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Data used in this report were provided by Waterford Regional Hospital Laboratory, Senior Medical Officers, Communicable Disease Control Nurses, General Practitioners, Hospital Clinicians, Environmental Health Officers, and the STI Clinic.

Adult Vaccinations For Winter

Seasonal flu vaccination

Each year the seasonal (annual) flu vaccine contains three common influenza virus strains. The flu virus changes each year and this is why a new flu vaccine has to be given each year. Anyone can get the flu but it is more severe in people 65 years and over, anyone with a chronic medical condition and pregnant women. These groups of people are targeted for influenza vaccination. The seasonal flu vaccine is strongly recommended for:

- persons 65 and over
- those with a long-term medical condition such as diabetes, heart or lung disease, people whose immune system is impaired due to disease or treatment
- residents of nursing homes and other long stay institutions
- persons with a body mass index (BMI) over 40
- pregnant women (can be given at any stage of pregnancy),
- healthcare workers (HCW)
- carers
- people with regular close contact with poultry, water fowl or pigs.

Why Healthcare workers?

HCWs include care assistants in the community, nursing homes, long-stay

institutions and hospitals, home helps, as well as nurses and doctors and allied health professionals. Flu vaccine is recommended for HCWs to protect them from getting flu and to reduce transmission of flu from them to their family and to patients. They care for elderly and at-risk patients who may not get sufficient protection from the vaccine themselves. Flu is spread by coughing and sneezing. Anyone with flu can be infectious from 1 day before to 3 – 5 days after onset of symptoms. This means that you can pass on flu or the flu virus to somebody you care for even before you know that you are sick. Flu vaccine is available free to all HCWs, whether employed by the public or private sector, however unless the HCW has a medical card or GP visit card, their GP may charge a fee for administering the vaccine.

PPV23 Pneumococcal vaccine

When patients attend the surgery for their annual flu vaccine, it is a good time to check if they have had their PPV23 Pneumococcal vaccine. PPV23 may be given at the same time as influenza vaccine.

Pneumococcal vaccine is not required annually. Please see National Immunisation Guidelines for further information and guidance on recommended risk groups <http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines2008/>

Control and Prevention of Legionnaires' Disease: Health and Safety Legislation

Background

Legionella bacteria are common and can be found naturally in environmental sources such as rivers, lakes and reservoirs usually in small numbers. Legionella bacteria do not appear to multiply below 20 °C and are killed within a few minutes at temperatures above 60 °C.

Infection with Legionella bacteria can cause two distinct clinical syndromes, grouped together under the name legionellosis (Pontiac fever—a self-limiting flu-like illness, and Legionnaires' disease—a flu-like illness which may progress to pneumonia, with a high case fatality). Legionellosis is a

statutorily notifiable disease in Ireland and should be notified to the Department of Public Health promptly.

Transmission

It is normally contracted by inhaling Legionella bacteria, either in aerosols or in droplet nuclei (the particles left after the water has evaporated) contaminated with Legionella. The disease may also be contracted following ingestion of contaminated water by susceptible individuals. There is no evidence of person-to-person transmission.

Key Messages

- Legionnaires' disease can be a risk in healthcare facilities, especially hospitals or care facilities, due to the presence of complex water systems and immunocompromised people.
- Any water based system which has the right environmental conditions, has the potential to be a source of Legionella bacteria growth.
- Potential sources include showers, taps and toilets, clinical humidifiers, respiratory equipment including nebulisers and dental chair unit water lines.
- Employers have a legal obligation under Health and Safety Law to:
 - Prepare a safety statement
 - Prepare a written risk assessment including risk to non-employees e.g. patients
 - Identify and implement appropriate control measures.

Risk factors for development of Legionnaires' disease

- Age >40 years.
- Males.
- Smokers
- Excessive alcohol intake.
- The immunocompromised, organ transplant patients, patient with HIV/AIDS, and those receiving systemic steroids.
- Patients with chronic underlying diseases such as diabetes mellitus, congestive heart failure, chronic obstructive pulmonary disease and chronic liver failure.

Environmental Growth of Legionella

Legionella bacteria require a supply of nutrients to multiply such as algae, amoeba and other bacteria. The presence of sediment, sludge, scale and biofilms within water systems, provide favourable conditions for Legionella growth and persistence.

