Inverclyde council

AGENDA ITEM NO. 17

Report To: Policy & Resources Committee	**Date**: **30 March 2010**
Report By: John Arthur – Head Of Safer Communities	**Report No: ECP/SCS/MMcN10/36**
Contact Officer: Martin McNab – Health Protection Manager.	**Contact No**: **01475 714246**
Subject: NHS Greater Glasgow and Clyde Joint Health Protection Plan 2010-12	

1.0 PURPOSE

1.1 To submit the 2010-12 Joint Health Protection Plan for the Greater Glasgow and Clyde Health Board area for members' approval.

2.0 SUMMARY

2.1 Section 7 of the Public Health etc. (Scotland) Act 2008 requires health boards, in consultation with the relevant local authorities, to prepare joint health protection plans.

2.2 The purpose of the plan is to provide an overview of health protection priorities, provision and preparedness. The plan must be formally submitted to the NHS board and relevant local authority committee for sign off. The plan for 2010-12 must be in place by 1 April 2010.

2.3 The plan at Appendix 1 was prepared by Greater Glasgow and Clyde Health Board in co-operation with the six local authorities in the health board's area.

3.0 RECOMMENDATION

3.1 That the committee approves the Joint Health Protection Plan for 2010-12.

John Arthur

Head of Safer Communities

4.0 BACKGROUND

4.1 The Public Health etc. (Scotland) Act 2008 brought in a number of changes in the way health boards and local authorities work together to protect public health amongst which was a positive duty to co-operate and a duty to prepare Joint Health Protection Plans.

4.2 Although the duty to prepare the plan rests with the health board, specifically with the director of public health, this must be done in consultation with the relevant local authorities. In the case of Greater Glasgow and Clyde Health Board the plan was prepared collaboratively by the board and representatives of the local authorities in the health board area; Inverclyde, Glasgow, East and West Dunbartonshire, East Renfrewshire and Renfrewshire.

4.3 The plan is to be signed off by the relevant council committee and is to be in place for 1 April 2010. The plan covers 2010-12 but, as this is the first such plan, it has been agreed to review it after one year to take account of any experiences arising out of the implementation of the Public Health etc. (Scotland) Act 2008.

4.4 The plan is a public document and, as such, will be made available on the Council's website.

5.0 IMPLICATIONS

5.1 Financial

None

5.2 Legal
None

5.3 Personnel
None

5.4 Equalities
None

6.0 Consultations

6.1 The plan was written by Greater Glasgow and Clyde Health Board with full input from the six local authorities in the health board area.

NHS Greater Glasgow and Clyde

Joint Health Protection Plan 2010-2012

Introduction

Following the introduction of the Public Health etc (Scotland) Act 2008, I am pleased to present NHS Greater Glasgow and Clyde's first Joint Health Protection Plan for the period 2010-2012. This has been written in conjunction with the six local authorities within the Board area. Although small areas of North and South Lanarkshire local authorities fall within the boundaries of NHS Greater Glasgow and Clyde, those areas have contributed to NHS Lanarkshire's Joint Health Protection Plan.

The plan provides an overview of health protection (communicable disease and environmental health) priorities, provision and preparedness within Greater Glasgow and Clyde.

The plan describes how the Board and the Local Authorities deal with the range of health protection topics and it also outlines areas we have identified that require further work.

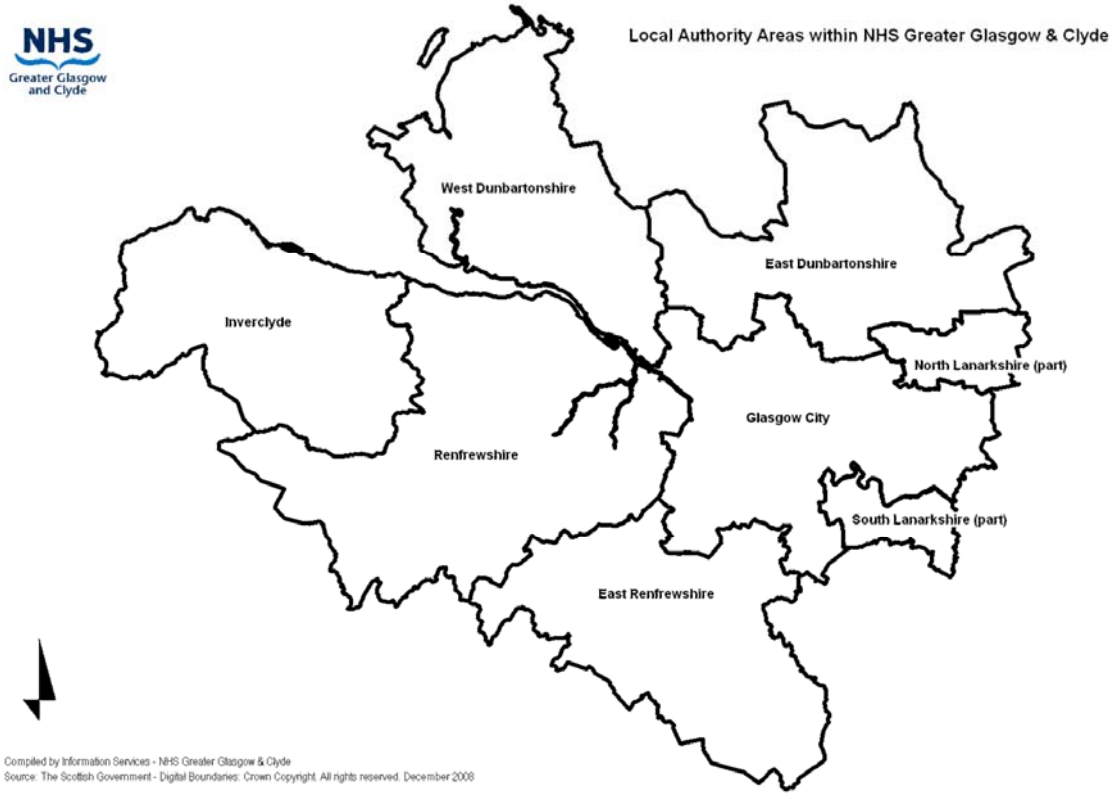
Dr Linda de Caestecker
Director of Public Health
NHS Greater Glasgow and Clyde

22nd February 2010

Glossary

CHP and CHCP	Community Health Partnerships and Community Health and Care Partnerships have been introduced to manage a wide range of local health services delivered in health centres, clinics, schools and homes. There are 10 CHPs across Greater Glasgow and Clyde including 6 CHCPs which are also responsible for delivering social work services.
Competent Person	Under the Public Health etc (Scotland) Act 2008, all health boards and local authorities must designate competent persons to carry out certain functions conferred to them under the Act. Competent persons must have the prescribed qualifications in terms of training and experience and take part in continuing professional development.
SOA	The Single Outcome Agreement (SOA) framework underpins funding provided to local government and sets out a national performance framework based around the five strategic objectives of the Scottish Government (wealthier and fairer; smarter; healthier; greener; safer and stronger), which are underpinned by national outcomes, national performance indicators and local performance indicators. The SOA demonstrates how each of the 32 Councils and their Community Planning Partners contribute to delivering the national outcomes, prioritised by the Scottish Government.

