imported or novel infections such as infection from Ebola or the Middle East Respiratory Syndrome – Novel Coronavirus (MERS-CoV). Actions in relation to the prevention, surveillance and management other emerging infections such as Monkeypox, Avian Influenza or hepatitis of unknown origin in children, are also impacting HPTs activity.

⁶ Department of Health (2011) UK Pandemic Influenza Preparedness Strategy. London.

3.3.2 Healthcare associated infections (HAI) and antimicrobial resistance

The Nurse Director is the executive lead for the prevention and control of infection within NHS Ayrshire & Arran. The Infection Control Manager (ICM) is the “Designated Senior Manager” required under HDL (2001) to deliver the corporate accountabilities of the NHS Board, Chief Executive and Medical Director. The Prevention & Control of Infection Committee (PCOIC) reports to the NHS Ayrshire & Arran Healthcare Governance Committee (HGC).

The Infection Prevention & Control Team (IPCT) provides a service to all directly managed NHS Ayrshire & Arran services, including acute, continuing care and mental health services in the hospital and community settings.

There is close liaison between the IPCT and the Public Health department’s HPT. A CPHM and a HPN are members of the PCOIC. The HPT may provide expert advice and guidance to care homes in relation to HAI and the prevention and control of infection.

The NHS Ayrshire & Arran Antimicrobial Management Team (AMT) is charged with ensuring a robust programme of antimicrobial stewardship in primary and secondary care. The AMT reports to the Antimicrobial Management Group (AMG) which is chaired by the Medical Director and is a sub-group of the Area Drugs & Therapeutics Committee (ADTC).

The National Infection Prevention and Control Manual (NIPCM),⁷ which is updated in real-time, is a relevant and useful document that may be used in community settings by the HPT. New chapters of the manual are circulated to IPCTs and HPTs in each Board for comment prior to publication.

⁷ Source: <http://www.nipcm.scot.nhs.uk/>

3.3.3 Vaccine preventable diseases and their impact on current and planned immunisation programmes

The implementation and monitoring of immunisation programmes in Ayrshire and Arran is overseen by the NHS Ayrshire & Arran Vaccination Programme Board. This is a multi-disciplinary group which is chaired by a CPHM, who is also the Immunisation Coordinator for NHS Ayrshire & Arran. Immunisation reports are produced and overseen by the programme board to monitor implementation and uptake of the immunisation programmes.

In addition to the established routine childhood, school and seasonal flu immunisation programmes, new vaccination programmes have been recently implemented across Scotland:

- Human Papilloma Virus (HPV) vaccination was introduced in September 2019 for all S1 boys.
- COVID-19 vaccination programme was launched in December 2020 as a response to the coronavirus pandemic. Initially the programme targeted the most vulnerable groups and rolled out during 2021 to all adults 18 and over. All children aged 12-17 years were later included in the programme as well as those children aged 5-11 years, initially only to those who are considered to be at higher risk or living with someone who is immunosuppressed, but then to all children in this age group. The programme schedule consists of 2 primary doses (3 for an individual considered severely immunosuppressed) followed by a booster dose, and later to a second booster dose to some groups, including residents and workers in adult care homes and those aged 75 years and older.
- Extension of the seasonal flu vaccine to all secondary school pupils for 2021/22.
- Extension of the seasonal flu vaccine to all individuals aged 50 years and over for 2021/22, which includes those not previously eligible who were considered 'at-risk'.
- Extension of the seasonal flu vaccine for 2021/22 to individuals in the following occupations:
 - All nursery, primary and secondary school teachers and support staff working in close contact with pupils in both Local Authority and independent settings

- All prison officers including support staff in close contact with the prison population delivering direct detention services.
- All frontline social care workers delivering direct personal care in residential care facilities for adults, residential care and secure care for children and community care for persons at home (including housing support and Personal Assistants).

There have been other recent changes to the immunisation programmes:

- December 2021 saw the introduction of an inactive Shingles vaccine - Shingrix®- which is to be offered to those individuals who are severely immunocompromised and therefore contraindicated to the currently available live shingles vaccine - Zostavax®. The Shingles programme continues to target the same age based demographic – 70-79 years. By March 2023 a transition will be made where only the inactivated Shingles vaccine will be used in the Shingles vaccination programme.
- A new Diphtheria, Tetanus, Polio, Pertussis, Haemophilus type B and Hepatitis B (DTaP/IPV/Hib/HepB) 6-in-1 vaccine for use in the childhood programme for infants aged 2-4 months named Vaxelis® . This vaccine is available in limited numbers. The remaining will continue to be – Infanrix Hexa®. This programme will be closely monitored by Pharmacy and the Immunisation Coordination Team.

Other possible immunisation programmes that will be introduced from 2022/24 following further advice from the Joint Committee on Vaccination and Immunisation (JCVI):

- Extension to the COVID-19 vaccination programme to include booster doses for those aged 5-15 years.
- Further additions to the COVID-19 programme such as second booster doses. This could include the introduction of new types of COVID-19 vaccines or additional vaccines or doses beyond 2023.
- Potential extension of the seasonal flu vaccine offered to groups that were not offered before 2021.

Announced in early 2017, the Vaccination Transformation Programme (VTP), as part of the wider Primary Care Transformation Programme, aims to ensure the health of the Scottish public through the modernisation of the delivery of all immunisation

programmes, empowering local decision making and supporting the transformation of the role of the General Practitioner (GP). It recognised the need to modernise and empower Health Boards/Health and Social Care Partnerships (HSCPs) to deliver all vaccination programmes, including the following immunisation programme, in a way that addresses inequalities in uptake whilst addressing local needs:

- Pre-school vaccinations
- School vaccination programmes
- Adult vaccination programmes (including “at risk” vaccination)
- Vaccinations in pregnancy
- Travel health advice and vaccination

The responsibility for delivering the routine pre-school and school vaccination programmes, as well as vaccinations in pregnancy, had been transferred from GP practices before 2020.

The development of the COVID-19 mass vaccination service, which included the co-administration of flu vaccination to eligible adult cohorts, in 2021/22 created useful learning to inform future planning at a scale that is required on an annual basis for the adult flu vaccination programme during autumn/winter months.

Extended by one year as a result of the COVID-19 pandemic, the VTP had a completion date of end March 2022. With the main focus during 2021/22 being the ongoing COVID-19 vaccination programme as part of the pandemic response, work to fully implement the VTP was reconvened by Public Health and key stakeholders have been working to deliver on the programme.

3.3.4 Environmental and planetary health

Many different aspects of the physical environment impact on our health, from the beneficial impact of green space on mental wellbeing to potential hazards and incidents requiring a health protection response.

