

# THE LOTHIAN JOINT HEALTH PROTECTION PLAN

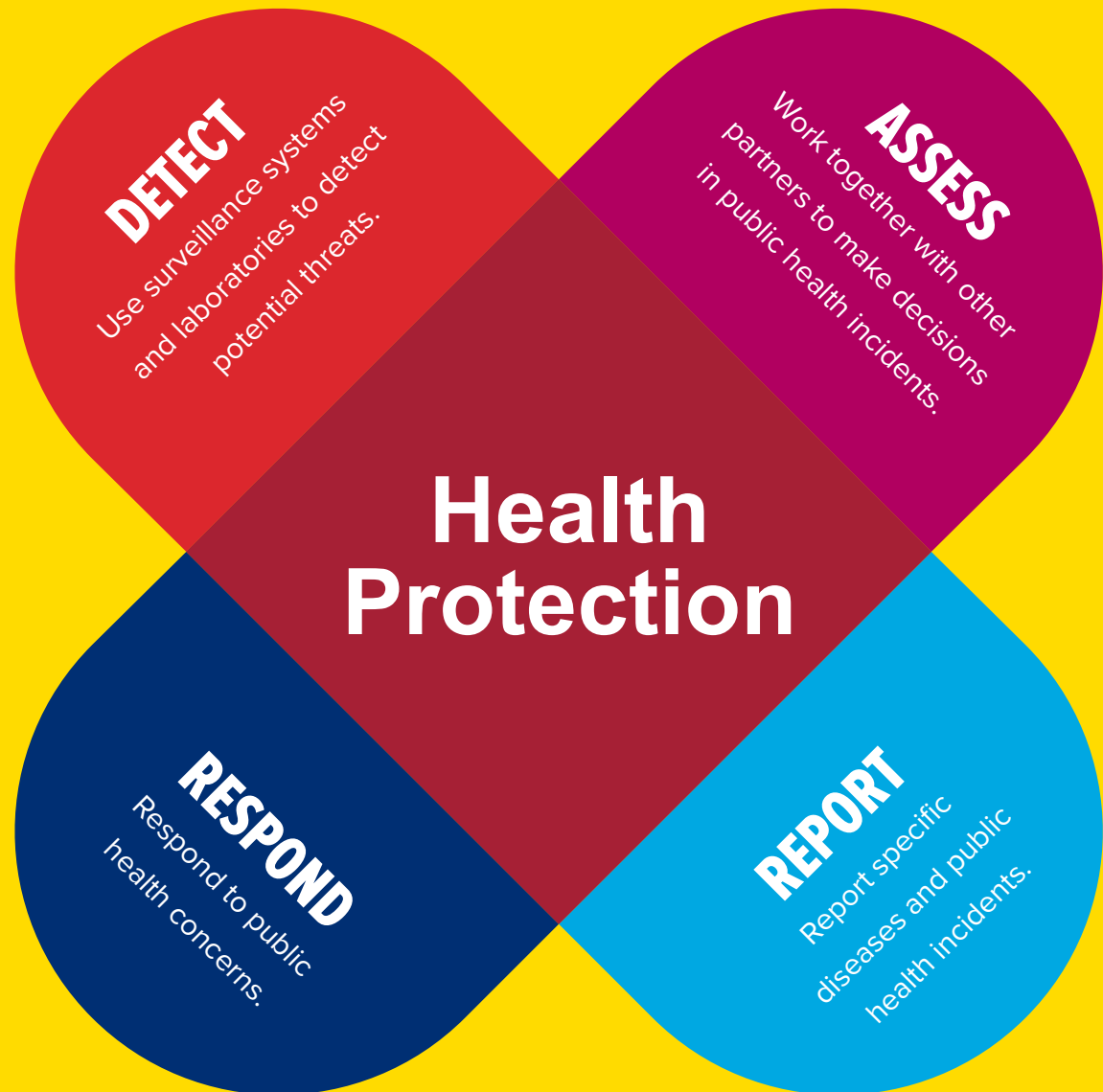
APRIL 2018 - MARCH 2020



# HEALTH PROTECTION

Health Protection in Scotland is an institutional function which involves protecting the health of the population, improving the prevention and control of infectious diseases and other environmental hazards by using a variety of legislation including the Public Health (Scotland) Act, 2008 and its guidance.

Health protection ensures the quality and safety of food, water, air, land and the general environment. It prevents the spread of communicable diseases and mitigates the impact of environmental hazards during incidents with a focus on national and local priorities.