1. Overview of NHS Greater Glasgow and Clyde and its six local authorities



NHS Greater Glasgow and Clyde

NHS Greater Glasgow and Clyde Health Board is responsible for the health needs of the population living in the six local authority areas within the Board's remit, amounting to approximately 1.2 million people, almost a quarter of the entire Scottish population. The geographical area covered is diverse; it covers the major city of Glasgow, large and small towns, villages and some rural areas. As such it presents considerable challenges in ensuring that the health needs of the population are met. The population of NHS Greater Glasgow and Clyde (NHSGGC) is much more socially deprived compared to the population of Scotland; 41.8% of the population of NHSGGC is classified as deprived, compared to 18.2% of Scotland (Carstairs deprivation categories 6 and 7). This remains a considerable challenge for NHSGGC given the strong links between social deprivation and ill health.

Glasgow City Council

Glasgow City Council is the largest of Scotland's 32 local authorities, providing essential frontline and support services to the people of Glasgow. Glasgow is the largest city in Scotland and the fourth largest in the UK. While the last 50 years have seen its population fall from over one million in 1951 to 580,690 in 2006, there are signs that this situation is changing. Between 2001 and 2006, the city's population has increased by almost 400 each year. In the next 10 years we expect the number of working-age people and pre-school age children to increase, while the number of school-age children and people of pensionable age will fall. This means that, compared to other large cities in the UK, Glasgow is a relatively young city, with around one-third of residents aged 15 to 34. The city continues to lose people to the surrounding areas. However, this loss is more than compensated for by people moving to the city from abroad. Important factors in this include Glasgow's Asylum Seeker contract, and more recently, people moving into the city from countries joining the European Union such as Poland, Slovakia and the Czech Republic, which has brought an estimated 10,000 extra people to the city.

East Dunbartonshire
East Dunbartonshire lies to the North of Glasgow, bounded by the Campsie Fells and the Kilpatrick Hills. It has a population of around 105,000 and comprises the suburban and rural towns and villages of Bearsden, Bishopbriggs, Kirkintilloch, Lennoxtown, Lenzie, Milngavie, Milton of Campsie, Torrance and Twechar. It is a flourishing area, with relatively high levels of home and car ownership. It also offers a healthy environment, and is one of the safest areas in Scotland to live, with levels of recorded crime well below the national average. The people living in East Dunbartonshire experience relatively good health. Life expectancy rates for males, at 77 years, are among the highest in the country, whilst life expectancy for women at, 81 years, is well above the national average. However, there remains a significant difference in life expectancy between the more prosperous areas of Milngavie, Bearsden and Lenzie compared to the less prosperous parts of East Dunbartonshire. The demography of East Dunbartonshire is changing, presenting a challenge for the continuing delivery of health services and supporting the increasing number of older people. Population changes in East Dunbartonshire to 2024 are expected to be similar to the Scottish average, with those over 75 years of age likely to increase by 71%.

West Dunbartonshire
West Dunbartonshire comprises three main settlement areas, which have developed along the rivers Clyde and Leven. The area has a history in manufacturing including activities such as shipbuilding, sewing machines, textiles and car production. A decline in manufacturing has led to a change in the employment base for West Dunbartonshire to being primarily service industries. The area is well serviced with local amenities including the retail centres in Clydebank, Dumbarton and Alexandria. Within the boundaries of the Authority, the three large areas of water, the river Clyde, the river Leven and the southern extents of Loch Lomond combine to cover 10 square miles. The urban areas of the Authority spread from the two rivers up to the foothills of the Kilpatricks, Dumbarton Muir and Carman, and cover a land area of 11 square miles. The remaining 50 square miles of the Authority area comprises greenbelt, farmland, foothills and the raised bogland of the countryside area. West Dunbartonshire has a population of 91,090. For men in West Dunbartonshire, life expectancy (at birth) is estimated to be 71.1 years, 1.8 years lower than the Scottish average, and has risen by about 0.6 years in the period 1994- 98 to 2001-05. Female life expectancy (77.7 years) has risen by nearly a year in the same period and is approximately 2.8 years lower than the Scottish average.

East Renfrewshire
East Renfrewshire covers an area of approximately 67 square miles and exhibits a diverse range of environments. East Renfrewshire is regarded as one of the best places to live in Scotland; however it is also an area of contrasts. While there are areas that are predominantly affluent and have high levels of employment and good health, there are also pockets of disadvantage and deprivation that are amongst the worst found in Scotland. In 2006, the total number of people resident in East Renfrewshire was 89,220. The built-up area of East Renfrewshire generally offers a good quality urban environment, and whilst it is predominantly residential, there are concentrations of other uses, such as business and industry. There is also a range of complementary uses in the residential areas, such as schools, shops and community facilities. There is a network of important, local urban green spaces comprising playing fields, woodlands, formal and informal parks along with amenity open spaces. These contribute positively to local amenity and the quality of life for residents.

Renfrewshire
Renfrewshire Council is situated to the west of Glasgow on the south bank of the River Clyde and covers nearly 103 square miles. To the west lies Inverclyde Council, to the south is North Ayrshire Council and East Renfrewshire is located to the south east. Renfrewshire has a population of over 177,000, making it the ninth largest council in Scotland in terms of its population. Paisley, with an estimated population of some 78,000 forms the commercial and transport hub for Renfrewshire. It has a rich heritage of civic architecture built during its days as a centre of textile and thread manufacture. The Royal Burgh of Renfrew lies to the north of Paisley and the 18th century planned town of Johnstone lies to the west. Glasgow International Airport is located to the north of Paisley and is easily accessed from the M8 Motorway and Paisley Town Centre. It is one of Scotland’s busiest

airports. It is a key part of the transportation infrastructure of Scotland and is a major contributor to Renfrewshire's economy. Renfrewshire Council is committed to its role as a health improving organisation, and recognises its responsibility in working with partners to improve the health of local communities. The focus is essential due to the significant health inequalities that exist in Renfrewshire, linked often to levels of deprivation within communities. For example, life expectancy is lower in Renfrewshire than the Scottish average at 72.5 years for men and 78.3 years for women, compared with the national averages of 74.2 and 79.2 years. This remains a considerable challenge for Renfrewshire given the strong links between social deprivation and ill health.