In the following sections, we first describe our overarching response to environmental exposures which may impact health before setting out in detail our response to the climate emergency as a specific – and pressing – example.

3.3.4.1 Prevention and management of environmental hazards

Health protection work in this area includes responses to acute incidents and chronic contamination resulting in human exposures to physical (e.g. ionising and non-ionising radiation, respirable particulates) and chemical hazards, whether by inhalation, ingestion, or direct exposure and contact.

The Guide to Environmental Incident Response for NHS Boards (2015) helps NHS Public Health / Health Protection staff in responding to environmental incidents. It sets out processes to assess the type of incident and to decide the appropriate level of NHS Health Protection response. In addition, preparedness for major chemical, biological, radiological and nuclear (CBRN) incidents needs to be maintained.

A further aspect of Environmental Public Health (EPH) is the assessment of proposed policy changes and infrastructure developments in order to mitigate adverse health impacts, and to promote beneficial influences on health such as assessments of developments involving hazardous emissions to air.

The three Local Authorities work closely with the NHS on a number of areas relating to environmental exposures which have an adverse impact on health.

These include:

- Air quality monitoring - provision of automatic air sampling equipment which provides continuous monitoring at locations throughout the area including particulate monitoring/investigation.

- Private water supplies (PWS) - monitoring, advice and inspection of private water supplies including sampling. An amendment to the Regulations commenced in 2019 expanded the scope of regulated supplies. Local Authorities are still undertaking risk assessments of these new regulated supplies. Scottish Government are planning a consultation on PWS with the timeframe of this plan.
- Health protection and improvement measures - food hygiene and safety, food standards, infectious disease investigation, diet and nutrition advice, and healthy eating campaigns (for example salt and fat content in food).
- Smoking prohibition checks and checks on the sale of tobacco products to under 18s. Actions for Local Authorities under the Scottish Government's Tobacco Control Strategy include the implementation of smoke free policies across their facilities and grounds, initiatives to tackle underage sales through existing legislation enforced by trading standards, and enforcement of the smoking prohibition Children in Motor Vehicles (Scotland) Act 2016, which came into force on 5th December 2016 prohibiting smoking by an adult in a private vehicle in the presence of a child while the vehicle is in a public place. 2022 sees the commencement of enforcement of smoke-free health board facilities and grounds. Once the guidance is published discussions with partners on enforcement expectations will proceed.
- Health and wellbeing campaigns, for example noise control and antisocial noise control relative to mental health and wellbeing.
- Healthy Working Lives (HWL) - health and safety inspections and advice visits, accident investigations and participation in campaigns such as prevention of accidents from slips, trips and falls and working at heights.
- Improving the built environment - for example identifying houses below the tolerable standard and using statutory nuisance powers to seek resolution; identifying unlicensed houses in multiple occupation and houses rented by unregistered landlords in partnership with other council services to provide accommodation that is fit for purpose. This aspect is being used as a critical part of Scottish Government's Ukrainian Refugee Scheme which started in 2022.
- Contaminated land use - identification and remediation strategies.
- Regulation of the use of sun beds.
- Regulation of skin piercers and tattooists.

- General public health issues - pest control and dog wardens, litter, fly tipping control and dog fouling campaigns / enforcement, nuisance control and abatement.
- Animal Health issues - including rabies, anthrax, Tuberculosis (TB).

Emerging issues that can be considered include:

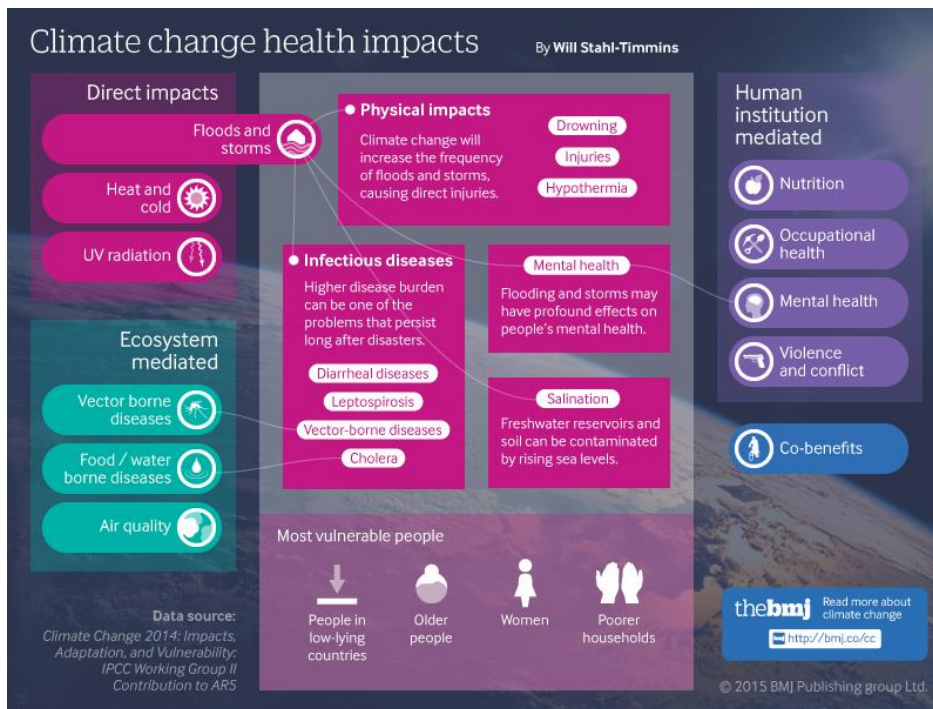
- Electronic cigarettes (vaping) as they may contribute to levels of indoor air pollution and second-hand vapour inhalation. This can be seen as a harm reduction option however increasing popularity has seen a number of emerging issues. An age-restricted product, we are seeing a rise in complaints of underage sales, with the devices gaining popularity in secondary age children. The products are marketed towards children with the choices of colours and flavours. In addition, there are product safety issues with the devices themselves.
- PWS -water scarcity. Effect of climate change on PWS. Since 2018, Scotland has been affected by water scarcity, with Ayrshire experiencing moderate to severe scarcity. Our Local Authorities have the following registered PWS: East Ayrshire, 78 regulated supplies and 216 type B; South Ayrshire, 94 regulated and 154 type B; North Ayrshire 26 regulated and 286 type B. In each Local Authority we had properties which had limited or no water supply for several weeks.
- Proliferation of cosmetic procedures and licensing implications.
- Trading Standards will continue to seek to work closely with health partners across the full range of health- related legislation they enforce, including animal disease, age-restricted sales (Tobacco/ Solvents) and the abuse of products (New Psychoactive Substances).

3.3.4.2 Climate emergency: mitigation and adaptation

The ongoing climate emergency has been described as the greatest threat – but also the greatest opportunity – for human health of the 21st century⁸.

