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**FACULTY OF
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PHYSICIANS OF IRELAND

“I’ve a lot on my plate at the minute”: Competing priorities among homeless attendees of an urban primary care and addiction services clinic

Health Service Improvement

C. Ingram, C. Perrotta, C. Buggy

Abstract

The aim of this study was to identify competing priorities amongst homeless individuals attending an urban primary care and addiction services clinic in Ireland. Ethnographic field work involving active participant observation (60 hours) and informal interviews was conducted between October 2022 and April 2023 in the clinic waiting room. Field note data were coded and analysed using an inductive thematic analysis framework method. Service users expressed concern about their mental state (N=18), caring for their children despite lack of adequate parenting supports (N=12), navigating relationships with family and partners (N=11), managing pain and disability (N=11), and keeping busy (N=11). Many were dealing with poor living conditions in hostels (N=11), trying to find a place to sleep for the night (N=8) and/or were not sleeping well (N=6). Others were grieving the loss of a loved one (N=10) or feared for their physical safety (N=6). Five service users felt overwhelmed by their addiction and were considering seeking help. Moving forward, non-medicalised alternatives that include expanded parenting support, grief counselling, and meaningful daytime activities are desired by people experiencing homelessness.



Priority healthcare needs amongst people experiencing homelessness in Dublin, Ireland: a qualitative evaluation of community expert perspectives

Health Service Improvement

C. Ingram, C. Perrotta, C. Buggy

Abstract

This study aimed to explore the perspectives of experts working in homeless health and addiction services on priority healthcare needs amongst people experiencing homelessness in Dublin, Ireland as of 2023. Semi-structured interviews were carried out with 19 community experts (CEs) followed by inductive thematic framework analysis to identify emergent themes and sub-themes. At the societal level, CEs identified a need to promote a culture that values health equity. At the policy level, accelerating action in addressing health inequalities was recommended with an emphasis on strategic planning, Housing First, social support options, interagency collaboration, improved data linkage and sharing, and auditing. At the health services level, removing barriers to access will require the provision of more and safer mental health, addiction, women-centred, and general practice services; resolved care pathways in relation to crisis points and multi-morbidity; expanded trauma-informed education and training and hospital-led Inclusion Health programmes; and outreach programmes and peer support for chronic disease management. Moving forward, the views of people in homelessness on optimal addiction care and support must be explored.



The Irish General Practice Chronic Disease Prevention and Management Programme (CDM)

Health Service Improvement

O. J. O'Reilly

Abstract

The CDM Programme pays GPs for scheduled visits, with specified elements which are evidence based.

Commenced in 2020, the objectives are;

Opportunistically diagnose patients at high risk of cardiovascular disease or diabetes.

Provide a prevention programme for those at risk.

Provide a management programme for those diagnosed with cardiovascular disease, chronic respiratory disease or diabetes type 2.

2 years data showed it was well accepted by GPs (91% uptake) and patients (83% uptake). Baseline measurements showed; 41.5% were multimorbid, 9.3% smokers, 33% obese, mean BMI 28.4. First visit and third visit data showed lifestyle behavior, biometric and blood result improvements for substantial numbers of patients; (13% of smokers quit, 14% of obese patients were no longer obese, 44% of hypertensives became normotensive. 23% - 42% of diabetics achieved their HbA1c and LDL cholesterol targets.

This programme was designed to improve public health, it demonstrates early detection, prevention and treatment services for patients with chronic ambulatory care sensitive conditions can successfully be provided in General Practice, and have population reach.



Management of sore throat (with focus on GAS) in young adults

Health Protection

M. De Paor, A. Vellinga

Abstract

Background

Sore throat is a common presenting symptom in primary care. A minority of cases are caused by Group A Streptococcus (GAS). Clinical guidelines for sore throat recommend prescribing antibiotics only when there is a high probability that the condition has been caused by GAS, and many incorporate clinical prediction rules (CPRs) to aid this process.

Objectives

To examine antibiotic prescribing and adherence with guidelines for sore throat management in a cohort of young adults.

Methods

This prospective observational cohort study included 342 young adults with sore throat. Descriptive statistics were used to examine the presence of symptoms in participants with and without GAS. Regression analyses were performed to explore associations.

Results

23% (80) of participants had a positive throat swab for GAS and 77% (268) were prescribed either immediate or delayed antibiotics. Retrospective application of the Centor score showed 50% prescribing in line with clinical guidelines, i.e. a high score. However, half of the participants had a low score but were also prescribed an antibiotic. The symptoms and clinical signs most associated with antibiotic prescribing were exudate on tonsils, absence of cough and enlarged



A cost-analysis of targeted and universal congenital cytomegalovirus screening programmes to reduce sensorineural hearing loss in Ireland

Health Service Improvement

C. Conlon, C. Perrota.

Abstract

Congenital cytomegalovirus (cCMV) is the most common congenital infection and is an important cause of sensorineural hearing loss. Antiviral treatment has been shown to improve hearing outcomes if initiated within the first month of life. Targeted screening of infants with no clear response on newborn hearing screening is being piloted in Ireland. The costs to the Health Service Executive of targeted screening or of expanding to universal screening have not previously been estimated.

The outcomes and total costs of both programmes were estimated using a decision tree model. Data were collected via a literature review and published healthcare cost data. The cost per case (CPC) of identifying and improving cCMV related hearing loss was calculated and compared between programmes.

The approximate total cost of a targeted programme is €210,036 per year. Assuming 50% of infants treated with antivirals will derive benefit, the CPC of improved hearing is €20,004. The approximate total cost of a universal programme is €1,131,907 per year and the CPC of improved hearing is €80,850.

Either screening programme is affordable within the health budget. Universal screening is costlier but would identify more infants who may benefit.



How health impacts are considered in urban transport planning: a literature review

Health and Wellbeing

J. O Connell

Abstract

Urban transport is an important determinant of health (1). To inform a health impact assessment (HIA) of local urban transport planning (UTP), this review aimed to understand how health impacts are considered in UTP practice.

Research, reviews, case studies and perspectives published since 2013 were included. Pubmed, the Transport Research Integrated Database and the WHO's IRIS were searched.

Health was reported to be poorly integrated into UTP. Planners may have an incomplete understanding of UTP's health impacts. Practice may not be evidence-based and planners may have competing demands (e.g., time, political). During environmental assessments, the scope of health considered can be narrow. Legislation to integrate health into UTP can be weak. Path dependency may impede health being a priority in UTP. Leadership with broad multisector partnership and a vision that includes health is needed.