Inverclyde

Inverclyde covers an area of 61 square miles stretching along the south bank of the estuary of the River Clyde. Inverclyde is one of the smaller local authorities in Scotland with a population of 81,540. The main towns of Greenock, Port Glasgow and Gourock sit on the Forth of Clyde. The towns provide a marked contrast to the coastal settlements of Inverkip and Wemyss Bay, which lie to the south west of the area, and the villages of Kilmacolm and Quarrier's Village which are located further inland. Demographic trends have shown a marked decrease in population in recent years with the majority of those leaving being young. Overall this is likely to result in a far higher proportion of over 60s in the population in the future. Inverclyde also has substantial areas of deprivation. In the 2009 Scottish Index of Multiple Deprivation 17 (15.5%) of Inverclyde's 110 datazones were in the 5% most deprived datazones in Scotland. This is the second highest local share of any authority in Scotland with obvious effects on the general health and life expectancy in the area.

2. Health protection: national and local priorities

2.1 National and local priorities

NHS Greater Glasgow and Clyde

The national priorities for health protection in Scotland in the period 2008-10 were listed in the Scottish Government letter from the Chief Medical Officer, Dr Harry Burns. These included

- Pandemic influenza;
- Healthcare associated infections;
- Vaccine preventable diseases;
- Environmental exposures which have an adverse impact on health and
- Gastro-intestinal and zoonotic infections.

In addition, the following were considered to be important to improve the delivery of health protection services by both the NHS and local authorities.

- Effective information systems for managing incidents and outbreaks
- Capacity and resilience of health protection services in responding to actual or potential significant threats to public health
- Developing means to assure the quality of health protection services
- Continuing professional development especially with regard to strengthening evidence based good practice
- Improving communications with the public on risks to health and securing a greater degree of involvement in health protection services

These are being addressed at a national level by the Health Protection Advisory Group and at a local level by NHSGGC as follows: -

Pandemic influenza

NHS GGC has developed a comprehensive suite of pandemic flu plans based on national and international guidance, frequent flu planning "exercises", and lessons learned from the recent H1N1 pandemic. Plans, comprising an over- arching NHS GGC Board www.nhsggc.org.uk/phpu, and complimentary Acute, CHCP and "function" plans such as infection control, communications etc, describe the arrangements for responding to the attendant increased demand for front line services while maintaining continuity of essential business during the pandemic. The recent H1N1 response has led to the development of detailed plans including those for distribution of antiviral drugs to those who require them and, importantly, vaccination to priority groups. NHSGGC's flu plans are a key component of the Strathclyde Emergencies Co-ordination Group (SECG) flu response and close working with key partners as ensured a consistent and collaborative approach to planning. While the recent H1N1 flu has receded, plans are continually updated to ensure readiness for future pandemics.

Healthcare associated infection

NHSGGC develops an annual infection prevention and control programme to co-ordinate and monitor all the detailed work of the infection control teams and committees in preventing and controlling infection through effective communication, education, audit, surveillance, risk assessment, quality improvement and development of policies and procedures. The programme addresses the national and local priorities for infection prevention and control and extends throughout healthcare, health protection and health promotion. The Board's progress against the programme of work is reported in the infection control manager's annual report. This report along with the infection control programme for 2009/10 and further information about healthcare associated infection in NHSGGC can be found at http://www.nhsggc.org.uk/content/default.asp?page=home_infectioncontrol

Vaccine preventable diseases

Immunisation is one of the most important public health interventions undertaken within the NHS. It has significantly improved the quality of life for people both locally and globally.

NHSGGC has one of the highest immunisation uptake rates in the UK giving protection against serious infections. A successful immunisation programme also protects the most vulnerable groups and those who cannot be immunised because of a pre-existing illness. Therefore the ongoing challenge is to encourage and maintain high uptake of vaccines across the health board area.

Immunisation programmes in NHSGGC are coordinated by the Health Protection team providing leadership, education and training and support to primary care and school health staff who administer the vaccines. The most recent and historical uptake rates on vaccines in the national programme are available from www.isdscotland.org/isd/1369.html

Environmental exposures

Environmental health is the part of health protection traditionally associated with protection against a wide range of chemical and physical risk factors that may be present in the indoors or out of doors environment. Environmental exposures to chemical or physical agents differ in a number of ways from exposures in association with lifestyle or occupation, as follows:

- Concern is usually with low-level exposures which are difficult to measure and difficult to link to disease;
- Exposures often occur to complex mixtures rather than just to a single agent;
- It may be difficult to estimate historical levels of exposure;
- Measurement of small effects associated with low-level exposures on common diseases may be difficult and may be beyond the capability of epidemiology.
- Pathway of exposure may be uncertain or difficult to establish. Pathways include the inhalational, ingestion and dermal contact pathways.

Issues in Environmental Health in the area of NHS GGC include the following:

- **Landfill sites:** Landfill has historically been a common way of disposing of domestic, industrial and hazardous waste, although the use of landfill for this purpose is expected to decline in future. There is some evidence that landfill sites may have a detrimental effect on health of local populations. The question of possible health effects will probably have to be revisited in relation to sites throughout NHS GGC in the next year.

- **Environmental asbestos exposure:** Asbestos is well established as an environmental risk factor with a widely accepted epidemiological framework for risk assessment. Asbestos has been widely used in the urban built environment and exposures may occur in a range of situations, including factory fires and demolition of blocks of flats. A study of the possible health effects of asbestos is currently underway as part of the demolition of a block of flats in Glasgow.

- **Air pollution** is an example of an environmental exposure with a well-known epidemiology, particularly in relation to particulate matter (PM10). Air pollution is the subject of clearly defined targets and standards set out in Air Quality strategies by each local authority.

- **Power lines and electromagnetic radiation:** Low intensity electromagnetic fields associated with power lines are an example of a physical risk factor. Power lines have been a source of public anxiety for about thirty years. There is some evidence of an increase in risk of leukaemia in children who reside close to power lines, but no feasible exposure pathway is known.