⁸ Source: [https://doi.org/10.1016/S0140-6736\(15\)60931-X](https://doi.org/10.1016/S0140-6736(15)60931-X)

Figure 4: Climate change health impacts



Source : <https://www.bmj.com/content/351/bmj.h6316/infographic>

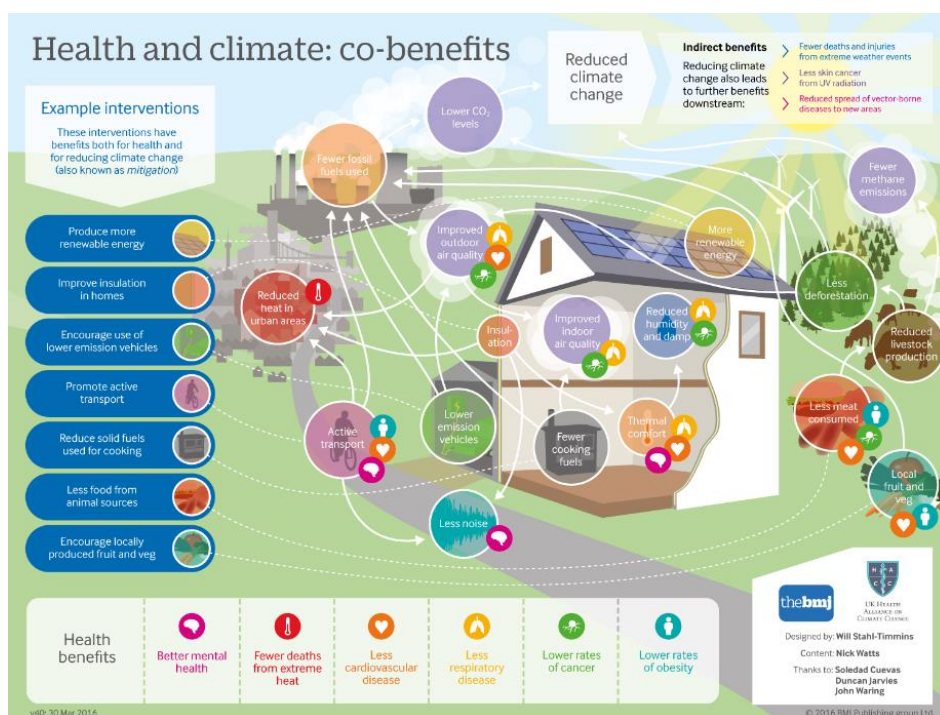
To avoid the worst fallout of climate change, average temperatures need to stay below 1.5°C above pre-industrial levels (the Paris agreement target). Yet if we continue on our current path, temperatures could increase by as much as 4.4°C by 2100 – a state thought to be incompatible with organised human society⁹.

Other natural 'life support' systems on which humans depend – such as biodiversity, freshwater, and soil quality – are also under threat¹⁰. Yet many of the solutions to the climate and ecological emergency also offer enormous health benefits.

⁹ Source: <https://www.un.org/en/climatechange/science/key-findings> and <https://www.gov.scot/publications/cmo-annual-report-2020-21/pages/6/>

¹⁰ Source: <https://stockholmresilience.org/research/planetary-boundaries.html>

Figure 5: Health and climate: co-benefits



Source: <https://www.bmj.com/content/352/bmj.i1781/infographic>

The COP26 summit in Glasgow focused the world’s attention on Scotland, and the Scottish Government has committed to the most ambitious statutory target for emissions reduction of any country worldwide. Like the COVID-19 pandemic, this requires all public bodies to work together to safeguard human health from an existential threat and to ensure we do so in an equitable and just way.

Environmental sustainability was a key focus of the Chief Medical Officer (CMO) for Scotland’s report¹¹ in 2020/21, and NHS Scotland has recently announced its commitment to become a net zero organisation by 2040, as set out in its draft climate emergency and sustainability strategy¹² and accompanying Chief Executive Letter (CEL). Locally, NHS Ayrshire & Arran has adopted a ten year Climate Change

¹¹ Source : <https://www.gov.scot/publications/cmo-annual-report-2020-21/pages/6>

¹²:Source :<https://www.gov.scot/publications/nhs-scotland-draft-climate-emergency-sustainability-strategy/pages/1>

and Sustainability Strategy¹³ to this end, and each Local Authority has developed its own climate change strategy and action plans¹⁴.

Ayrshire and Arran faces unique challenges and opportunities in mitigating and adapting to climate change. For instance, the Climate Just tool developed by the Environment Agency and Joseph Rowntree Foundation has identified multiple areas in the region with a flood risk index of 'extreme' or 'acute' – reflecting both environmental and social vulnerability¹⁵.

The climate emergency, and other environmental challenges, will therefore be an important focus for health protection partners over the years ahead.

Based on these strategies and related action plans, the areas of work for the current JHPP period will include:

- Working with local stakeholders across the NHS, Local Authorities, local and regional health resilience groups, community groups, community planning and civil contingency groups in identifying risks posed by current weather and climate change.
- Working with these stakeholders to develop action plans in response to these risks, with a particular focus on vulnerable communities.
- Reducing the risks of environmental contamination from hazardous chemicals in medical devices and consumables across the procurement, use, and disposal lifecycle, with a focus on reduction, replacement, reuse, and recycling, rethinking, and safe disposal.
- Working with partners and businesses to raise awareness and compliance with the single use plastics and other related regulations.

¹³Source: <https://www.nhs.uk/media/11845/2022-01-31-bm-p10-climate-change-and-sustainability-strategy-2021-2032.pdf>

¹⁴ Available here:

<https://www.east-ayrshire.gov.uk/Resources/PDF/C/Climate-Change-Strategy.pdf>;

<https://www.north-ayrshire.gov.uk/Documents/CorporateServices/Finance/environmental-sustainability-climate-change-strategy.pdf>;

<https://archive.south-ayrshire.gov.uk/sustainable-development/energy/sac-climate-change.aspx>

¹⁵ Available here: <https://www.climatejust.org.uk/mapping/#>

- Working alongside partner organisations to learn from and share learning, building up a framework that can protect, people, place, and planet, promoting health and wellbeing. This will include workforce development on the climate and ecological emergency across NHS Ayrshire & Arran and beyond, building on the Active Global Citizenship resources developed for NHS Scotland and seeking to empower staff to incorporate sustainability as a 'golden thread' throughout their existing work.