During the HIA, how evidence relates to the local context must be considered carefully. For HIA reporting, a conceptual model of UTP's health impacts may be beneficial and what role, if any, path dependency has in local UTP should be examined. How legislation could be leveraged to strengthen health in local UTP should be explored.



Report on HPSC surveillance activities, including gaps and opportunities

Health Protection

R. Ceannt, S. Cotter, G. Martin

Abstract

This descriptive report outlines current surveillance activities within the Health Protection Surveillance Centre (HPSC), and the gaps and opportunities within these. Additionally, opportunities for expanding surveillance activities to encompass an all hazards approach, particularly in environment and health, are explored.

The methods used for this report included stakeholder mapping, key informant interviews/groups, review of key documents, and literature scoping.

Contributors were drawn from several key disciplines involved in surveillance. Eighteen key informants participated in the interviews, with written input from an additional thirteen contributors. A comprehensive overview of current surveillance activities is provided, and gaps, opportunities, and key enablers were identified. The most significant gap is in the area of the environment and health; multiple key steps for development of this function were identified, particularly focusing on water, air, radon, and weather events.

This report acts as a reference manual for health protection surveillance in the HPSC, and maps areas that need to be addressed to enhance and expand surveillance, and realise the goal of an all hazards health protection function.



Considering a Multi-disciplinary Public Health Workforce in Ireland

Health and Wellbeing

J. Mack, H. Mc Avoy

Abstract

The Crowe Howarth report recommended the exploration of multidisciplinary public health (MDPH) in Ireland. The Institute of Public Health formed a Public Health Advisory Group (PHAG), and commissioned Crowe to develop a discussion paper to provide examples of MDPH workforces in other countries, as well as insights from local stakeholders and international experts.

Methodology included desk-based research to identify key international reports and stakeholder engagement through interviews with international experts and a scoping exercise with PHAG members.

PHAG members (n=11/22) identified lack of career pathways for public health postgraduates, workforce capacity, complexity of current public health challenges and breadth of skills required for a public health response as key challenges in Ireland. MDPH workforces are at different stages of progression internationally, however experts recommended the UK model as an example of best practice. Key facilitators included development of competency frameworks, registration systems and career structures.

This paper seeks to support public health reform and delivery of essential public health functions in Ireland by outlining key considerations for developing a MDPH workforce.



Point prevalence survey of healthcare- associated infections and antimicrobial use in Irish hospitals

Health Protection

M. O Hanlon, R. Franca, H. Murphy, T. Mitchell, S. Frost

Abstract

The European Centre for Disease Control (ECDC) invites member states to participate in an EU/EEA point prevalence study (PPS) of healthcare-associated infections (HCAI) and antimicrobial use every five years. The Health Protection Surveillance Centre (HPSC) coordinates Ireland's PPS. Inpatients in every acute care hospital (public, voluntary and private) were surveyed.

A standardised protocol was used. Training was provided by the HPSC team to over 300 hospital staff ahead of the survey. The survey occurred in May 2023.

12,472 patients were included from 65 hospitals. Analysis is ongoing with a HCAI prevalence of 7-12.4% are seen in individual hospitals and an overall prevalence of 7.5% (6.1% in 2017 PPS). We will present data from the 2023 PPS with a special focus on long-term residential care facility (LTCF) associated HCAI.

Results are used to benchmark Ireland's progress in infection prevention and control (IPC) and to inform national IPC strategy for the coming years. This was the first ECDC PPS to include infection acquired in an LTCF under the HCAI umbrella. In some hospitals almost half of the HCAI were LTCF associated. The last Irish PPS of LTCF occurred in 2016. This PPS strongly supports a PPS in LTCFs in 2024.



Facilitators and barriers to Public Health following notification of Diphtheria in a congregate setting for people seeking international protection

Health Protection

L. Peterson, C. Conlon, R. Conway, N. Conroy

Abstract

Diphtheria is a vaccine preventable disease with an increasing incidence in the European Union (EU), with the majority of cases notified in asylum seekers or refugees. This case report highlights actions after notification of *C.diphtheriae* in a person residing in a congregate setting for people seeking internal protection.

This incident served as an opportunity to exercise the response to a potential outbreak within a congregate setting. The actions can be separated into the initial response, contact tracing, site visit, communications, workplace risk assessment, immunisation, and closure of the incident following confirmation that the *C.diphtheriae* isolate did not contain the toxigenic gene.

Facilitators included; rapid establishment of the incident management team (IMT), the site visit, access to prepared translated materials, assistance from the National Ambulance service (NAS) and the ability to vaccinate 1/3rd of the facility within 3 days of notification. Barriers included: delayed notification, inability to determine toxigenic status quickly, 'zero-hour contracts' causing resistance to isolation, crowded living conditions within the facility, delays in translators and low vaccination rates within the facility.



The Woman's Health Service (WHS): A qualitative review with sex workers to inform clinical and social care service delivery

Health Service Improvement

T. Mc Glacken, F. Ciani, D. O'Flynn, N. O'Loughlin

Abstract

Sex workers experience higher levels of physical and mental ill health than the general population. High levels of stigma exacerbate these health outcomes. The WHS in Dublin provides healthcare and social support to women/trans-women involved in sex work across Ireland. A recent evaluation of the service recommended harvesting sex worker views in relation to service delivery and their care needs. A qualitative evaluation was conducted with eight sex workers and their subjective experiences of health and social care explored through the use of semi-structured interviews. An analytical approach was adopted using inductive thematic analysis. Six themes emerged: difficulty accessing the clinic; the need to broaden knowledge and awareness of the service; the importance of neutrality and confidentiality; the need to expand the scope of the current service; the need for help to deal with psychological, legal and financial stress; the importance of ongoing service-user involvement and feedback. These themes fed into a number of recommendations to improve the service. The findings of this study help to address a gap in the literature relating to best practice processes for providing care to this vulnerable population.



An evaluation of the first ten years of Newborn Screening for cystic fibrosis in Ireland

Health Service Improvement

F. Mc Guire, A. Collins, B. Linnane, P. Marsden

Abstract

Ireland has the world's highest incidence of cystic fibrosis (CF) (1). Newborn screening for CF (NBSCF) improves outcomes but identifies carriers and may yield inconclusive results (2). This study aimed to evaluate the performance of the first 10 years of the Irish NBSCF programme.

Programme data were analysed, including neonates identified as cases of CF, as CF carriers and Cystic Fibrosis Screen Positive Inconclusive Diagnosis (CFSPID) from 01st July 2011- 30th June 2021. Microsoft Excel was used to calculate sensitivity, specificity and positive predictive value (PPV) of NBSCF. Results were compared to European Cystic Fibrosis Society (ECFS) standards.