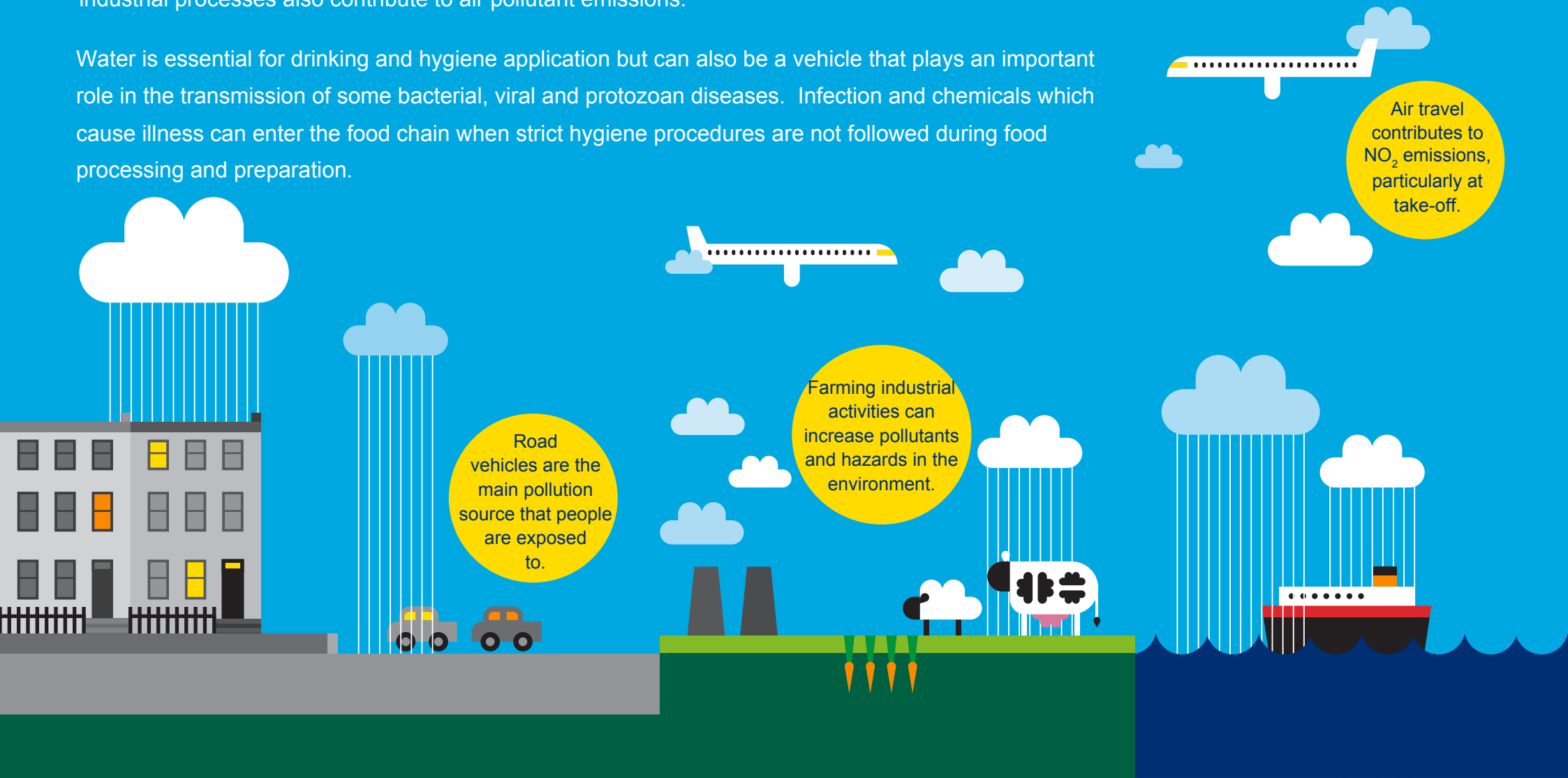


# ENVIRONMENTAL HEALTH

Environmental risk factors significantly impact human health, either directly by exposing people to harmful agents, or indirectly, by disrupting life-sustaining ecosystems. The World Health Organisation estimates that 24% of the global disease burden (healthy life years lost) and 23% of all deaths (premature mortality) are attributable to environmental factors.

Road vehicles are the main source of air pollution that people are exposed to. Combustion for heating, farming activities and industrial processes also contribute to air pollutant emissions.

Water is essential for drinking and hygiene application but can also be a vehicle that plays an important role in the transmission of some bacterial, viral and protozoan diseases. Infection and chemicals which cause illness can enter the food chain when strict hygiene procedures are not followed during food processing and preparation.