3.3.5 Gastro-intestinal and zoonotic infections

Local

One of the most common health protection issues managed on a daily basis is gastro-intestinal infections. These are investigated and managed jointly by the HPT and the three Local Authorities to identify the source, control the infections and reduce the risk of further spread. Where there is any indication of an outbreak, a multi-disciplinary, multi-agency meeting convened by a CPH(M) will manage any incident. During the pandemic there was a significant reduction in the number of gastrointestinal and zoonotic (GIZ) infections reported to the HPT. The introduction of Public Health measures by Scottish Government to curb the spread of COVID-19 helped reduced spread of other infections. During this period there were no large outbreaks of GIZ infections in Ayrshire.

Now the Local Authority food enforcement regimes are re-starting there are early indications emerging that may impact on our resources. Hospitality has been hit hard economically by the pandemic therefore financial constraints are limiting the maintenance of food businesses. In terms of staffing a combination of EU Exit and the pandemic mean that there is a skills and resource issue. Due to these factors we are already seeing a decrease in compliance with food legislation and a related increase in the risk of GIZ infections as a result. This has implications for the workloads of Environmental Health services and the prioritisation of work.

National

Environmental Health and Public Health are members of the Scottish Health Protection Network (SHPN) Gastrointestinal Infections and Zoonosis (GIZ) Group. SHPN-GIZ is part of the SHPN and supports and co-ordinates a multidisciplinary considered approach to the methodology, evidence and responses to GIZ disease threats in Scotland. The group's current work plan includes work on tick-borne diseases, shiga toxin-producing infections, hepatitis E, giardia and hepatitis A. Following a hiatus during the pandemic, the group is focusing on reset and recovery of GIZ activities.

The HPT and the three Local Authority Environmental Health Services continue to use a joint protocol for the investigation and management of cases of gastrointestinal disease.

3.3.6 Blood borne viruses (BBV)

Priorities for the Sexual Health Outcomes Working Group during the 2022/24 period include prevention and management of acute hepatitis B, and improved surveillance and management of syphilis, Human Immunodeficiency Virus (HIV), and other BBVs during pregnancy.

Public Health will launch a BBV Programme Board in March 2022 to restart and extend the work of the BBV Managed Clinical Network (MCN), with fortnightly meetings to deliver on actions. Priorities will include; development of a community BBV testing strategy, including rapid and point of care options and a focus on groups at highest risk; improved quarterly surveillance and reporting for BBV; contributing to the Scottish Government and the World Health Organisation (WHO) target of Hepatitis C virus (HCV) elimination by 2030; and a review of HIV clinical standards and development of an HIV action plan, including increased access to pre exposure prophylaxis (PrEP) to prevent new HIV infections among those most at risk.

An integrated and multi-agency approach is required to deliver these outcomes. Whilst the NHS has a critical role in preventing, diagnosing and treating infection, there is a vital role to be played by Local Authorities and the third sector (e.g. voluntary bodies). This is particularly important in relation to the links with other

public health and health protection concerns such as drug misuse and excessive alcohol consumption.

3.3.7 Tuberculosis (TB)

Whilst numbers of TB cases appear stable across Ayrshire and Arran, there is potential for larger and complex outbreaks such as that seen in 2018. In addition, the complexity of individual cases is increasing, placing more pressure on our acute services. Longer hospital stays are associated with lack of community support, poor adherence to treatment, risk of wider transmission, and repeat hospital admission.

As well as successful treatment, prevention is a key priority which requires a multidisciplinary approach from many teams including respiratory nurses, clinical teams in primary and secondary care, microbiology, local authority, partnership, third sector colleagues, and Public Health to prevent transmission and reduce the burden of disease.

TB disproportionately affects our under-served population. Public Health are engaging with our partners in areas such as homelessness services, drug and alcohol teams, and new migrant support teams to encourage symptom identification and support early referral of symptomatic individuals providing ongoing treatment whilst considering a more holistic approach to other risk factors which the individual may be experiencing.

NHS Ayrshire and Arran in collaboration with our partners, are currently developing a robust TB identification and treatment pathway and a prevention strategy in line with the TB Action Plan for Scotland 2011¹⁶ and the more recent TB Framework for Scotland (2017).¹⁷ The outcomes to be delivered by the framework include:

- Fewer cases of active TB via person-to-person transmission or reactivation of latent TB infection:

¹⁶ Scottish Government (2011) A TB Action Plan for Scotland. Edinburgh.

¹⁷ Scottish Government (2017) TB Framework for Scotland. Edinburgh.

- Robust migrant screening, including work with Primary Care and refugee services;
- Surveillance and improvement work on BCG to ensure all at risk <16 offered vaccination, working with the vaccination team;
- Surveillance and quarterly reporting locally and nationally.
- A reduction in the health inequalities gap in people diagnosed with TB:
 - Awareness raising and risk assessment in community for e.g. homeless services and addiction services including widespread understanding of and ease of access to the pathway into screening;
 - Collaborative working with our partners to ensure awareness of pathway and prevention work and proactive intervention and management of TB and related issues such as financial support during treatment;
 - Ensuring support is widely available within the community to facilitate treatment through DOTs and other third party agencies;
 - Engaging with users of the service to help identify any gaps or changes needed in the pathway.
- People affected by TB lead longer healthier lives:
 - Governance through TB Programme Board, allowing partnership working with respiratory nurses and clinicians, labs, occupational health, and infection control;
 - Project team meeting routinely to deliver actions and report to Programme Board.

Both the pathway and prevention strategy will be fundamental in ensuring a robust process which is familiar to all stakeholders and ensures a proactive and supportive service for those at risk or having TB with a clear focus on prevention.

A Public Health TB Project Group was formed in January 2022, and will take forward the above actions, reporting initially to INEG (Infection Network Executive Group). Members of the project group will also work in partnership with other departments and organisations to meet the wider actions within the TB Framework. Oversight for this work will ultimately come from the TB Programme Board, which will commence in Spring 2022, meeting quarterly and reporting to INEG.

3.3.8 Improving quality, access, and outcomes of care for underserved and excluded groups

As part of NHS Ayrshire & Arran and partner Local Authorities' commitment to tackling health inequalities, addressing the health protection and prevention needs of underserved and excluded groups is a key priority.

Social exclusion is a process by which individuals or groups are deprived of the resources, rights, or opportunities to participate in the activities and relationships available to most people in society – and it is associated with profound health inequalities. Referring to underserved groups recognizes that at present, not everyone enjoys equitable quality, access, and outcomes from our health and care services, and that changes are therefore needed to meet these needs. There is a substantial overlap between people experiencing social exclusion and those who are underserved by existing models of service delivery. Experiences associated with social exclusion and which might result in people being underserved include – homelessness, refugee or migrant status, ethnic or linguistic minority, lesbian, gay, bisexual, transgender, and queer (or questioning) (LGBTQ+) identity, problem use of alcohol and/or other drugs, experience of the care system, and justice involvement such as imprisonment.