- **Radon gas** is a well-established environmental exposure for populations resident in land of certain geological types. The increase in risk for lung cancer is well-established for this exposure.

- **Moulds** are fungal agents that may colonise indoors environments in conditions of abnormal humidity or damp. Moulds may be associated with a range of different pathogenic mechanisms but it is likely that allergy is the most important of these.

Gastro-intestinal and zoonotic infections

- Joint working with local authorities is described later in the plan;
- Nationally, exercises take place to ensure local preparedness for zoonotic infections;
- In addition, national plans are available e.g. rabies http://www.documents.hps.scot.nhs.uk/giz/rabies/protocol-management-rabies-2007-05.pdf

In addition, bloodborne viruses such as hepatitis C and HIV, as well as tuberculosis (TB), are local priorities within NHSGGC.

Hepatitis C

- 41% of all patients with hepatitis C in Scotland are from Greater Glasgow and Clyde.
- Significant number unaware of their infection or not currently accessing treatment and care.
- Much of the Board's effort is focussed on primary prevention.
- Hepatitis C Managed Clinical Network co-ordinate treatment and care and are introducing a number of service developments as a result of Hepatitis C Action Plan.
- Further information on hepatitis C including testing, referral, the prevention network and the patient involvement group can be found at http://www.hepcnet.scot.nhs.uk/

HIV

- Continues to be a significant problem and in 2009 NHSGGC had by far the highest number of new cases compared to the other health board areas in Scotland.
- The main route of transmission is through unprotected sexual intercourse.
- The board has comprehensive prevention programmes in place to tackle onward transmission among at risk groups – mainly men who have sex with men and people who originate from countries of high prevalence.
- Effective treatment means that more people are living with HIV than ever before – currently there are over 1,000 people attending specialist services for treatment and care
- The HIV Action Plan was published in December 2009 and demonstrates the government's commitment to dealing with the epidemic.

TB

- Still an important public health problem with over half of all cases in Scotland each year occurring within Greater Glasgow and Clyde.
- Risk factors include alcohol and drug abuse and homelessness, indicating clear links with social deprivation.
- TB nurse specialists and other agencies tailor their services to meet needs of TB patients many of whom have multiple social problems.

Local authorities

Local health protection priorities carried out within local authorities by environmental health and other professional staff are outlined below. Many are requirements of statute, in order to protect the health of individuals living and working in our communities.

- Improving air quality;
- Nuisance (including controlling environmental noise, antisocial behaviour noise, odours, sewage, waste water spillage etc);
- Communicable disease control;
- Investigating and control of contaminated land;
- Avian/ swine flu preparedness;
- Housing (including private sector, housing conditions, building disrepair);

- Drinking water quality;
- Pest control;
- Protecting health and consumer interests in relation to food by working with the FSA, local business and other partners to achieve nationally set targets and minimising the risk of food poisoning incidences and outbreaks through inspection, training and initiatives;
- Minimising the risk of ill health caused by occupational health exposures (including stress) and workplace safety, through inspection, awareness raising, training etc;
- Minimising the risk of exposure to environmental incivilities such as dog fouling, litter, illicit tipping, graffiti – there being a growing body of evidence that links stress to aspects of mental health and wellbeing, but also to physical disease- psychosocial dimension;
- Minimising the risk of environmental tobacco smoke and secondary exposure through inspection, enforcement (e.g. preventing sale of tobacco to under 18s), awareness raising of smoking in public places legislation;
- Activities concerning alcohol consumption regulation through new licensing standards legislation – including enforcement, education and awareness raising work;
- Protecting the health, welfare and safety of the public through raising standards of premises licensed for these purposes;
- Promoting community health and well-being by protecting public health through educational and advisory services.

2.2 Unique health protection risks and challenges within NHSGGC

Contaminated land

The issue of contaminated land causes considerable public anxiety not only because of effects on health but because of possible effects on housing markets. Queries regarding contaminated land, usually made by local councils, make up the single largest category of queries about environmental health made to the PHPU. Contaminated land may represent a risk factor for health in local populations although the nature and scale of the risk depend on the type of contamination. The contamination is usually the result of historical use of land for industrial purposes. In Glasgow, substantial amounts of land are contaminated with chromium as a result of the operations of the former chromium industry in the area. Several epidemiological studies have been carried out in the affected areas, including one study carried out last year at the request of Glasgow City Council but no detrimental effects on health have been demonstrated.

Commonwealth games

The Commonwealth games coming to Glasgow will be a terrific boost for the city and surrounding areas. However, the health protection risks, in terms of both the number of people coming to Glasgow and the wide location of countries they are coming from, is being considered in the plans for 2014.

Migrant populations

Asylum seekers and the large number of people moving into the city from countries joining the European Union (an estimated 10,000 extra people) pose considerable health protection challenges for the area.

Port health

- Large international airport and seaport in Board area.
- Long established plans between NHSGGC and Renfrewshire Council for dealing with port health calls at Glasgow International airport. Plans regularly reviewed and updated.
- Long established plans between NHSGGC and Inverclyde for dealing with incidents involving the port of Greenock.
- Updated aircraft and port regulations awaited following the introduction of the Public Health etc (Scotland) Act 2008. Current plans and arrangements will be reviewed and updated if necessary as a result of these.

2.3 Lessons learned from recent significant public health incidents

The following are short descriptions of some of the significant health protection incidents from the last few years.

Lessons learned from contaminated land at Muirend playing fields in East Renfrewshire
Muirend playing fields was used to dispose of waste from a chemical works during the 1950s. The waste comprises calcium carbonate containing chromium residues. Chromium can exist in several forms, of which the hexavalent, which is carcinogenic, is the most harmful.

Extensive remedial works costing in the region of £1.2 million were undertaken on behalf of East Renfrewshire Council at Muirend Playing Fields in 2003. These comprised construction of an independently drained clay and topsoil cap over the waste and a clay wall around the waste from ground level down to the full depth of the waste. This was designed to prevent any further entry of groundwater or rainwater into the waste, which could then travel through it, become contaminated and enter the Merry Burn. The cap does not extend to the bank of the burn as it was decided during the remediation works in 2005-2006 to retain the bank of trees which exist at the location. As a result of this area not being capped it has been significantly affected by weathering. Sample results have been shown that chromium is again entering the Merry Burn which is in excess of statutory guidelines.

The implications of retaining a line of trees along the riverbank were not fully considered when the remediation work was being planned and as a result chromium is again present in the groundwater. Further works will be necessary to remove contaminated silt and to carry out maintenance and drainage works which will involve unscheduled additional expenditure.