Overall 650,809 neonates were screened, with 290 cases of CF, 533 CF carriers and 21 CFSPIDs reported. NBSCF identified 284 (98%) cases of CF, sensitivity was 97.93% (95% CI 96.29–99.57), specificity was 99.91% (95% CI 99.91-99.92%), PPV was 0.34 (95% CI 0.31-0.37). The observed incidence of CF was 1 in 2,203, still Europe's highest. Of the six undetected cases, most were of Asian ethnicity, suggesting genetic panel limitations for diverse ethnicities.

The Irish NBSCF programme exceeded ECFS standards. Ongoing validity monitoring is vital as the Irish population diversifies.



Multi-Organisational Response to Tuberculosis Cluster in Dublin Homeless Population

Health Protection

M. Mc Loughlin, K.I. Quintyne, C. Carroll, Chantal Migone, L. O Connor, S. McNally

Abstract

On 04/05/2023, the Irish Mycobacteria Reference Laboratory (IMRL) in St. James's Hospital (SJH) identified a cluster of three Tuberculosis (TB) cases linked by whole genome sequencing (WGS) between 05/06/2020 - 06/03/2023. Public Health Area A (PHAA) noted that all cases were from the homeless population residing within emergency accommodation sites in Dublin.

PHAA convened an incident management team (IMT), including the National Health Protection Office, Safetynet Primary Care (SNPC) and the IMRL. The group agreed to offer TB screening using on-site serial chest x-rays (CXRs) using SNPC's mobile CXR unit, performed with a six-month interval.

The first sweep between 20/07/2023 - 02/08/2023 was coordinated by SNPC and supported by PHAA. In total, 214 CXRs were conducted across four sites (72 staff and 142 residents), of which 20 were abnormal. 5 individuals were ultimately referred to SJH TB Services.

This initiative demonstrated an effective multi-organisational response to an infectious threat within the homeless population living in Dublin. The response of the IMT, combining on-site engagement with robust follow-up, ensured this community was given an opportunity to both understand and avail of appropriate screening.



Impact of the COVID-19 vaccination programme on symptomatic and severe SARS-CoV-2 infection during a period of Omicron variant dominance in Ireland

Health Protection

L. Marron, A. Urdiales Mateo, J.M. O'Donnell, E. Robsinon, L. Donegan

Abstract

This study aimed to quantify the direct impact of the COVID-19 vaccination programme in Ireland on averted key outcomes in individuals aged ≥ 50 years during a period of Omicron variant dominance, to inform vaccination strategy and public health communication about the rationale for additional booster doses.

We conducted a retrospective observational study from December 2021-March 2023, using an adapted formula from a methodology used internationally to assess COVID-19 vaccine impact.^{1,2} We used national surveillance data on notified outcomes, vaccine coverage and vaccine effectiveness estimates to estimate the count and prevented fraction of averted outcomes.

The COVID-19 vaccination programme averted 48,551 symptomatic presentations to primary care (36% of expected), 102,160 hospitalisations (81% of expected), 3,303 Intensive Care Unit admissions (89% of expected) and 15,985 deaths (87% of expected). During a period of Omicron dominance, the vaccination programme averted symptomatic and severe COVID-19 cases, including deaths. These findings are relevant for informing COVID-19 vaccination programmes, winter planning, cost-effectiveness analyses and communicating the importance of vaccination in Ireland and internationally.



An evaluation of the severe acute respiratory infection (SARI) surveillance system in Ireland

Health Protection

L. Marron, R. Duffy, J.M. O'Donnell, L. Donegan

Abstract

This evaluation aimed to assess key surveillance system attributes to guide expansion of the Severe Acute Respiratory Infection (SARI) surveillance programme.

A mixed quantitative and qualitative evaluation was conducted from September 2021–November 2022. Surveillance data were analysed to assess completeness and timeliness. Focus group discussions evaluated simplicity and acceptability. Qualitative data were analysed using thematic analysis.

Completeness of key variables including age and outcome was 100% (n=747). COVID-19 vaccination status was completed in 89%, completeness of ethnicity data was 0.6%. Median time from hospitalisation to data entry commencing was 1 day (IQR 1-3). Time to receipt of whole genome sequencing (WGS) results was 40 days (IQR 30-61). Themes identified in the qualitative evaluation were the complexity of SARI surveillance. Suggested areas for improvement included process automation and additional resources to improve timeliness and acceptability.

SARI surveillance reports high-quality, timely data. Timeliness of WGS data and recording of vaccination status and equity stratifiers e.g. ethnicity should be improved. Priorities for expansion are process automation and adequate resource allocation.



Results of a systems-based incident review of a failure of disinfection at a water treatment plant resulting in a large outbreak of disease

Health Protection

J. Gilroy, C.T. Mullaney

Abstract

We present the findings of a systems-based incident review, conducted by the Dublin and South East Department of Public Health, of an incident at a water treatment plant in Gorey, Co Wexford, in August 2021 resulting in the largest outbreak of VTEC linked to a Public Water Supply in Ireland since surveillance commenced.

We reviewed reports by the Environmental Protection Agency, Wexford County Council, the Commission for the Regulation of Utilities and the Outbreak Control Team relating to the incident. The framework for the review was the HSE Incident Management Framework and Guidance, 2020 (1).

In total 13 Contributory Factors were identified across the categories of Process (n=4), Systems (n=4), People (n=3) and Place (n=2), with both latent conditions and active failures noted. One factor was related to an aspect involving statutory consultation with the HSE while nine were related to antecedent failures in processes within the water supplier.

Our analysis raises significant concerns from a health protection perspective and several key learning points are identified to guide discussion with stakeholders, including the response to complaints of human illness and the need for robust risk management plans for water suppliers.



Trends in prevalence of obesity in pregnancy in Ireland: Longitudinal evidence from a large tertiary maternity hospital

Health and Wellbeing

E. Congrave, M. Germaine, M. Brennan, P. Naughton, P. Kearney

Abstract

Obesity during pregnancy is associated with adverse maternal and neonatal outcomes, both short and long term.¹ Maternal obesity in Ireland has not been recently reported. This study aimed to quantify recent trends in obesity in pregnancy among patients attending a large tertiary maternity hospital.

Secondary analysis of routinely collected records from the Coombe Hospital was conducted to assess prevalence of obesity in pregnancy from 2013-2022. BMI was measured objectively at first antenatal visit. Trends in obesity in pregnancy were stratified by age and parity.