Legionnaires' Disease and Healthcare Facilities

Legionnaires' disease can be a risk in healthcare facilities, especially hospitals or care facilities, due to the presence of complex water systems and immunocompromised people. Facilities which have old or redundant pipe work or fittings, complex lengthy pipe systems, poorly maintained wet air conditioning systems or intermittently used areas (such as premises not used over a weekend or temporarily closed wards or departments), may present ideal environments for the growth of the bacteria. Aerosols can be generated from any water outlet for example when a bath or basin is filled.

Recognised and potential sources of Legionella infection in Healthcare Facilities include:

- Showers, taps and toilets.
- Clinical humidifiers, respiratory and other therapy equipment.
- Cooling towers and evaporative condensers.
- Spray washing equipment and high pressure hoses.
- Ornamental fountains and water features.
- Spa pools, whirlpool baths or therapy pools.
- Ice machines.
- Dental chair water lines (fixed and portable).
- Fire fighting systems such as sprinklers and hose reels.

- Portable ultrasound scalers.

Legislation

The principle legislative provisions with relevance to the prevention of Legionellosis in the work place include:

1. The Safety, Health and Welfare at Work Act 2005 (S.I. No. 10 of 2005)

Under this act there is a legal obligation on employers to carry out a written risk assessment to prevent Legionella in the place of work including, assessing the risk to contractors using the workplace. This duty of care extends to healthcare patients, employees, contractors and visitors alike. There is also a requirement to prepare a safety statement (section 20 of the 2005 Act) setting out how the risk is managed.

2. The Safety, Health and Welfare at Work (Biological Agents) Regulations, 1994 & Amendments (S.I. No. 146 of 1994 and S.I. No. 248 of 1998)

Legionella spp. and *L. pneumophila* are listed among biological agents set out in the Fourth Schedule of the regulations and are categorised as "group 2 biological agent", that is "one which can cause human disease and might be a hazard to employees, although it is unlikely to spread to the community and in respect of which there is usually effective prophylaxis or treatment available".

Therefore where there is potential for Legionella bacteria to be present at the work place an employer must take the following actions:

- Assess the risk of exposure.
- Limit exposure.
- Identify appropriate control measures to be taken.
- Carry out a written risk assessment of employee exposure to a biological agent (including legionella).
- Forward information on the risk assessment to the Health and Safety Authority as requested.

3. The Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007)

Of relevance to the control of Legionella in the workplace is Part 2, Chapter 2 which covers the use of work equipment i.e. any machinery, appliance, apparatus, tool or installation for use at work.

4. The Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (S.I. No. 619 of 2001)

While not directly related to Legionella, employers are obliged to consider the requirements of these regulations to ensure that their workers are not at risk from exposure to chemicals (i.e. biocides and disinfectants) while at work and/or performing a work activity in which chemical agents are being used.

Legionella Risk Assessment

Risk assessment should be carried out by a competent, trained individual/organisation who should ideally be a member of a recognised professional body or association e.g. the Legionella Control Association in the UK or equivalent. The risk assessment should be reviewed annually. Where a risk of Legionnaires' disease is identified a responsible person should be appointed to manage and ensure that control measures are implemented.

Failure to undertake written risk assessments or possession of an inadequate risk assessment may lead to prosecution, particularly if the water system or premises is implicated in a Legionnaires' disease outbreak.

Controlling risk may include:

- Prevention of favourable temperatures and conditions for bacterial growth.
- Temperature control, coldwater systems maintained at < 20°C, hot water should be stored at 60°C and distributed so it reaches 50°C within one minute at outlet.

- Flushing: stagnation or low water use can cause problems especially if water outlets such as showers are underutilised or not in use.
- Water treatment, cleaning and disinfection.

Legionellosis in Ireland

- Between seven and fifteen cases of Legionnaires' disease were notified each year in Ireland since 2005.
- There were seven outbreaks of Legionellosis reported in Ireland in that time, two of which were associated with long-stay health-care facilities.