Lessons learned from remediation of former gasworks at Royal Inch Crescent in Renfrewshire
A small residential estate of 26 houses was built over the remains of a former gasworks and following the construction of a conservatory at one of the houses, hydrocarbon residues were found. This led to one of the largest remediation projects of this type taking place to remediate the land. Two houses and a garage were demolished and removal of contaminated material undertaken throughout the site with clean material then introduced.

The lesson learned from this major issue was the crucial need for a communications strategy. A residents' awareness programme was set up and there were a series of one-to-ones, public meetings and regular newsletters as progress towards addressing the problems was made. Local members were also kept updated. During the actual remediation work, a weekly bulletin of progress was presented about what the work would mean to residents in terms of disruption and to ensure health and safety was maintained.

Lessons learned from E coli 0157 outbreak in Renfrewshire
A food poisoning outbreak of E coli O157 occurred in August 2007 with 10 cases including, unfortunately, one fatality, associated with cold cooked meats purchased from a Morrison's supermarket in Paisley. An outbreak control team was immediately established and a full investigation was undertaken by Renfrewshire Council and NHSGGC in conjunction with colleagues throughout Scotland and elsewhere in the UK. A report on the outbreak was subsequently produced. As a result of the fatality a Fatal Accident Inquiry was held in January 2008 requiring evidence to be given by all parties involved in the investigation. No findings or recommendations were made by the Sheriff, who also concluded that there was insufficient evidence to conclusively prove Morrisons role or the source of the infection.

The lessons learned from this outbreak include: -

- The need to maintain clear communication channels at all levels, particularly when a major national company is involved;

- The civil contingency role in assisting with any issues impacting on other Council services e.g. advice to staff directly in contact with cases etc. supports the investigation;
- Where private laboratories are used for food sampling, competence, accreditation and particular specialist knowledge in respect of the outbreak organism needs to be considered;
- Interviews of cases conducted jointly by an environmental health officer (Renfrewshire Council) and a health protection nurse specialist (NHSGGC) were considered beneficial to the investigation.

Lessons learned from the Clostridium difficile outbreak at the Vale of Leven Hospital

In late April/early May 2008, the Infection Control Team in the Acute Clyde Division of NHSGGC became aware of a cluster of *Clostridium difficile* associated disease (CDAD) patients. Subsequent investigations identified 55 patients with CDAD diagnoses at the Vale of Leven Hospital over a six month period from 1st December 2007 to 31st May 2008.

After a maximum of seven months follow-up of CDAD cases diagnosed over this six month period, a total of 28 patients had died. Over this period both the number of cases of CDAD and the number of deaths from CDAD were more than expected for the hospital. In addition, isolates from 16 of these patients were typed and 14 had ribotype 027. These data suggested that there was an outbreak of CDAD 027 at Vale of Leven Hospital.

NHSGGC set up a full outbreak control team (OCT) with representatives from the NHS Board, Health Protection Scotland and the *Clostridium difficile* Reference Service in support of the local infection control team to investigate this outbreak retrospectively. The OCT made a number of recommendations and all these recommendations were implemented by the NHSGGC Board. The key recommendations which were immediately implemented were as follows:

- A programme of work to improve the physical environment in the wards;
- A new antimicrobial prescribing policy and a new *Clostridium difficile* treatment protocol was developed and implemented throughout NHSGGC;
- The roll out of an electronic surveillance system based on the use of statistical process control chart were implemented in all hospitals in NHSGGC;
- The infection control structure in NHSGGC was reviewed and replaced with a single spine accountability structure with clear reporting arrangements in place to the Medical Director of the Health Board;

Additionally, the Cabinet Secretary for Health and Wellbeing set up an Independent Review Panel in June 2008 to look into the CDAD outbreak at the Vale of Leven Hospital. The Independent Review Panel report was published in early August 2008 and made a number of recommendations which were all implemented by NHSGGC. However, subsequently the Scottish Government has announced a further Public Inquiry to look into the circumstances of this outbreak and once the findings of this inquiry are available, any further recommendations made by the inquiry team will be considered by the Board.

Lessons learned from swine flu outbreak NHS Greater Glasgow and Clyde

From May to August 2009, there were over 1000 confirmed cases of H1N1v influenza (swine flu) within NHSGGC. The majority of cases were under the age of 45 years. The lessons learned include: -

- The need for more formalised approach to the public health internal response to an incident;
- The importance of improving communication within the organisation e.g. ensuring the cascading of information is adhered to with greater discipline and establishing daily teleconferences to help improve access to meetings and allow better decision making.

3 Health protection: planning infrastructure

3.1 NHSGGC health protection plans

A number of Board health protection plans have been produced. These include: -

Pandemic flu plans

- Describe the overall strategic response to an influenza pandemic by NHSGGC;
- Last reviewed in 2009;
- Tested in a number of CHCPs throughout the board area during 2009.
- Available at www.nhsggc.org.uk/phpu

NHS Greater Glasgow and Clyde Area Major Incident Plan

- Includes arrangements to deal with accidents, radiation and chemical incidents, incidents involving the deliberate release of chemical, biological, radiological or nuclear agents (CBRN).
- Reviewed every year and was last updated in October 2008.

3.2 NHSGGC and local authority health protection plans

The Board has a number of health protection plans which both the board and the local authorities contribute to. These include: -

Outbreak Control Plan

- Developed by the Public Health (Health Protection) Liaison Working Group;
- Compiled by the Public Health Protection Unit (PHPU) and contributed to, and endorsed by, all six local authority departments of environmental health and by Scottish Water;
- Reviewed every year.
- Available at www.nhsggc.org.uk/phpu

Blue Green Algae Plan

- Published in April 2008 in conjunction with the Public Health (Health Protection) Liaison Working Group;
- List of high risk waters within the board area is updated every year;
- Plan reviewed every two years;
- Last reviewed in 2009.
- Available at www.nhsggc.org.uk/phpu

Scottish Waterborne Hazard Plan

- Developed as a multi-agency approach to the management of waterborne hazards within Scotland;
- Developed by working group with representatives from Scottish Water, NHS Boards, Local Authority and Environmental Health and Emergency Planning Departments and Health Protection Scotland;
- Provides guidance for dealing specifically with waterborne hazards to enable a consistent approach to be adopted by staff in all the relevant agencies across Scotland;
- Updated every year.