There were 78,915 valid observations. Prevalence of obesity (BMI \geq 30kg/m²) increased from 17.0% (95% confidence interval (CI) 16.2%-17.9%) in 2013 to 23.1% (95% CI 22.1%-24.1%) in 2022, a relative increase of 35.9%; higher prevalence was noted among older and multiparous patients. Notably, BMI \geq 40kg/m² increased 47.1% from 1.7% (95% CI 1.4%-2.0%) in 2013 to 2.5% (95% CI 2.1%-2.9%) in 2022.

Escalating levels of obesity during pregnancy are likely to result in increased maternal and infant morbidity and resultant healthcare needs, with consequences for population health. Findings should be used to inform health promotion and population needs-based healthcare planning.



Analysis of the HSE National Children's Screening Programmes 2020–2022

Health Intelligence

E. Cosgrave, P. Marsden, M. O Loughlin, G. Norman, C. Harvey

Abstract

The HSE Children's Screening Service delivers two population level screening programmes, the Newborn Bloodspot Screening Programme (NNBSP) and the Universal Newborn Hearing Screening Programme (UNHSP), wherein newborns are screened for 9 rare but serious medical conditions and for permanent congenital hearing loss (PCHL).

An analysis of the HSE's Children's Screening service activity for years 2020-22 was conducted: case numbers, key performance indicators and programme performance were assessed.

During 2020-22 172,785 babies were screened as part of the NNBSP; 351 (203/100,000) cases were detected. Most (96.1%) samples were taken between 72-120 hours after birth. Sensitivity rates were 100.0% and specificity was in excess of 99.8% across all screened conditions. During the same period 170,751 babies completed screening as part of the UNHSP; the number of cases of PCHL detected relative to the number of babies screened was 1 in 661. Specificity of the UNHSP was 98.96% with a positive predictive value of 12.7%. Both screening programmes performed well regarding key indicators indicating the programmes continue to support early identification and appropriate interventions to reduce mortality and morbidity in the Irish population.



Healthcare Workers Attitudes to COVID-19 and Influenza Vaccination

Health Protection

K. I. Quintyne, C. Reilly, C. Carpenter, J. Kearney

Abstract

Vaccination of healthcare workers (HCWs) is critical to curtailing the spread of COVID-19 and seasonal influenza, but herd immunity can only be appreciated with high levels of vaccination coverage. The aim of the study was to assess attitudes, aversions, and advantages among HCWs in relation to COVID-19 and influenza vaccination.

From 19/09/2023 to 26/09/2023, an anonymous voluntary questionnaire was sent to the healthcare structures within HSE Public Health, Area A. Data was collected through Smart Survey platform.

A total of 595 HCWs responded with majority (36:47%) from Nursing. 90.92% reported that it was easy to access workplace vaccination, with 82.35% citing encouragement from line manager in accessing vaccination. 64.54% of respondents were aware of HSE Land module, with 66.67% of Medics & Dentists being the most unaware. 60.17% of respondents did not know if there was any plan to undertake training within workplace.

One of the key elements in the successful introduction of vaccination is high-quality training of all HCWs on the vaccines and the diseases they prevent. Moreover, communication to relevant staff is particularly necessary to achieve high vaccine coverage especially among hesitant individuals



Alcohol per capita and prevalence of alcohol exposed pregnancies: systematic review and meta-analysis

Health Intelligence

E. Burton, P. Kearney, S. Kelly, M. Moffatt, J. Morris

Abstract

Alcohol, a teratogen, crosses the placenta. Worldwide, alcohol consumption per capita (APC) data are accessible. This systematic review assesses the relationship between APC and alcohol consumption during pregnancy, by country, gauging APC's accuracy in predicting prenatal alcohol exposure (PAE) prevalence.

This study combines data on PAE and fetal alcohol syndrome (FAS) prevalence from prior research by Popova et al. in 2017 and a MEDLINE search from 2015 to October 6, 2022. Two authors were involved in all processes from title and abstract screening to data extraction, incorporating World Health Organization (WHO) APC data by year and country. A meta-analysis with a random effects model and sensitivity analyses were conducted.

Out of 24,935 PAE and 12,231 FAS prevalence studies, 475 PAE articles and 77 FAS studies met inclusion criteria. Studies represent data from 1959-2020 from all 6 WHO regions, with APC between 0.012-14.78. Preliminary analysis suggests a statistically significant correlation between PAE prevalence and APC.

Investigating the association between PAE and APC enables publicly available data on APC by year and by country to be related to the epidemiology of congenital anomalies in different countries.



Healthcare professionals' perspectives of acute stroke care during the COVID-19 pandemic in Ireland: A qualitative descriptive study

Health Service Improvement

E. Burton, I. Hartigan, C.M. Buckley, P. Kearney, S. Masterson

Abstract

The management of time-sensitive conditions like acute stroke and transient ischaemic attack (TIA) serves as a key gauge for assessing the COVID-19 pandemic's impact on healthcare access and delivery. Thus we aimed to investigate healthcare professionals' perspectives on the emergency/pre-treatment phase of acute stroke care in Ireland during the COVID-19 pandemic.

We conducted semi-structured interviews from April-August 2023, with diverse healthcare professionals engaged in both prehospital and hospital-based stroke care. Participants were purposively sampled from two counties in Ireland. Data were analysed using reflexive thematic analysis.

Fifteen healthcare professionals participated in this study. They highlighted that "COVID-19 superseded everything" but found that the acute stroke pathway remained intact. They observed fewer stroke/TIA cases during lockdowns and COVID-19 surges. Visitor restrictions and impact on stroke survivors' well-being concerned all participants.

This study highlights interdependence among stroke care phases and changing patient behaviour during crises. Thus initiatives adapted due to and during COVID-19 provide insights for shaping acute stroke care in routine and crisis healthcare.



Policy options to reduce the national incidence of neural tube defects

Health and Wellbeing

E. Cosgrave, M. O Loughlin, A. Pardy, J. De Lacy, D. Gray, C.M. Murphy

Abstract

Ireland is recognised as having one of the highest rates of neural tube defect (NTD)-affected pregnancies globally, with an incidence rate of 1.05/1000 births.¹ The risk of NTDs can be reduced through adequate intake of folic acid peri-conceptionally by women of reproductive age.

To date Irish policies to achieve this on a population level have been based on recommending folic acid supplementation among women of reproductive age and voluntary fortification of foods with folic acid. Due to large scale non-compliance with supplementation and a decline in the number of foods fortified with folic acid, such measures are suboptimal in augmenting folic acid levels on a population level; it is likely this will be compounded by the rising prevalence of diabetes and obesity.