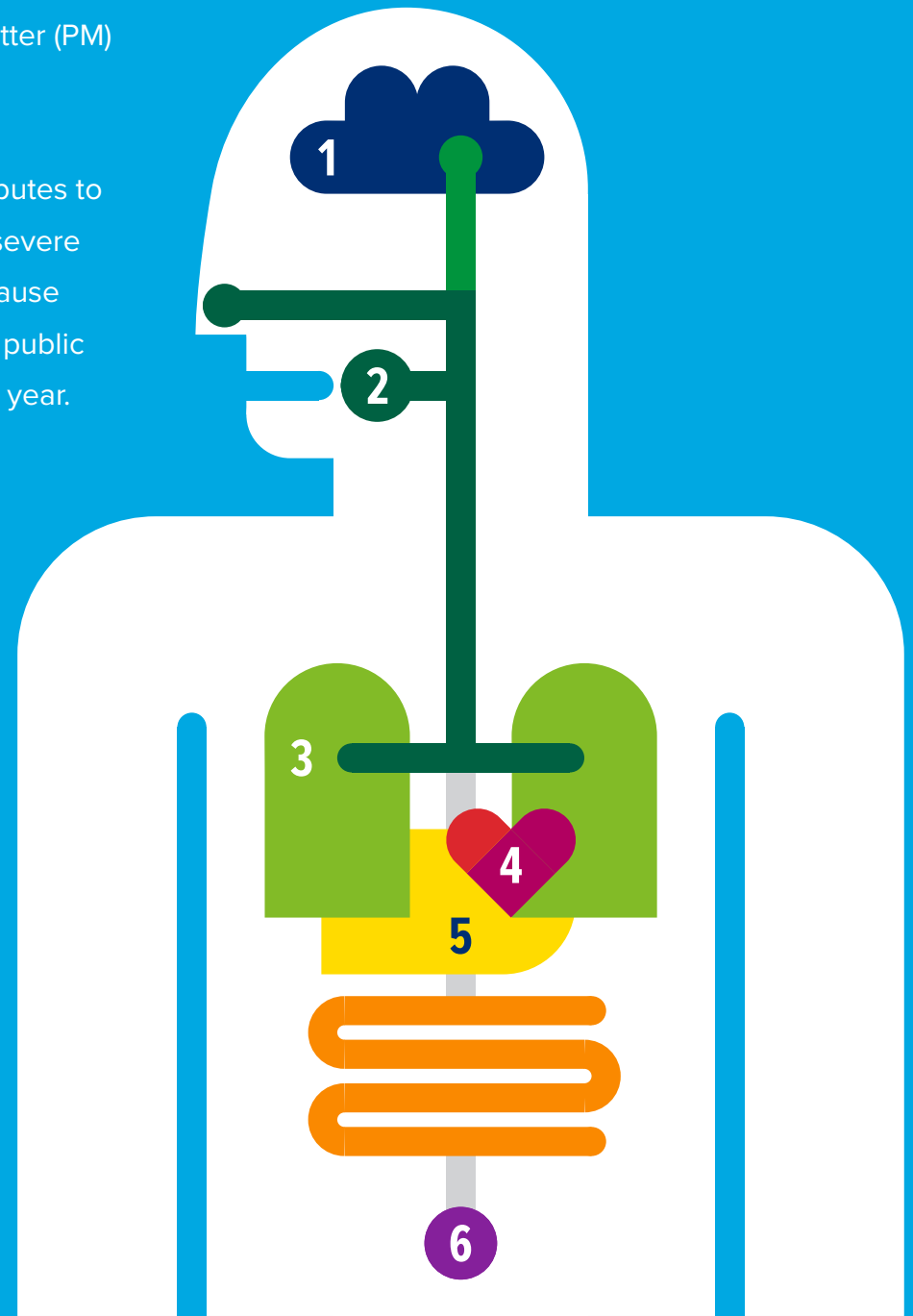


# EFFECTS OF AIR POLLUTION

Air pollution is a mixture of particles and gases that can have adverse effects on human health. The most important primary air pollutants are particulate matter (PM) and nitrogen dioxide (NO<sub>2</sub>).

Air pollutants are the largest environmental risk to public health and contributes to cardiovascular disease, lung cancer and respiratory diseases. In the most severe cases, it can lead to the loss of life. Air pollution in the UK is estimated to cause 29,000 deaths and 340,000 healthy life years lost. The adverse impact on public health caused by air pollution costs the UK economy more than £20bn per year.