3.3 Local authority health protection plans

	Glasgow City	East Dunbartonshire	West Dunbartonshire	East Renfrewshire	Renfrewshire	Inverclyde
Air quality statement	✓**(e)**	✓**(e)**	✓**(e)**	✓	✓**(e)**	✓**(e)**
Single outcome agreement	✓**(e)**	✓**(e)**	✓**(e)**	✓**(e)**	✓**(e)**	✓**(e)**
Food and feedstuffs service plan	✓	✓**(e)**	✓	✓	✓**(e)**	✓**(e)**
Local housing strategy	✓	✓**(e)**	✓	✓**(e)**	✓	✓
Private sector strategy	✓	✓**(e)**	✓	✓**(e)**	✓	✓
Pandemic influenza	✓	✓**(e)**	✓	✓	✓**(e)**	✓
Contaminated land strategy	✓	✓**(e)**	✓**(e)**	✓	✓**(e)**	✓
Health and safety service plan		✓**(e)**	✓			
Council emergency plan		✓**(e)**		✓		✓
Council plan (corporate)		✓**(e)**	✓		✓**(e)**	✓**(e)**
Environment strategy and action plan	✓**(e)**					
Climate change strategy	✓**(e)**					
River Clyde flood management strategy	✓**(e)**					
Joint health improvement plan		✓**(e)**				
Fuel poverty strategy		✓**(e)**		✓**(e)**		
Community plan		✓**(e)**			✓**(e)**	
Carbon management strategy				✓**(e)**		
Sustainability strategy				✓**(e)**		

(e) = electronic version available on local authority website

Further information on local authority functions and copies of the plans listed above can be found on the relevant websites: -

Glasgow City	www.glasgow.gov.uk
East Dunbartonshire	www.eastdunbarton.gov.uk
West Dunbartonshire	www.west-dunbarton.gov.uk
East Renfrewshire	www.eastrenfrewshire.gov.uk
Renfrewshire	www.renfrewshire.gov.uk
Inverclyde	www.inverclyde.gov.uk

4. Health protection: resources and operational arrangements

4.1 Resources within NHSGGC and the local authorities

NHS Greater Glasgow and Clyde

The Public Health Protection Unit (PHPU) within NHS Greater Glasgow and Clyde comprises 3.5 FTE health protection consultants in public health medicine (CPHM), three health protection nurse specialists (HPNS) and a number of support staff. A further 7 CsPHM take part in the out of hours rota for public health medicine. In total, there are 15 (CsPHM and HPNS) competent persons designated under the Public Health etc. (Scotland) Act 2008.

PHPU take responsibility for: -

- Surveillance, prevention and control of communicable diseases and environmental health;
- Providing specialist advice and support to primary care, hospitals, and other relevant organisations, and agreeing with them how health protection should be delivered locally;
- Investigating and managing a full range of health protection incidents (including outbreaks of diseases like meningitis and food poisoning).

Areas of work include: -

- Immunisation;
- Bloodborne viruses;
- Respiratory infections (including TB and flu pandemic planning);
- Gastrointestinal and waterborne infections;
- Port health and
- Environmental health.

Local authorities

	Competent persons designated under the Public Health etc (Scotland) Act 2008 (FTE)	Others who contribute to public health protection functions [1] (FTE)
Glasgow City	45	20.5
East Dunbartonshire	13	5
West Dunbartonshire	12.5	12
East Renfrewshire	8.4	2
Renfrewshire	23	12
Inverclyde	11	3

[1] This includes technical officers, environmental health assistants, enforcement officers, licensing standards officers and community wardens with responsibility for food safety, contaminated land, air quality, environmental incivilities and antisocial behaviour.

4.2 Health protection joint working between NHSGGC and local authorities

Strategic Co-ordination Group (SCG)

Under the Civil Contingencies Act 2004, a Strategic Co-ordination Group was established in Strathclyde chaired by the Chief Constable. The aim of the SCG is to co-ordinate multi agency plans between Category 1 responders (blue-light emergency services), Category 2 responders (comprising

mainly utilities, transport and Government) and voluntary groups to deal with any emergency or unusual situation arising or which threatens the Strathclyde Region.

Public Health (Health Protection) Liaison Working Group Greater Glasgow and Clyde
This group provides an area wide forum for the surveillance and investigation of infectious diseases (including outbreaks) and environmental hazards affecting, or with the potential to affect the health of the general population, and to ensure that appropriate procedures are carried out during this process. It provides an area wide multidisciplinary forum to monitor, report, discuss and recommend actions to protect the health of our population. It meets quarterly.

The group includes representation from: -

- Public Health Protection Unit (PHPU) Medical and Nursing Staff;
- Environmental and Protective Services Representative from each Local Authority;
- Animal Health;
- Scottish Water;
- Microbiology;
- Scottish Environment Protection Agency;
- Glasgow Scientific Services and
- Health Protection Scotland

Joint protocol for the epidemiological investigation and surveillance of infectious intestinal diseases
The Public Health (Health Protection) Liaison Working Group produced this joint protocol which is followed by both the Board and the local authorities. It describes how PHPU and colleagues in the local authorities deal with cases of infectious intestinal diseases including salmonella and E coli O157.

Glasgow Scientific Services
This laboratory is managed by Glasgow City Council but jointly funded by all local authorities from the former Strathclyde Region. It provides comprehensive scientific services to local authority, private business and government agencies. It does not interface with the general public, but provides a support service to other local government departments such as Environmental Health and Trading Standards. Their remit includes air quality, contaminated land, food quality and safety and microbiological testing. The work of the lab contributes greatly to the work of the local authorities within NHSGGC area both day to day and in the outbreak situation.

4.3 On-call arrangements

NHS Greater Glasgow and Clyde
On-call is provided 24 hours a day, 7 days a week. During office hours, staff within PHPU provide advice and deal with health protection issues. Out of hours, on-call for public health within the Board is provided by consultants in public health medicine supported by training grade doctors.

Glasgow City
The Access call centre (0845 270 1558) accepts calls 24 hours a day for Environmental Health. An Out of Hours Group has been created and includes the following Competent Persons: Group Manager, Assistant Manager, Team Leaders and Environmental Health Officers. In addition, Technical Officers (who are not designated as Competent Persons) provide support as part of the Out of Hours Group. The Group is employed to work every night of the year from 5pm to 3.30am. However, at weekends during the periods between 3.30am and 5pm, and on weekdays between 3.30am and 8am an out of hours telephone response can be facilitated via specified Management within Environmental Health who are also designated Competent Persons. The extent of any response beyond telephone advice is a matter of professional judgement. The Access call centre and Greater Glasgow and Clyde Health

Board are in possession of mobile telephone numbers of Management who may be contacted as Competent Persons under the Regulations.