This is a key area for partnership working, as the issues involved span multiple organizations and policy sectors, and cannot be tackled effectively by the health service alone.

The priority accorded to this area of work in the JHPP is consistent with local and national policy, and with recent context in terms of outbreaks and incidents. In the past year, the HPT has dealt with a number of COVID-19 outbreaks in the prison setting, as well as an ongoing outbreak of acute Hepatitis B among men who have sex with men (MSM) but do not identify as gay or bisexual. Nationally, 2022 will see the launch of an updated Sexual Health and Blood Borne Virus (SHBBV) Framework, with an enhanced focus on sexual health and contraception.

Some local priority actions include:

- As part of the Caring for Ayrshire (CfA) Programme of work, we will continue to develop new models for delivery of prevention and treatment of communicable diseases which reflect the CfA principles of partnership and coproduction; integration of multi-agency care pathways; a shift towards home and community-based care; and reducing health inequalities.
 - Progress the Barrier Breaker project, started pre-pandemic, to address the systemic difficulties experienced by underserved groups in accessing health and support services: this includes professional education, scoping of barriers and solutions, and developing new models of care such as assertive outreach and active case finding. An example includes the Navigator Programme offered in Crosshouse Hospital Emergency Department (ED), whereby support workers, many with lived experience, connect with patients who come into the ED, who are often at a point of crisis in their lives and therefore more open to engagement. They then support them in the community on discharge from hospital, to connect them with services that can support them to make changes in their lives.
 - We will support the implementation of the trauma-informed practice toolkit and other elements of the National Trauma Training Programme in all our health protection activities and our work with partners.
 - Support the work outlined in section 3.2.7 with regards to tackling TB within Ayrshire and Arran as it disproportionately affects those affected by homelessness, substance use and poor mental health.

In relation to SHBBV, section 3.3.6 outlines the local priorities as it is recognised that our underserved population groups are also disproportionately affected by BBVs and poor sexual health.

Changes to the delivery of health protection consultant cover, in which a wider range of consultants participate in weekday health protection activities, will provide opportunities to link health protection to broader public health priorities and prevention work, in areas such as mental health, child health, screening, and health improvement.

We will seek to identify opportunities for partnership working on this agenda with the local authority and HSCP more broadly, including social work, criminal justice, homelessness, alcohol and drug treatment, and resettlement services – recognising that people who may not be engaged with health services may be reached in these settings, and that the intersecting nature of these disadvantages mean that people in contact with one such service often are in contact with others.

4. Civil Contingencies Risks

Procedures for responding to public health incidents at seaports and Prestwick Airport were reviewed and updated.

4.1 West of Scotland Regional Resilience Partnership Community Risk Register

The West of Scotland Regional Resilience Partnership Community Risk Register¹⁸ has been compiled in accordance with the Civil Contingencies Act 2004 (CCA) and its associated Regulations and Guidance as outlined in the Scottish Government document *Preparing Scotland*¹⁹.

This register has been created to provide public information about the hazards that exist within the West of Scotland area and the control measures in place to mitigate their impact. These hazards do not represent forecast or predictions relating to particular incidents or sites but rather indicate the scale of potential problems relating to that type of hazard and for which relevant services and agencies may be expected to plan.

¹⁸ See www.firescotland.gov.uk/your-area/west/local-senior-officers.aspx

¹⁹ See www.scotland.gov.uk/Publications/2012/03/2940

4.2 Off site contingency plans

Within Ayrshire there are five top tier sites as defined by the Control of Major Accident Hazard Regulations 2015 (COMAH sites), and one site covered by the Radiation Emergency Preparedness and Public information Regulations 2019 (REPPIR sites) and one site covered by the Major Accident Control Regulations (MACR).

COMAH sites:

- Chivas Bros Ltd, Balgray Bonded Warehouse, Beith
- Chivas Bros Ltd, Willowyard Bonded Warehouse, Beith
- William Grant & Sons – Distillery and Maturation Warehouse, Girvan.
- DSM Nutritional Products Ltd – manufacture of vitamins, Dalry
- Chemring, Stevenston

REPPIR sites:

Hunterston B, West Kilbride – civil nuclear power station used to generate electricity

MACR site:

Defence Munitions Beith (DMB) - maintenance and storage facility.

5. Joint Response to COVID-19 Pandemic - Effective Partnership

5.1 Co-operative working

One of the main working successes of the pandemic was the ability and willingness of all partners to come together and working in co-ordinated way, opening up excellent communication channels and sharing information timeously. This co-operative approach will now be continued going forward, as we come out of the pandemic, enabling us to better plan for the future.

The response to the COVID-19 pandemic began prior to the first lockdown. Initially, full contact tracing was required for travel related cases, however once sustained

community transmission was reached, this ceased and the following work streams were generated.

5.2 Short life Working Groups (SLWG)

NAC, EAC and SAC were invited to contribute to a working group chaired by Joint Interim Director of Public Health, to produce guidance to support vulnerable closed communities, initially with care homes and then moving on to work with the prison. Initial meetings were by teleconference. These continued well into the first wave, with weekly support meetings taking place with contributions from each HSCP, Scottish Care and the Care Inspectorate.

A SLWG was created to strengthen local levels response referring to the levels contained within the Coronavirus Regulations. This brought together a wider group, including NHS, Environmental Health representatives from the three Local Authorities, and Scottish Government. Using data from NHS researchers and responding to and providing information for the SALRP report, the group made data driven decisions about enforcement priorities.

5.3 Test and Protect (Ceased from May 22)

One of the key work strands during the pandemic was the implementation of Test and Protect, with Environmental Health in Ayrshire leading on 'place'. NHS Scotland set up a Teams channel with access for the three Local Authorities to facilitate sharing of information between Environmental Health, contact tracing teams and CPHMs. This allowed any contact tracing issues to be dealt with quickly, provided a central area for file storage and reduced the need for phone calls and e-mail communication.

5.4 Community Testing (Ceased March 22)

5.4.1 Mobile testing

Working together the NHS with Scottish Ambulance Service, Police Scotland, Local Authorities, HSCPs, Scottish Fire & Rescue Service (SFRS) and National Services Scotland (NSS) were able to identify suitable sites for the Mobile Testing Units (MTUs). Around 35 sites were identified and approved for use, providing availability in most towns in Ayrshire and within a reasonable travel distance of the more outlying villages.

5.4.2 Asymptomatic testing

Similarly with the same partners and the Ministry of Defence (MoD), the NHS identified and set up sites to use as Asymptomatic Testing Sites (ATS) and had these operational within 6 weeks. The military staffed these sites initially to give NHS time to recruit and train their own staff. SFRS identified 12 retired firefighters who formed the first tranche of NHS staff and worked with the military for the initial period of the sites being operational before taking over the management and operation of the sites.