Mandatory folic acid fortification of food is an equitable, population-based policy approach to reduce NTDs with wide potential reach. This policy has been adopted by over 90 countries, with consequent reductions in NTD incidence reported; it is estimated this policy could reduce the risk of NTD-affected pregnancies in Ireland by 8-32%.²

There is a need to re-consider the optimal approach by which to ensure folate sufficiency peri-conceptionally in Ireland.



Is there a maximum transfer time for safe planned home births? Building evidence to inform policy in Ireland

Health Service Improvement

C. Carroll, I. San Lazaro Campillo, J. Keane, P. Corcoran, R.A. Greene, P. Kavanagh

Abstract

This study aimed to build an evidence base to inform recommendations on transfer times for the Health Service Executive (HSE) Home Birth Service.

Binary logistic regression was used to identify factors associated with intrapartum transfer and to examine the relationship between transfer time and outcomes for home births with the HSE Home Birth Service between 2012 and 2021. A survey on home birth policy and practice was issued to informants in countries offering comparable services to the HSE Home Birth Service.

Of 2,000 women initiating labour at home, 376 (18.8%) required intrapartum transfer. Primiparity (aOR: 8.95, 95% CI 6.89, 11.7, $p < 0.001$) and maternal body mass index ≥ 30 (aOR: 1.93, 95% CI 1.14, 3.20, $p = 0.013$) increased the odds of intrapartum transfer. Serious adverse outcomes were rare following intrapartum transfer. Maximum transfer time is defined in eligibility criteria for some Australian home birth services. In other regions, transfer time is considered when assessing suitability for home birth.

This study did not find a threshold time associated with increased risk of adverse outcomes for planned home births. Opportunities to enhance assessment of suitability and shared decision-making on birthplace were found.



The burden of asthma and chronic obstructive pulmonary disease in Ireland. A secondary analysis of The Irish Longitudinal Study on Ageing (TILDA)

Health Intelligence

K. Dryzmala, D. Stamenic, L. O Keeffe, C.M. Buckley

Abstract

Asthma and COPD are chronic respiratory conditions that contribute significantly to the burden of chronic disease in Ireland. We examined the specific burden of these conditions in Ireland and their implications on health service utilisation.

This is a secondary data analysis using data from 8097 participants aged 50+ from the first wave of TILDA. Outcomes were the self-reported number of general practitioner (GP) and outpatient department (OPD) visits, A&E attendances, and hospitalisations over the 12 months preceding the interview.

The prevalence of asthma and COPD were 9% and 4% respectively. Participants with asthma and COPD reported higher utilisation of all health services. Compared to those without asthma, higher proportion of participants with asthma visited GP 94% (91%, 95%) vs 87% (86%, 88%), and OPD 51% (47%, 55%) vs 40% (39%, 41%). Compared to those without COPD, higher proportion of participants with COPD visited GP 95% (92%, 97%) vs 87% (86%, 88%) and OPD 60% (54%, 65%) vs 40% (39%, 41%), with similar results observed for the use of other healthcare services.

Asthma and COPD cause significant additional use of healthcare services in Ireland, increasing burden on the health system over time.



A health economic evaluation of a dedicated primary care service for social inclusion in the Mid-West of Ireland

Health Intelligence

S. Kenny, P. O'Donnell, A.P. Dee

Abstract

People experiencing homelessness (PEH), and other marginalised groups, have complex multi-morbidity and social needs, and are at high risk for poor health outcomes. Access and social barriers to mainstream general practice (mGP) leads to costly and inappropriate hospital care that fails to meet their needs. The Inclusion Health Clinic (IHC) of HSE Social Inclusion in CHO3 offers care to socially excluded groups and is the focus of this economic evaluation.

Cost analysis was undertaken with the perspective of the publicly funded healthcare system from 01/09/21 to 31/08/22. Cost data from IHC was compared to the cost data from the literature for mGP and acute services. Potential costs averted were also calculated.

Total cost of IHC is €193,851.70 pa. Cost per consultation is €84.61 compared to €52.50 in mGP. Use of dedicated homeless clinics for medical needs could reduce odds of ED usage by 39%. Potential cost savings in averted ED attendances and inpatient admissions is estimated to be 418 bed days and €329,406.98pa.

Not unexpectedly, IHC costs more per consultation than mGP due to the complexity of clients' needs. Despite this for every €1 investment in IHC services there is an estimated return of €1.70 in costs averted.



The association between socioeconomic position and cardiovascular disease in Ireland: A structured life course analysis of The Irish Longitudinal Stud

Health and Wellbeing

E.T. Kearney, K. O'Neill

Abstract

Socioeconomic position (SEP) across the life course influences cardiovascular disease (CVD). We explored the sex-specific association of life course SEP and CVD among Irish adults. Data from Wave 1 of The Irish Longitudinal Study of Aging (TILDA) was analysed. A set of sex-stratified nested logistic regression models, each representing a specific life course model (critical period, accumulation, sensitive period) were compared to a fully saturated model to determine which one best described the association between SEP and CVD prevalence.

One in five TILDA participants had CVD, with higher prevalence among males. Disadvantaged SEP across the life course was consistently associated with CVD among females but not males. The effect of SEP on CVD across the life course among females is best explained by a sensitive period model whereby a higher educational attainment in later life may confer the greatest protective effect (OR 0.69, 95%CI:0.6; 0.84). There was little evidence of an effect of life course SEP on CVD among males.

SEP across the life course was associated with CVD among females but not males. Interventions targeting SEP specifically in adulthood among females may help reduce socioeconomic inequalities in CVD.



Examining Vitamin D predictors across Ethnicities: a cross-sectional analysis of the UK Biobank

Health & Wellbeing

M. Brennan, J. Van Geffen, M. Van Geele, L. Zigaga, R. Shraim

Abstract

Up to 40% of Europeans are vitamin D deficient, with notable disparities between ethnicities. Despite this, little is known about the relative importance of vitamin D predictors in different ethnic groups. This study aimed to examine the association between serum 25-hydroxyvitamin D (25OHD), ultraviolet-B (UVB), and other 25OHD predictors.

A cross-sectional analysis of the UK Biobank and Tropospheric Emission Monitoring Internet Service was conducted. Associations between 25OHD and predictors were evaluated with multivariable linear regression, stratified by ethnicity, including interactions with BMI and sex.

438,978 participants were analyzed. Median 25OHD was 47.1 nmol/L (IQR 32.7-62.6), but this varied significantly by ethnicity (Asian 25.4, Black 30.6, White 47.9, $p < 0.001$). In the White subgroup, UVB was the most important predictor of 25OHD ($\beta=0.35$, variance=14%) whereas vitamin D supplementation was most influential for those of Asian and Black ethnicities ($\beta=0.15$ and variance=10%, $\beta=0.20$ and variance=6% respectively).