East Dunbartonshire
Although there is currently no official 'on call' response service for Environmental Health and Health Protection for out of hours, the 24 hour service operator will contact a Competent Person from Environmental Health to respond to health protection incidents.

West Dunbartonshire
No on-call service is provided by the Environmental Health Section. The Council has civil emergency procedures in place and can be contacted out with working hours on 0800 197 1004.

East Renfrewshire
Environmental Services has the following arrangements in place for the provisions of cover outwith the routine working hours which are 8.45am to 4.45pm, Monday to Thursday 8.45am to 3.55am, Friday. One EHO is available for all out of hours periods over the full year including all public holidays. The on-call officer is contacted via a dedicated mobile phone number by staff from East Renfrewshire Council's 24hr Ring and Report Helpline. The on call officer can contact the Environmental Services Manager (or the Principal Officer/Team Leader in her absence) at any time for advice when calls are received. Depending on the circumstances, the Environmental Services Manager may decide to attend or draft in additional EHOs. The Environmental Services Manager has a list of current emergency contact numbers should such circumstances arise.

Renfrewshire
Renfrewshire Council Environmental Services operates an emergency on call service. Outside of office hours a mobile telephone number is manned 24 hours for response to health protection emergencies. This is staffed by EHOs on a rotational basis and all officers are listed as Competent Persons. The on call service covers Port Health emergencies at Glasgow Airport which are responded to jointly by Renfrewshire Council EHOs and Consultants in Public Health Medicine from NHSGGC. Renfrewshire Council has an Emergency Contacts Directory which lists all appropriate persons in Renfrewshire Council for contact in an emergency.

Inverclyde
The Head of Safer Communities and two Service Managers are available to respond out of hours and would be the first points of contact in an out of hours public health incident. Additionally the service keeps a voluntary register of officers willing to be contacted in an emergency including staff who could provide administrative support. Staff on this list would be contacted first should an incident require it. Regardless of this list, all available Competent Persons would be expected to attend should the circumstances require.

4.4 Standard Operating Procedures

The PHPU within NHS Greater Glasgow and Clyde and the six local authorities all have appropriate Standard Operating Procedures (or similar) which are subject to regular review. Many of these relate to health protection, food safety and food hygiene. Many procedures are subject to audit by external agencies and/or are accredited via recognised systems, e.g. ISO 9001

4.5 Maintaining knowledge and skills

NHS Greater Glasgow and Clyde
All medical staff who take part in the out of hours rota are required to maintain their skills and record continuing professional development (CPD) activities with the Faculty of Public Health. The Faculty of Public Health carries out random audits of members' CPD returns. Maintenance of CPD records is also checked at yearly appraisals carried out in the Board. This is in keeping with current General Medical Council (GMC) guidelines on revalidation and appraisal for doctors.

Local authorities

The local authority professionals all have a staff Performance Development Review, or equivalent, on an annual basis. This means ongoing training to ensure staff have necessary skills and competencies on a wide range of public health and environment matters, including health protection. In addition, there are specific requirements, defined by external agencies, for food enforcement officers and for other environments health functions. Many environmental health professionals also take part in the voluntary scheme organised by the Royal Environmental Health Institute of Scotland (REHIS) and can gain and maintain Chartered Status as an EHO.

Local authorities participate in several liaison groups, e.g. West of Scotland Food Liaison Group, West of Scotland Health and Safety Liaison Group, Public Health and Housing Working Group and the Central and West of Scotland Pollution Control. At these liaison groups new legislation, guidance, consultation documents, common issues of interest and difficulties that authorities are experiencing are discussed and common approaches determined. These groups also provide a network where Officers can contact other group members outwith meetings for advice and information.

5. Health protection services: capacity and resilience

5.1 Capacity and resilience

Health Protection Scotland carried out a pilot study in 2009 looking at capacity and resilience of health protection services within all Boards and is planning a national assessment exercise in the near future.

5.2 Mutual aid arrangements

NHS Greater Glasgow and Clyde
A memorandum of understanding exists between the Board and other Scottish Boards for providing mutual aid in emergency situations. Due to the size of NHSGGC compared to other Boards in Scotland, the flow of aid would be more likely to be from NHSGGC to smaller boards rather than the other way round.

Local authorities
Currently mutual aid arrangements are being reviewed in Inverclyde, Renfrewshire and East Renfrewshire and taken forward as a workstream of Renfrewshire Civil Contingencies Service. This is to cover barriers to and opportunities to develop mutual aid agreements across all areas and will therefore cover health protection. Within the other local authorities the lack of formal mutual aid arrangements has been identified as a gap in services and is something to be dealt with by the Clyde Valley Community Planning Partnership and others.

As part of Civil Emergencies procedures an understanding exists between West Dunbartonshire Council and neighbouring authorities, that in the event of a major incident overwhelming the resources of a single authority, mutual aid in the form of the provision of personnel or resources may be requested and provided.

Within other local authorities, mutual aid arrangements have yet to be formally agreed.

6. Health protection: public involvement and feedback

There are a number of different ways that the local authorities consult and engage regularly with the public. These include follow up telephone calls regarding public satisfaction with services; customer feedback questionnaires - such as pest control or environmental health premise inspections; Citizens' Panel surveys etc. Below are some examples of public involvement and feedback exercises within local authorities.

East Dunbartonshire Council - Bishopbriggs air quality management area public consultation
In the declaration of the Air Quality Management Area in Bishopbriggs, public consultation was required to inform preparation of the Bishopbriggs Air Quality Action Plan. This included a consultation meeting and events, and public focus groups for qualitative research, carried out by consultants working on behalf of the local authority. This gained information on local peoples' ideas, views and concerns – including issues about protecting human health through improving air quality locally.

East Dunbartonshire - Community assembly
East Dunbartonshire arranges an annual community planning engagement event, to which the public are invited, together with council officials, community partners and the voluntary sector. Consultation has been carried out in a number of ways including 'world café events' and use of Quizdom systems and handsets.

West Dunbartonshire - survey of service users
In line with the Charter Mark Award requirements, West Dunbartonshire currently survey both business and service users to provide feedback on its services. Specific consultations are undertaken with stakeholders when necessary. The most recent consultation was on the draft Regulatory Services Enforcement policy.

Renfrewshire - air quality and land contamination
Public and stakeholder consultation is carried out regularly and as required for issues relating to air quality and land contamination. Regular customer feedback is obtained for health protection services by various mechanisms.