For further information:

- Health Protection Surveillance Agency. National Guidelines for the Control of Legionellosis in Ireland, 2009. http://hpsc.ie/hpsc/A-Z/_Respiratory/Legionellosis/Publications/File,3936,en.pdf
- Health and Safety Authority website www.hsa.ie,
- Health and safety Executive UK. Legionnaires' disease. The control of legionella bacteria in water systems. Approved Code of Practice and guidance (L8) 2000 <http://www.hse.gov.uk/pubns/books/l8.htm>

Immunisation uptake for children at 12 and 24 months of age

The uptake rates shown in the table below are for children who reached 12 and 24 months in Quarter 1, 2012. The uptake of MenC₃ at 24 months remains up to 10% less than the uptake for other vaccines at that age, and is a concern locally and nationally. The target uptake of 95% was achieved or exceeded in all South East LHOs for BCG₁ at 12 months and for D₃ at 24

months. However 95% uptake of D₃ at 12 months and PCV₃ at 24 months was only achieved in Tipperary South LHO. All LHOs except Waterford achieved ≥95% uptake of MMR₁ at 24 months. The primary immunisation schedule is available at www.immunisation.ie.

Local Health Office	% vaccine uptake, Q1 2012					
	BCG ₁	D ₃ [*]		MenC ₃	PCV ₃	MMR ₁
	12 mths	12 mths	24 mths	24 mths	24 mths	24 mths
Carlow - Kilkenny	97	93	97	87	93	96
Tipperary South	96	95	97	90	95	95
Waterford	96	92	95	87	92	92
Wexford	97	94	96	87	93	96
Ireland	80	91	95	85	91	93

*D₃: Three doses of Diphtheria containing vaccine. In this table, uptake of D₃ is indicative of uptake of vaccines contained in the 5 in 1 or 6 in 1 combined vaccine.



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In the News

Reminder!

Guidelines for antimicrobial prescribing in primary care in Ireland (2011) are available at <http://www.hpsc.ie/hpsc/A-Z/MicrobiologyAntimicrobialResistance/Antibiotics/>

New guidelines for the public health management of pertussis published

These are available at <http://www.hpsc.ie/hpsc/A-Z/VaccinePreventable/PertussisWhoopingCough/Guidance/>

Included in the guidance is background information on the clinical presentation in various age groups, guidance on the treatment and immunisation of cases and recommendations on what laboratory tests should be carried out depending on the age of the case and the duration of the illness.

National Outbreak of rare Salmonella Typhimurium serotype

As of 24th October, 25 confirmed cases of Monophasic Salmonella Typhimurium U323, none of which were travel related, have been identified across Ireland since June 2012. This is unusual, as human S. Typhimurium U323 is rare in Ireland with only one isolate in 2010 and two in 2011.

Investigations as to the source of these infections are ongoing.

Summary of infectious diseases notified Weeks 1 to 39, 2012

Disease	Cases ¹	Disease	Cases ¹
Bacterial Meningitis (not otherwise specified)	3	Measles	4
Campylobacter infection	232	Meningococcal Disease	3
Chickenpox – hospitalised cases ²	11	Mumps	14
Chlamydia trachomatis	470	Noroviral infection	26
Clostridium difficile	142	Pertussis	46
Cryptosporidiosis	91	Rotavirus	439
Giardiasis	3	Rubella	0
Gonorrhoea	40	Salmonellosis	26
Haemophilis influenza (invasive)	4	Shigellosis	1
Hepatitis A (acute)	2	Streptococcus group A (invasive)	16
Hepatitis B acute and chronic	21	Streptococcus pneumoniae (invasive)	84
Hepatitis C	25	Syphilis	21
Herpes Simplex (genital)	44	Trichomoniasis	9
Influenza ³	59	Tuberculosis	22
Legionellosis	0	Typhoid	0
Leptospirosis	0	Verotoxigenic Escherichia coli infection	19
Listeriosis	0	Viral encephalitis	2
Malaria	4	Viral Meningitis	20

¹ Provisional data.

² Newly notifiable since 1st January 2012.

³ Influenza figures contain all subtypes.

The table above shows cases of infectious diseases notified in the **HSE (SE) area only** under Infectious Disease (Amendment) Regulations 2011 (S.I. No. 452 of 2011). Medical practitioners and clinical directors of diagnostic laboratories are required to transmit a written or electronic notification of a notifiable infectious disease to a Medical Officer of Health. Case definitions for notifiable diseases are available at www.hpsc.ie and notification form booklets are available from regional public health department offices, to which notifications should be returned.

Infectious disease notifications can be phoned to 056 7784142, faxed to 056 7784599 or posted to Public Health Department, HSE South (SE), St. Canice's Hospital, Lacken, Dublin Road, Kilkenny.