The relative importance of factors contributing to 25OHD vary significantly between different ethnicities in the UK. Findings can be used to inform population approaches to vitamin D optimization.



Uptake of the first dose of MMR vaccine in Cork & Kerry, before and during the COVID-19 pandemic

Health Protection

M. Hanrahan, H. M. T. Sheahan

Abstract

Declining uptake of the Measles, Mumps and Rubella (MMR) vaccine is a serious public health concern.[1] The aim of this study was to compare uptake of the first dose of the MMR vaccine among a sample of children from Cork and Kerry who were born before and during the COVID-19 pandemic.

This cross-sectional study included all children born during the first quarter (Q1) of 2018 and Q1 of 2021 who had a last known address in Cork or Kerry as of September 2023. Data was extracted from the Primary Childhood Immunisations Database. Uptake, default and refusal rates were compared between time periods using the chi-square test.

Vaccine records of 2,108 and 2,049 eligible children were examined from 2018 and 2021 respectively. The MMR uptake rate for the 2018 cohort was 95.5% compared to 93.6% for the 2021 cohort ($p = 0.005$). The defaulter rate was significantly higher for the 2021 cohort compared to the 2018 cohort (3.1% vs 1.9%, $p = 0.015$) while the refusal rate was also higher but not significantly different (3.3% vs 2.5%, $p = 0.123$).

MMR uptake appears to have declined, primarily due to an increased proportion of vaccine defaulters. Increased efforts to facilitate vaccination, such as weekend clinics, should be considered.



Assessment of sun protection behaviours in the Irish adult population following the SunSmart Campaign 2023

Health and Wellbeing

C. Kelly, M. McEnery, S. Daly, A.M. Tobin, T. McCarthy

Abstract

SunSmart is an annual awareness campaign run by the HSE's National Cancer Control Programme and Healthy Ireland. This study assessed sun protection awareness following the 2023 campaign, compared to 2022.

An online survey was conducted in September 2023, a repeat of the 2022 survey. Data were collated and analysed in Excel.

In 2023, 48% (n=480) adults reported being sunburnt that summer. Younger adults were more likely than older adults to report sunburn (62% v 28% p<0.001). In assessing the "SunSmart 5s": 94% rated sunscreen, 88% rated shade, 84% rated hats, 71% rated long sleeves, and 70% rated sunglasses as important – all increased compared to 2022. Older adults were more likely than younger adults to rate each factor as important. Awareness of the campaign had increased, 32% having heard of SunSmart, compared to 21% in 2022 (p<0.001). Awareness was higher in older adults (39% v 21% p<0.001), and in those who reported no sunburn (34% v 30% p=0.023).

Awareness of SunSmart and perceived importance of the sun protection behaviours have improved since 2022, with perceived importance of the "SunSmart 5s" reasonably high. Reaching younger adults and improving their sun protection behaviours remain areas for progress.



Review of influenza cases notified in HSE South West during the 2022-2023 influenza season

Health Protection

J. Rolls, O. Bruton, M. McEnery, L. Carlton, H.M.T. Sheahan

Abstract

The Computerised Infectious Disease Reporting (CIDR) system is one of the data sources used in influenza surveillance in Ireland. CIDR data were used in this study to describe the 2022/2023 influenza season, to determine if unvaccinated cases had a longer hospital stay compared to vaccinated cases and to assess accuracy of patient type.

Influenza data were extracted from CIDR. Patient type, hospital admission, discharge dates and vaccination status were updated using CIDR lab records, the patient information management system and Covax (the HSE national vaccination registry). Where no vaccine record was found on Covax, the case was assumed to be unvaccinated. Data were updated on CIDR by the HSE Contact Management Programme.

An overview of the 2022/2023 influenza season was prepared using excel; epidemiological curve, age specific incidence rates, ICU admissions and mortality rates. The vaccinated 2-17 year olds spent an average of 2 days in hospital compared to 2.5 days in unvaccinated cases, there was no difference observed in the 18-64, the vaccinated >65's spent an average of 13 days in hospital compared to 22.5 days in unvaccinated cases.

Study data is being used to promote the Influenza vaccine rollout in the region.



A National TB incident in a Migrant Congregate Setting: Challenges and Recommendations

Health Protection

N. Murphy, A. Bermingham, M. Leahy, H.M.T. Sheahan

Abstract

Tuberculosis (TB) is a leading cause of death worldwide. 2022/23 has seen unprecedented levels of immigration to Ireland. Ireland is a low-incidence TB country but most immigration stems from high burden countries. This study aims to identify the public health challenges occurring during a national TB incident in a migrant congregate setting and provide recommendations.

Epidemiological data were collected on the index case and contacts by accessing TB databases and paper records in five of the six areas of public health necessitating inter-departmental collaboration. A survey of clinical staff was performed.

Due to a three week stay in the National Transit Centre, the index case generated 78 close contacts in five of six areas of public health. 23 cases of LTBI were identified.

The incident presented numerous challenges including difficulties in identifying contacts, managing LTBI cases and migrant access to primary care. Organizational challenges were encountered involving transportation, personal safety and movement of patients to other sites. Recommendations include future early identification of active TB cases, provision of directly observed therapy (DOT) and a comprehensive contact tracing service for migrant populations



The 'Clarify the Objective' Facilitation Approach: potential relevance to Public Health Teams in a time of change

Health Service Improvement

C. O'Hare, M. Morrissey, D.J. McKeown, G.M.M. Sayers, D. Keoghan, M. Boland

Abstract

Background

We describe the impact of a novel facilitation method, which aims to assist varied healthcare (HC) teams in creating or renewing their group 'vision statement' and direction amid organizational change.

Methods

Four teams (5-to-11 individuals) participated in group facilitation using a methodology called 'clarify the objective'(CTO). CTO is a 7-step process, grounded in established visualization and facilitation techniques, which seeks to enable HC teams to agree a consensus vision statement to support the team's trajectory. Participants completed a 4-item questionnaire pre- and post-facilitation designed to capture change in perceived clarity on team vision and direction. For each facilitation group, paired ANOVA tests compared change over time in responses across questionnaire items.

Results

Across four groups, over a total of 18 facilitation hours, 28 participants completed the CTO intervention, of whom 27(96%) also completed pre- and post-facilitation questionnaires. All groups showed improvement in participants' perceptions of clarity on team direction and vision ($p<0.05$).

Discussion

CTO may assist HC teams to reach consensus on group direction and vision particularly at times of organizational change.