The NHS had two Military Liaison Officers (MLO) embedded at the start of the pandemic. These officers assisted with planning, preparing and running stress test exercises and participated in multi-agency meetings with the Ayrshire Local Resilience Partnership (ALRP).

In conjunction with MLO, Acute, HSCP and Procurement staff, the NHS developed an ordering, recording and distribution system for staff within the Health & Social Care sector across Ayrshire that required Lateral Flow Devices (LFDs).

5.4.3 Identification of vaccination centres

Working with Local Authority colleagues from Facilities and Health & Safety as well as Public Health Scotland (PHS), NHS visited, identified and approved suitable sites to utilise for vaccination centres. These centres ranged from small community halls across the three Ayrshires to large complexes like the Citadel.

5.4.4 Flying Squad

Following the initial pilot of sending in a team of asymptomatic testers to a large manufacturer, the 'Flying Squad' was deployed to a number of businesses to assist in managing outbreaks. Initially this was LFD testing, but the team latterly have been delivering Polymerase Chain Reaction (PCR) testing to support vulnerable communities.

5.5 **Virtual meetings**

The three local Environmental Health teams met weekly with Police Scotland and Public Health colleagues at NHS Ayrshire & Arran, to discuss trends and emerging issues, allowing us to prioritise workloads, provide co-ordinated advice and ensure a consistent approach to issues throughout Ayrshire.

There was a very high number of PAGs and IMTs throughout the pandemic, many of these included the business owners/managers. This inclusion proved to be very successful, giving the businesses information on the work and remit of the partners and providing the group members with a better understanding of what occurred within the business.

HPTs created dialogues with HSCP and education within the Local Authorities and working together with the help of Health and Safety teams within the Local Authorities work was carried out into improving health and safety within education establishments, care homes etc.

5.6 **Local resilience partnerships**

At a more local level, Local Authorities met regularly with Police Scotland, transport providers, and housing providers to improve our readiness for any incident. This was of particular importance during the outbreak on Arran, where staff could be mobilised quickly and to the right areas and with Calmac's assistance, staff and equipment were delivered to undertake large numbers of testing for residents, tourists and workers on the Island. In addition, contact tracing of wild campers known to have tested positive was undertaken, giving them advice and arranging a delivery of supplies from a local supermarket.

5.7 Future approach

The Scottish Government set their Coronavirus (COVID-19): Scotland's Strategic Framework update on 22 February 2022²⁰. All COVID-19 rules and restrictions have been lifted in Scotland, but the virus has not gone away. Testing and contact tracing has been scaled back, but there is ongoing activity in relation to monitoring of cases and outbreaks in high-risk settings, and a contribution to a national surveillance system. There is ongoing work to clarify the longer term national and local actions required in relation to vaccination and surveillance, including a plan to deal with any future variant of concern that would require to be managed differently. This plan will outline how local HPTs will be expected to support the ongoing response to COVID-19.

6. Health Protection: Resources and Operational Arrangements

6.1 Resources

Staffing information, including a note of designated competent persons, can be found at Annex B.

The availability of adequate information and communications technology is essential for the day-to-day work of health protection and is detailed at Annex C.

During a larger incident or outbreak there may be a decision taken to activate the NHS control centre. The control centre is resourced with telephones, computers, printers and a fax machine. The computers have internet access to allow access to specialist information. Facilities are also available for video and teleconferencing. NHS staff working in health protection have access to Microsoft Teams and laptops that would allow them to work from home if necessary. New systems of working have been used efficiently during the pandemic.

²⁰:Source:<https://www.gov.scot/publications/coronavirus-covid-19-scotlands-strategic-framework-update-february-2022/>

Where required during an incident, a dedicated helpline for the public can be provided by NHS 24.

6.2 Organisational arrangements to facilitate collaborative working

Organisational arrangements for collaborative working are in place between NHS Ayrshire & Arran, EAC, NAC, SAC and other health protection agencies.

These are:

- The JHPPG. This group provides strategic oversight and is responsible for agreeing and setting joint priorities for health protection activity in Ayrshire and Arran;
- The Ayrshire and Arran Water Liaison Group. This is a subgroup of the JHPPG and has representation from NHS Ayrshire & Arran HPT, the three Local Authority Environmental Health Services, Scottish Water, SEPA and HPS. The group meets 3 monthly to discuss water-related issues in Ayrshire and Arran, to share learning, and take forward any joint pieces of work.
- The Strategic Alliance and Local Resilience partnership (SALRP) is a high-level group consisting of the Chief Officers from each of the Local Authorities, the NHS, Police Scotland, Scottish Fire and Rescue and the Scottish Ambulance Service. Our Director of Public Health raises concerns regarding health protection at these meetings and provides updates on key surveillance information for Ayrshire and Arran. Partner agencies also feedback any concerns that they have in relation to public health and safety due to upcoming large events, changes in legislation, planning activities etc.
- Infections Network Executive Group (INEG): strategic, multiagency group to support a whole systems approach to the management of infectious disease.

A number of other formal and informal arrangements are in place to facilitate good collaborative working including ad hoc meetings, phone calls, teleconferencing and emails.

There are also arrangements in place within EAC, NAC and SAC to ensure appropriate sharing of information and learning across teams and departments. In addition, Glasgow Scientific Services (GSS) provides specialist assistance to each of the three Local Authorities.

Joint exercises also contribute to building and maintaining good working relationships. Recently tested exercise scenarios include a significant water outage in Ayrshire, testing of COMAH External Contingency Plans. Debriefs are held following every exercise and are used to identify areas of both good practice and areas for improvement to inform changes in practice, plans and procedures.

6.3 Arrangements to respond in office hours and out-of-hours

In NHS Ayrshire & Arran, a CPH is always available out-of-hours through Crosshouse Hospital switchboard. There is a one in five consultant-led rota for health protection. The NHS also operates a strategic directors' rota to support both the duty managers and health protection rota.

Changes to the delivery of health protection consultant cover, in which a wider range of consultants participate in weekday health protection activities, will provide further resilience. A health protection surveillance officer and additional health protection nurses have been recruited. A number of individuals within the Public Health Department now have experience in the management of COVID-19 and other infectious diseases, which adds further resilience for any surge capacity needed. There is now a public health vaccination team, which also provides flexibility in relation to the response to vaccine-preventable diseases.

The NHS Ayrshire & Arran HPT can be contacted by phoning 01292 885858 during office hours.