- 1** PM can contribute to strokes in later life and has been found in samples of brain and central nervous system tissue.
- 2** Exposure to PM and NO<sub>2</sub> can irritate the eyes, nose and throat tissue.
- 3** Poor air quality affects everyone. It can have long term impacts on all and immediate effects on the vulnerable.
- 4** Heart and blood vessel diseases like strokes are one of the main impacts of air pollution.
- 5** Ultrafine PM can get into the blood then throughout the body and has been found in body organs.
- 6** PM has been found in the reproductive organs and in unborn children.



# JOINT HEALTH PROTECTION PLAN

The joint health protection plan is a collaborative approach to protecting the health of the Lothian population between NHS Lothian and the four local authorities. As well as the priorities laid out within the joint health protection plan, there are also areas of health protection that are delivered independently by NHS Lothian and independently by each of the partners.

## A. NHS LOTHIAN

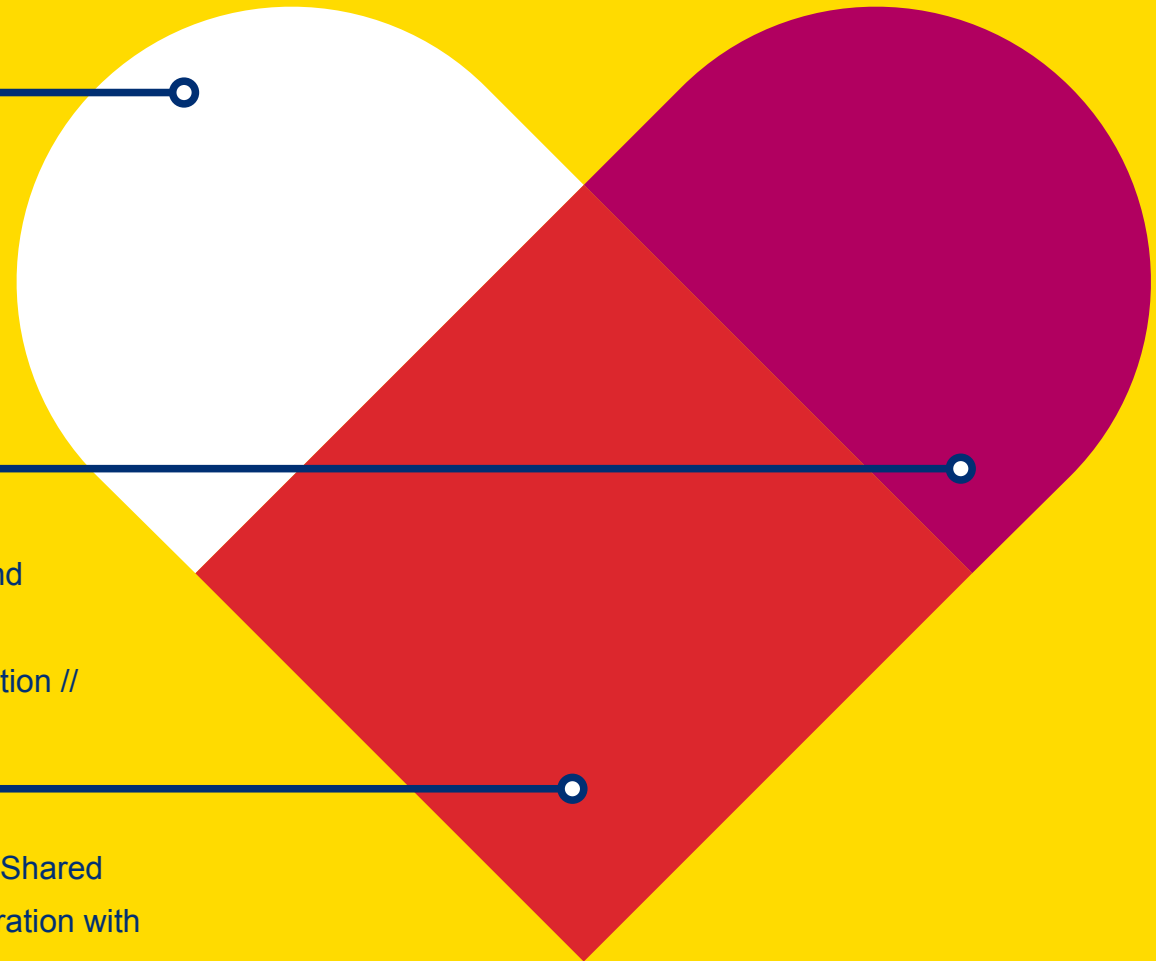
Teaching & research // Vulnerable populations vaccinations // Healthcare associated infections // Blood borne virus control // Health impact assessment // Smoking and substance misuse // Surveillance of diseases & incidents.