Evaluation of the National Serosurveillance Programme and HSE National Hepatitis C Treatment Programme Collaborative HCV Seroprevalence Study.

Health Service Improvement

J. Finucane, A. McCormick, K. Browne, D. Igoe, K. O'Brien, E. Brabazon, L. Domegan, G. Martin, C. Dillon, A. McKenna, E. Perry, F. Culkin.

Abstract

The National Serosurveillance Programme (NSP) currently monitors SARS-CoV-2 seroprevalence to inform vaccine policy. The Programme undertook its first partnership with an external third party in 2022. A collaborative seroprevalence study with the National Hepatitis C Treatment Programme, to understand current hepatitis C virus seroprevalence in the Irish adult population and inform hepatitis C birth cohort screening policy.

An evaluation of the process was undertaken to consolidate learning and inform future collaborations. Following international frameworks on surveillance evaluation, it explored the attributes of usefulness, timeliness, representativeness, simplicity, flexibility and acceptability. Data was collected from semi-structured interviews and a Qualtrics survey.

Results showed high satisfaction with the attributes explored and the main improvements identified as timely signing of service agreements to avoid operational delays; timely reporting of results, and greater visibility of NSP collaborative opportunities.

It demonstrated the feasibility and usefulness of this surveillance methodology for other infectious diseases of public health importance and a standard operating procedure is under development by the NSP.



Infectious Disease Screening among vulnerable migrants

Health Protection

F. O'Reilly, A. O'Dalaigh, S. Bhandari, D. F. H. Hamilton

Abstract

Safetynet Primary Care's Mobile Health and Screening Unit is commissioned by the HSE National Social Inclusion Office to provide health assessment and screening services to International Protection Applicants (IPAs). Post Covid Ireland has seen an increase in numbers of IPAs seeking protection.

In the first 6 months of 2023, 567 IPAs from 55 different countries agreed to voluntary health screening offered by Safetynet Primary Care at 3 emergency accommodation sites in Dublin and Wicklow.

532 (93%) agreed to blood tests for HIV, Hepatitis B, Hepatitis C and Syphilis. Of these 426 (75%) provided a urine sample or vaginal swab to be tested for STIs.

Results indicate 12 (2.2%) new cases of chronic Hepatitis B, 6 (1.1%) Hepatitis C, 6 (1.1%) Syphilis and 3(0.6%) new cases of HIV. 10 (1.7%) cases of Chlamydia were detected and treated and no Gonorrhoea was detected. All positive results were followed by the Safetynet team and referred for specialist follow up or treated. Results from the TB questionnaire indicated 67required Chest Xray. None were found to have active TB.

Rates of new infections found are far greater (180-400 times) than that found among new cases in Ireland demonstrating the import of this screening.



Using Nominal Group Technique in a Stakeholder Engagement Process to inform Regional Child Health Needs Assessment

Health Service Improvement

S. Bel-Serrat, A. Reddan, C. Dowling-Cullen, H. Glynn, N. Dever, R. Conway, R. Corcoran
S. Qaisar, M. M. Canny

Abstract

Executive participated in one of two SEP Workshops held in April and June 2023 in the West and North West respectively. Nine groups of 5-7 participants used the Nominal Group Technique to generate statements relating to unmet child health needs which were ranked from least to most important. The top five ranked statements from each group were analysed thematically.

Fifty-eight statements were analysed. Six key themes were identified: parental support, staffing, service waiting times, service integration, service availability, and social determinants of health.

These themes of unmet health needs of children could be used to advocate for child health services regionally and to support the planning and provision of future services.



A nosocomial outbreak of invasive Group A Streptococcus infection during a national upsurge in incidence in Ireland

Health Protection

C.F. Ni Bhuachalla, C. D'arcy Walsh, A. Ronayne, M. Creedon, M. Meehan, P. Barrett

Abstract

National incidence of invasive Group A Streptococcal (iGAS) infection increased significantly from 2022, but nosocomial outbreaks remain very uncommon. We describe the Public Health (PH) management of a nosocomial iGAS outbreak in a vulnerable population on an oto-rhino-laryngology ward.

Following notification of two epidemiologically linked inpatient cases of iGAS infection, a multidisciplinary outbreak control team was convened. National case definitions were used. Control measures were implemented. Environmental and hospital-staff screening was conducted. Isolates were sent to the national reference lab for typing and whole genome sequencing (WGS).

Five linked patient cases of iGAS infection, from two wards, generated 64 patient close-contacts. Communication alerts were issued to all close-contacts, of whom 13 received chemoprophylaxis; 20 close-contacts were followed-up by PH. Of 138 staff members screened, 3/138 (2.2%) returned positive GAS results, of whom 2 were linked by emm-typing (both asymptomatic). Six outbreak isolates returned emm-type 28 sequence-type 458, WGS revealed high relatedness.

Management challenges include paucity of nosocomial guidance and absence of a national outbreak and case management system.



Winter is Coming: Actions health services can take to reduce the impact of Energy Poverty

Health Service Improvement

A.M. Murray, L. Smith, C. Carroll, C. Lynch, P. Kearney, F. Cooney

Abstract

Energy Poverty contributes to winter mortality as cold homes adversely impact on health and increases health service use. The Energy Poverty Action Plan¹ provides a strong policy framework for health services to take action to protect the population and the health services. This paper describes preliminary work carried out by a public health multi-disciplinary team (MDT) and follow on actions underway to inform implementation.

The MDT agreed an evidence search strategy, completed a rapid review and synthesis of the literature and produced a rapid report on Energy Poverty with a narrative synthesis².

Key health service recommendations include increasing awareness among health and social service personnel, implementing a national health sector policy, co-location of support and home improvement services to enhance accessibility, and maintenance of appropriate ambient temperatures in health facilities.

Utilising the COM-B model, work is underway to establish whether healthcare personnel have the capability, opportunity or motivation to discuss Energy Poverty with service users. This information will be used to devise an evidence informed implementation plan to support concerted action on Energy Poverty among healthcare personnel.



Positive evaluation of an Immunisation Workshop for General Practice Nurses in Dublin West/South-West (CHO7)

Health Service Improvement

F. McGuire, I. Gorman, M. Ward

Abstract

General Practice nurses (GPNs) play a key role in achieving the recommended childhood vaccination uptake rates. In CHO7 the most recent MMR uptake rate was 92.8%. Consequently, an Immunisation Workshop was organised for GPNs to support the immunisation process. Our aims included providing guidance on vaccination in migrant populations and how to manage vaccine hesitancy.