The three councils have staffing levels to deliver the full Environmental Health and Trading Standards remit. Team Leaders have responsibility for Food / Health and Safety enforcement or Public Health / Pollution or Trading Standards

Contact during office hours:-

North Ayrshire Council

Office hours number is 01294 324339

East Ayrshire Council

Office hours number is 01563 576790

South Ayrshire Council

Office number is 03001230900

Ayrshire Civil Contingencies Team

Single contact number is 0300 123 0900 and select Option 4 and ask for the ACCT duty officer

6.4 Arrangements for reviewing health protection Standard Operating Procedures (SOPs) and guidance

NHS Guidance and SOPs have been developed locally and are subject to regular review. These documents are contained in the Microsoft Teams channel available through remote access enabled computers and laptops.

Other guidance and information documents can be accessed through the Scottish Health Protection Information Resource (SHPIR) website provided by HPS. SHPIR is an on-line resource which provides NHS Board HPTs with access to the most up to date and relevant guidance which can be used in an outbreak or incident situation.

HPZone Scotland – a health protection information and case management information technology (IT) system – is used for the management of health protection cases, situations and outbreaks by all HPTs across Scotland.

The three Local Authorities have SOPs and guidance covering food, occupational health and safety, animal health and public health enforcement activities. These have been developed based on national frameworks and adapted for local circumstances. They are subject to review and audit.

6.5 Corporate arrangements for the maintenance of knowledge, skills and competencies of staff with health protection duties

Within NHS Ayrshire & Arran there is an annual cycle of personal development planning (PDP) and review and performance appraisal for all staff.

In addition to annual performance appraisal, medical staff and other consultants are required to undertake annual consultant appraisal. All staff are required to demonstrate their maintenance of Continuing Professional Development (CPD) records.

Under the Public Health etc (Scotland) Act 2008, NHS Ayrshire & Arran must designate a sufficient numbers of competent persons for the purposes of carrying out the functions of the Act (see Annex B).

In each of the three Local Authorities there is an annual professional development review (PDR) process based on a competency framework for officers within Environmental Health. This ensures that technical and personal development objectives are agreed to maintain the necessary competencies. The process is recorded formally.

Food Standards Scotland (FSS) also carries out periodic audits of Food Safety / Food Standards Inspections and Enforcement carried out by this service. This provides feedback on the maintenance of standards by the Environmental Health services.

In terms of The Public Health etc (Scotland) Act 2008, Local Authorities must designate sufficient numbers of Environmental Health Officers (EHOs) for the purposes of carrying out the functions of the Act. This list has to be kept updated and staff numbers adequate (see Appendix B).

7. Health Protection Services: Capacity and Resilience

7.1 Assessment

There are no nationally set levels of staffing for Health Protection services in either the NHS or Local Authorities. Within NHS Ayrshire & Arran the capacity of the HPT to deal with service requirements is subject to ongoing assessment.

There has also been an ongoing focus on building resilience across the Public Health Department with both formal and informal training. In exceptional circumstances, staff from across NHS Ayrshire & Arran will also assist in a variety of capacities, dependent on their skills.

There are ongoing workforce pressures in the NHS and public agencies. Additional workload linked to the pandemic (such as the management of COVID-19 outbreaks in high risk settings) or Brexit (enhanced surveillance of foods to manage changes on the regulation of imports) mean that there is an increased need of specialists across the country which is causing recruitment difficulties, at a time that many of our staff's wellbeing has suffered because of the emergency response to COVID-19 and there may be a reduced workforce because of the changes of the immigration and work regulations.

7.2 Mutual aid arrangements

A memorandum of understanding (MoU) exists between the West of Scotland NHS Boards (NHS Ayrshire & Arran, NHS Dumfries & Galloway, NHS Forth Valley, NHS Greater Glasgow & Clyde and NHS Lanarkshire) to provide mutual aid in public health emergency situations. In addition, NHS Ayrshire & Arran, NHS Dumfries & Galloway, NHS Greater Glasgow & Clyde and NHS Lanarkshire have agreed to work together to provide appropriate personnel to form a Scientific and Technical Advice Cell (STAC) to advise the West of Scotland Regional Resilience Partnership in emergency situations.

A similar MoU exists between the thirteen Local Authorities of the West of Scotland Regional Resilience Partnership. This enables councils to support each other during emergencies if required.

There is also support from national and regional centres in relation to specialist advice and activities, such as testing in national reference laboratories.

There was increased collaboration between NHS Boards, HSPCs, Local Authorities, PHS and the Scottish Government during the pandemic, which has been retained and resulted in new ways of working together. For example, mutual aid between national staff and different health boards was facilitated regularly in relation to contact tracing. These arrangements could be stood up if necessary in the future.

8. Public involvement in the planning and delivery of health protection services

Day to day work of the HPT involves contact with the public on a regular basis, and this in turn informs the planning process.

The three Local Authorities consult and engage with the public in a number of ways including by telephone or written questionnaire enquiry on various topics, including the use of people's panels, the internal processes of each council or feedback for businesses and customers.

9. Summary and Actions

This plan gives an overview of health protection responsibilities and priorities, provision and preparedness within Ayrshire and Arran and describes how the Board and the Local Authorities deal with the range of health protection topics.

Working together, the priorities of work in health protection for the NHS Board and Local Authorities up to March 2024 are:

1. Climate change and sustainability:
 - Working with local stakeholders across the NHS, Local Authorities, local and regional health resilience groups, community groups, community planning and civil contingency groups in reviewing each organisations climate change plans and looking for common themes relating to health protection.
 - PWS scarcity: The Scottish Government is undertaking a pilot in Aberdeenshire. Outcomes could inform future work in this area.
 - Reducing the risks of environmental contamination from hazardous chemicals in medical devices and consumables across the procurement, use, and disposal lifecycle, with a focus on reduction, replacement, reuse, and recycling, rethinking, and safe disposal.

2. Licensing of cosmetic procedures: expected to be introduced in the near future.

3. E-cigarettes. Under-age selling and product safety issues with the devices themselves will be examined and progressed at the Ayrshire Tobacco Control Group along with other tobacco related health issues.

4. High Consequence Diseases: emerging infections such as COVID-19, Monkeypox and Avian Influenza have had a significant impact since 2020. Pathways for the management of high consequence diseases will be reviewed and updated. This will be led by the INEG and informed by the lessons learned by response to the pandemic and other infections.

5. Food Enforcement Inspection Programme: resumption of food law interventions after the suspension of proactive work due to the pandemic. Potential increased resource demand due to increase in non-compliance and additional work streams such as enhanced inland surveillance of food imports.

Many of the planned actions depend on joint working with other agencies or departments. Health Protection local priorities could change as a result of a significant incident or a change in national priorities. Implementation of new areas of work would depend on the provision of adequate resources.