East Renfrewshire Council - Survey of callers
A sample of service users is contacted and their views on the level of satisfaction obtained.

Glasgow City - survey of callers
Glasgow Household Survey is a sample survey taken by Glasgow City Council as regards its provision of services to the Public. Environmental Heath also has Service Requests sampled and a small percentage is phoned to establish the public satisfaction of the service provided.

NHS Greater Glasgow and Clyde - Public Partnership Forums
Each Community Health Partnership and Community Health and Care partnership has its own Public Partnership Forum. Each Forum has an Executive Group of between 12 and 25 members which in turn nominate two representatives to sit on the Community Health (and Care) Partnership Committee. This enables Public Partnership Forums to represent wider community and patient interests in influencing the decision-making process and shaping provision of local services.

7. Summary and actions

The plan describes an overview of health protection priorities, provision and preparedness within Greater Glasgow and Clyde and describes how the Board and the Local Authorities deal with the range of health protection topics. Below are the topics that have been identified that require further work. These will form the basis of our plans within the period 2010-12.

1. Review adequacy of current on-call arrangements in some of the local authorities in the Board area.

2. Review and update port health plans for Glasgow International airport and Greenock port once aircraft and port regulations have been published.

3. Review the capacity and resilience of health protection services in the health board and in local authorities taking into account results of the national audit.

4. Clarify and document mutual aid arrangements between neighbouring local authorities.

5. Develop a programme of joint training events between health board and local authorities to develop and maintain health protection skills.

6. Although the plan is for the period 2010 – 2012, review this plan after one year, i.e. 2011.

JOINT HEALTH PROTECTION PLANS

Purpose

1. This Annex provides guidance to health boards and local authorities on Joint Health Protection Planning, to fulfil their requirements under the Act. It was developed with the assistance of an Expert Working Group and with considerable input from public and environmental health professionals in a number of health boards and local authorities. **Joint Health Protection Plans for the years 2010-2012 should be in place for 1 April 2010.**

Background

2. Section 7 provides that each health board must prepare such plans relating to the protection of public health in its area as the board considers appropriate. The plans must be prepared in consultation with the relevant local authority/ies, with whom there is a statutory duty of co-operation on health protection issues. The plans must also be prepared in accordance with guidance issued by the Scottish Ministers (i.e. this guidance) and include provision about such matters outlined in the guidance.

3. The plans need not be stand-alone, but may be incorporated into other local statutory plans, as relevant, and may be varied (following consultation with the relevant local authority/ies) from time to time. The plans do not require to be submitted to the Scottish Government, but require to be published.

Guidance

4. Detailed guidance on the development of Joint Health Protection Plans follows in this Annex.

ANNEX D

JOINT HEALTH PROTECTION PLANS

Purpose of plan: To provide an overview of health protection (communicable disease and environmental health) priorities, provision and preparedness.

Geographical extent of plan: Territorial NHS Board area.

Statutory responsibility: Territorial NHS Board, in consultation with relevant local authority/ies.

Period to be covered: 2 years, in advance, but authors' discretion to review on more frequent basis, if desired.

Author: Director of Public Health, in collaboration with, and co-signed by, relevant local authority Chief Officer(s) of Environmental Health (or equivalent).

Governance arrangements: To be formally submitted to the NHS Board and relevant local authority committee for sign-off, via clinical governance/risk management committees.

Status: Public document. Statutory duty placed on NHS Board to publish plans and any variations to plans. The plans should be available to the public on the NHS Board website and also on request. Plans and variations must be subject to consultation with relevant local authorities.

Contents:

Overview of NHS Board and Local Authority/ies

1. Provide a brief description of the demography and geography of the population being served.

Health protection: planning infrastructure

2. (a) Set out the key health protection plans (CD & EH) for your area to which you and the relevant local authority/ies lead on (jointly or individually), or contribute to. Plans can also be solely for the use of either the NHS Board or the local authority. Provide an electronic link to the plans, if available. Indicate:

(b) Date of last review and scheduled date of next review of each plan as determined by the author.

(c) Date of last test and scheduled date of next test of each emergency plan.

(d) Any specific issues which need to be addressed, e.g. areas for development.

Health protection: national and local priorities

3. (a) Which national priorities, for example those defined by the Chief Medical Officer, are being addressed at local level and how?

(b) Identify the local health protection priorities and how they are addressed.

(c) Identify any health protection risks/challenges which are unique to your area and how they are managed. You may wish to provide a link to the risk register, if relevant.

(d) Highlight any significant public health incidents or outbreaks in the last two years. What was learnt from such incidents? What, if any, improvements have been made to plans and services to better address future incidents?

Health protection: resources and operational arrangements

4. (a) Outline the resources (health board and local authority) available to provide health protection services (CD & EH) – staffing (expressed as whole time equivalents/full-time equivalents), job titles, roles and responsibilities (statutory and non-statutory), including management, technical and professional staff. Indicate the numbers of health board and local authority competent persons, as designated under the Public Health etc. (Scotland) Act 2008.

(b) Briefly outline the IT and Communications Technology available to the NHS Board and local authority(ies) to facilitate health protection (CD&EH) work, including the management of incidents and outbreaks.

(c) Outline the organisational arrangements in place to facilitate good collaborative working between the NHS, local authority(ies) and other health protection partners, e.g. the veterinary service, Scottish Water etc. How often do the teams meet? How are public health incidents reviewed and lessons shared locally?

(d) Outline the arrangements to respond out of hours, including staffing and job titles (NHS and local authority), including management, technical and professional staff.

(e) Outline the arrangements for reviewing Health Protection Standard Operating Procedures or Guidance. How often does this take place?

(f) Outline the corporate arrangements for ensuring the maintenance of knowledge, skills and competencies for staff who have health protection duties in both the NHS Board and local authority/ies, including keeping up to date for out of hours duties. How is this recorded? How often are the arrangements reviewed?

Health protection services: capacity and resilience

5. (a) When did the NHS Board and local authority/ies last assess the capacity and resilience of health protection services?

(b) What were the key findings?

(c) What action was taken following the assessment and what further action, if any, is planned?

(d) When will the NHS Board and local authority/ies next assess capacity and resilience?

(e) Describe any mutual aid arrangements in place with other NHS Boards and local authority/ies. What documentation is in place to evidence the arrangements?

Health protection: public involvement and feedback

6 (a) Describe any public involvement in the planning and delivery of health protection services including obtaining feedback from those affected by an outbreak and other public health incidents.