## B. LOCAL AUTHORITY

Air quality monitoring // Food and food hygiene standards // Recreational water monitoring // Health and safety at work // Occupational health & safety // Public health nuisance control // Contaminated land investigation // Regulatory protection.

## C. JOINT HEALTH PROTECTION PLAN

Incident and outbreak management // Joint Working // Shared training // Focus on air quality // Strengthening collaboration with partners // Aligning local services with national plans and priorities.



# LOTHIAN POPULATION

Lothian is a geographically diverse area covering around 700 square miles with a population of 880,000. The population's gender split is 49% males and 51% females. The local authority and age profiles are illustrated below. 58% of the Lothian population live in City of Edinburgh. The working age population (16 - 64 years) accounts for 67%, with 16% of the population under 16 and the remaining 17% over 65.

## LOTHIAN POPULATION BY LOCAL AUTHORITY



## LOTHIAN POPULATION BY AGE AND SEX



■ EAST LOTHIAN  
 ■ EDINBURGH  
 ■ MIDLOTHIAN  
 ■ WEST LOTHIAN

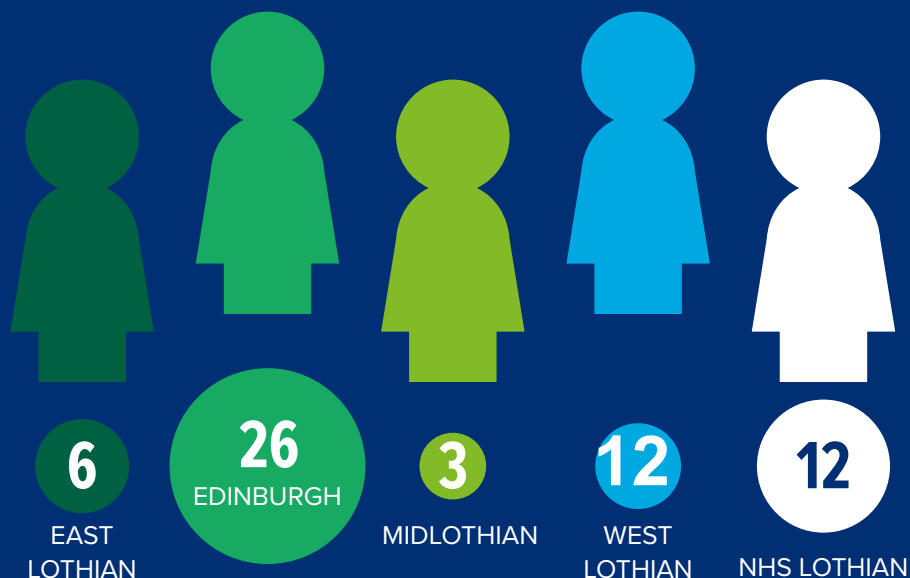
■ MALES  
 ■ FEMALES

# ANATOMY OF OUTBREAKS AND INCIDENTS

Infections and pollutants in the environment can be a threat to public health.

## AN INFECTION/CHEMICAL THREAT ANYWHERE CAN BE A THREAT EVERYWHERE

Infection or pollutants in the community can spread or cause ill health. The Health Protection team keep registers of risks and challenges unique to the Lothians which are potentially a source of outbreaks and incidents.



## WHEN INCIDENTS OR OUTBREAKS OCCUR

Health Protection monitors, detects and promptly responds to incidents and outbreaks through joint Problem Assessment Group (PAG) and Incident Management Teams (IMT) multiagency response to protect the community from infectious disease, contamination and any other hazards that constitute a danger to human health.

Number of staff designated as competent persons to investigate incidents, by respective agencies, as required under the Public Health (Scotland) Act 2008.

# 2,382

## INCIDENTS AND OUTBREAK MANAGEMENT

NUMBER OF INCIDENTS AND OUTBREAKS JOINTLY DEALT WITH BETWEEN 2016 & 2018

# PRIORITIES FOR THE NEXT TWO YEARS

The Joint Health Protection Plan has eight key priority areas for April 2018 to March 2020, which are summarised here. The detailed description of Lothian risks and challenges, local health protection resources, joint activities, health protection plans for the Lothian area and lessons from health protection incidents and outbreaks are contained in the link: <https://www.nhsllothian.scot.nhs.uk/jointhealthprotectionplan>



The Health of Lothian Population



1. Focus on Air Quality
2. Regulatory Protection
3. Immunisation
4. Incident and outbreak Management



5. Shared Training
  - Competent Persons training for new staff
  - Joint Incident Management
  - MedVet Training Day
  - Exercising of Plans

6. Aligning Local Services with National Plans and Priorities



7. Joint Working
8. Strengthening Collaboration with Partners



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