Annex A Ayrshire Civil Contingencies Team Workplan

Multi Agency Contingency Plans

COMAH Plans:

(A) Plan	(B) Date of last review	(C) Scheduled date for next review	(D) Date of last test	(E) Scheduled date of next test	Comments
Chivas Bros, Willowyard, Beith	June 2021	June 2024	March 2021	March 2024	COMAH plans are subject to a review every three years.
Chivas Bros, Balgray, Beith					
DSM, Dalry	February 2020	February 2023	November 2019	December 2022/January 2023	
Chemring	April 2018	December 2022	March 2018	August 2022	
William Grant & Sons, Girvan	Currently Under Review	February 2025	January 2022	January 2025	

REPPIR Plans:

(A) Plan	(B) Date of last review	(C) Scheduled date for next review	(D) Date of last test	(E) Scheduled date of next test	Comments
Hunterston B Power Station	February 2021	December 2022	June 2019	December 2022	Annual Review Modular work will take place

MACR Plans:

(A) Plan	(B) Date of last review	(C) Scheduled date for next review	(D) Date of last test	(E) Scheduled date of next test	Comments
Defence Munitions Beith (DMB)	August 2019	August 2022	May 2019	May/June 2022	

Port Plans:

(A) Plan	(B) Date of last review	(C) Scheduled date for next review	(D) Date of last test	(E) Scheduled date of next test	Comments
Girvan Harbour - LA	November 2021	November 2026	October 2019	April 2022	Plan updated when required, notification call out cascade checked twice annually

Annex B Health Protection: staffing levels (as at 1st April 2022)

NHS Ayrshire & Arran Health Protection Team

Consultant in Public Health Medicine	1.0 wte
Locum Consultant in Public Health	0.6 wte
Consultants in Public Health: distributed working involving all 6 CPH(M)	1.0 wte
Health Protection Nurse Specialist	1.0 wte
Health Protection Nurses	3.4 wte
Secretary	1.0 wte

In addition, at times of high demand, support from other staff in the Public Health Department can be obtained by releasing them temporarily from non-essential duties. During significant public health incidents, staff from the wider NHS can also provide support if required.

Ayrshire and Arran Designated Competent Persons by August 2022

<i>Designated competent persons</i>	<i>NHS</i>	<i>EAC</i>	<i>NAC</i>	<i>SAC</i>
Consultant in Public Health	6			
Health Protection Nurse Specialist	1			
Environmental Health Officers		7	8	
Team Leaders		2	2	2
Environmental Health & Trading Standards Manager		1		

Other NHS Ayrshire and Arran staff

Assistant Directors of Public Health	2
Vaccination Programme Coordinator	1
Chief Nurse Immunisation	1
Senior Nurse Vaccinations	1

Local Authority staffing

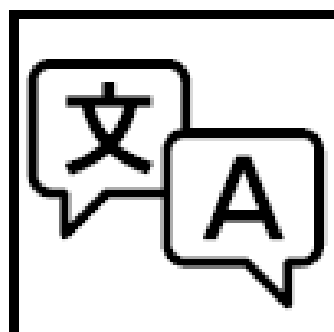
<i>Local Authority management, technical and professional staff not included above</i>	<i>EAC</i>	<i>NAC</i>	<i>SAC</i>
Environmental Health Manager		0.3	0.5
Environmental Health Supervisor/Coordinators			2
EHOs (food, health, safety and pollution control)			11
Contaminated land officer	0	1	
Food Safety Officers	1	1	0
Health and safety technical staff	0	0	
Environmental Health Technical Staff			
Pollution control technical staff	1		
Corporate Enforcement Unit Staff	4	0	
Pest control/dog warden staff	2	3	2
Enforcement Officer		1.4	1

Annex C Information and communications technology resources available in NHS Ayrshire and Arran and the three Local Authorities

	<i>NHS</i>	<i>EAC</i>	<i>NAC</i>	<i>SAC</i>
Hardware				
Desktop and laptop computers	✓	✓	✓	✓
Printers (black and white and colour)	✓	✓	✓	✓
Photocopiers	✓	✓	✓	✓
Fax machines	✓	✓		
Office and mobile telephones	✓	✓	✓	✓
Blackberry / Smartphone available	✓	✓	✓	✓
Single page scanner	✓	✓	✓	✓
Document feed scanner	✓	✓	✓	✓
Remote encryption access	✓	—	✓	—
Pagers (with text screen)	✓	—	—	—
Audio-teleconferencing equipment	✓	✓	✓	✓
Video-conferencing equipment	✓	✓	✓	✓
On-call laptops with access to public health drive	✓	—	—	—

	<i>NHS</i>	<i>EAC</i>	<i>NAC</i>	<i>SAC</i>
Software				
MS Office (Word, Excel, PowerPoint, Access)	✓	✓	✓	✓
E-mail	✓	✓	✓	✓
Dictaphone	✓	—	—	—
Access to local computer networks and to the internet	✓	✓	✓	✓
Access to electronic information resources and databases –	✓	—	—	
HPZone				
ECOSS (Electronic Communication of Surveillance in Scotland)				
Clinical Portal				
Trakcare				
SCI Store (to access laboratory results)				
SCI Gateway				
SHPIR (Scottish Health Protection Information Resource)				
TRAVAX (travel advice)			✓	
Toxbase (toxicology database)				✓
SEISS (Scottish Environmental Incident Surveillance System)				✓
NHS Scotland e-library				
NHS Education for Scotland				
Access to resources provided by NHS24	✓			
M3 Northgate system		✓		
Civica Public Protection system to record all Environmental Health work.			✓	
IDOX UNI-form EH Management System	—			✓

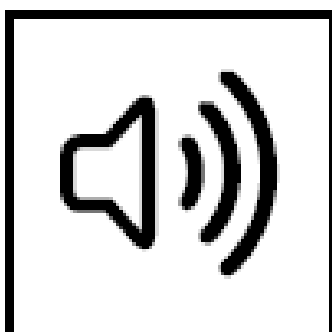
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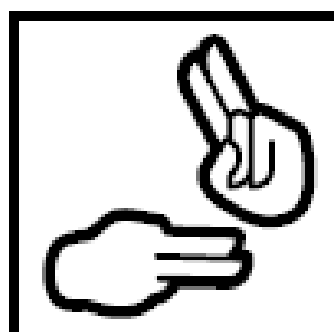
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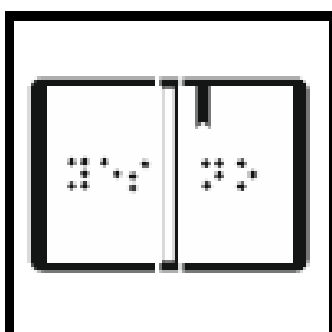
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