Two interactive three-hour workshops were delivered by a multidisciplinary team and regional immunisation coordinator. Sessions included presentations, role plays and a Q&A. Key issues raised included: difficulty in obtaining sufficient timely vaccines for changing practice cohorts, challenges with payment processes for vaccines and lack of clarity in the area of consent for vaccination. In total 88 GPNs attended over the two days. 64/88 (73%) GPs completed the survey. 100% of respondents were satisfied that the information provided was relevant to their needs. We identified immunisations for migrants and refugees as a key learning need for GPNs. 18% of respondents rated their knowledge as high in this area before the workshop, this increased to 81% after the workshop. 81% of respondents intended to make changes in their practice after attending the workshop.



A national survey of the public health management of contacts of acute and chronic Hepatitis B cases

Health Protection

C. Conlan, M. Ward, A. Murray, A. King, P. Downes, G. Meagher, K. Dunne, Y. Williams, F. Cianci

Abstract

Hepatitis B virus (HBV) is a vaccine-preventable disease. Ireland has committed to eliminating viral hepatitis as a major public health concern by 2030. Household and sexual contacts of individuals with HBV infection are at increased risk and should receive screening and vaccinations. This project aimed to gather information on the approach of each public health (PH) department in Ireland to the management of contacts of HBV cases.

A survey was circulated and completed by an informant in each PH area in June 2023. The results were compared between areas.

For chronic HBV, health protection (HP) teams were fully responsible for enhanced surveillance form (ESF) completion in 1 of 6 areas. HP teams were fully responsible for contact tracing in 1 area, and partially in 2 areas. Where HP teams did not complete ESF/contact tracing, the responsibility lay with the diagnosing clinician or GP. Conversely, for cases of acute HBV, HP teams were fully responsible for ESF completion, contact tracing and arranging post exposure prophylaxis (PEP).

PH areas differ in the management of contacts of chronic HBV. HP teams completing ESF, contact tracing and arranging PEP should be a priority action in order to meet HBV elimination targets.



Assessment of patient experience with gastrointestinal endoscopy within a tertiary hospital endoscopy unit.

Health Service Improvement

S. Fennessy, B. Leahy, E. McDermott

Abstract

Background

International studies have shown that improved patient experience led to reduced missed appointments, increased adherence to treatment plans, reduced healthcare utilisation and overall better clinical outcomes.

Objectives

We wanted to measure our patients' experience within our endoscopy department, as well as their digital literacy and preferences regarding patient education and communication in the future.

Methods

We designed a 2-stage questionnaire (incorporating the validated Newcastle ENDOPREM) with the help of a diverse stakeholder group. We offered paper and digital survey options. All outpatients presenting for OGD/colonoscopy/sigmoidoscopy were included.

Results

146 patients responded (58.7% response rate); median age 70.5 years. 22.2% sought further information prior to procedure; 46.7% found our departmental information "easily available"; 68.9% found it "easy to understand". 83.3% wanted to receive information via email (median age 53.9). 26.3% were unclear about their follow up on discharge. 89.7% were satisfied with their experience.

Conclusion



Whilst patients are satisfied with their experience, it is clear that we have to improve how we communicate and educate patients pre/post procedure.



A review of Dermatology surgeries carried out on renal transplant recipients at Beaumont Hospital

Health Service Improvement

K. Casey, M. Roche, S. Ní Raghallaigh

Abstract

Renal transplant recipients are at a higher risk of developing skin cancers (1). Beaumont Hospital coordinates the National Kidney Transplant Service for the Republic of Ireland. It was noted by the Beaumont Dermatology team that a large volume of their Dermatology surgical procedures were being carried out on renal transplant recipients specifically. Anecdotally there is a real and recognized need for a multi-disciplinary renal transplant skin clinic at Beaumont Hospital, however no local data existed to support its implementation and this was the purpose of our study.

This observational study reviewed a case series of consecutive renal transplant recipients who required Beaumont Dermatology review.

Our results demonstrated that in the calendar year 2019, over 8% of Dermatology surgery procedures were carried out on renal transplant recipients alone. Of these, 41% required direct referral to Plastic Surgery colleagues, due to the advanced or complex nature of a skin cancer.

The implication of this study was to support a recommendation on moving to a more ideal model of care via implementation of a dedicated multi-disciplinary team renal transplant skin clinic, to support skin cancer screening and early intervention.



An audit of Hepatitis C notifications to the Department of Public Health HSE Mid-West Jan - Dec 2022th Mid-

Health Service Improvement

E.T. Kearney, G. McHugh, B. Cosgrove, A. O'Connell

Abstract

Hepatitis C viral (HCV) infection can lead to serious liver damage if untreated. Case numbers have risen nationally and in the Mid-West (MW) since 2020. This audit quantified the number of HCV notifications to the Department of Public Health (DPH) MW and their subsequent departmental recording and management. The departmental infectious diseases (ID) log was reviewed and the other Regional DPHs were contacted by email in relation to their HCV practices for comparison.

Of the 35 notifications of HCV to DPH MW, 97% were entered on the ID log, enhanced surveillance forms (ESFs) were sent for 91.4% and returned in 61.8%. Data completeness of different indices in returned ESFs ranged from 6% to 67.6%. 32.3% of ESFs were sent by post, 14.7% by email and delivery method was unrecorded in 50% of cases. Of the other regional DPHs, the majority felt that ESF return for HCV cases was poor, with associated inadequate completion of forms.

Methods of documentation of HCV cases and correspondence with clinicians varied within the department. There is significant scope for improving the rate of return and completeness of HCV ESFs to the DPH MW and recommendations have been made. Anecdotally, this is replicated in most other regional DPHs.



Verotoxigenic *Escherichia coli* in the Mid-West – A Retrospective Analysis

Health Protection

C. Sharkey, B. Cosgrove

Abstract

Aim

To assess time to microbiological clearance for Mid-West VTEC cases in risk groups over a 12-month period.

Background

Enhanced surveillance is performed on all VTEC cases in Ireland. The risk of onward VTEC transmission is assessed by categorising cases into risk groups. Cases in a risk group require microbiological clearance in the form of two negative stool samples before returning to a work or care setting. Waiting for clearance can often be lengthy and socioeconomically challenging.

Methods

This retrospective secondary data analysis examined all VTEC cases between October 2022–2023 in the region using local infectious disease logs. iLab laboratory system was used to identify time from first positive sample to second microbiologically clear sample. R was used for all statistical analyses.

Results

There were 131 PCR positive VTEC cases in a 12-month period. 40.6% of cases (53/131) were in a risk group. The median time to clearance was 22 days (IQR: 12 to 29) with 67.9% (36/53) of cases requiring more than 14 days. 26.4% (14/53) required over four weeks. 9.4% (5/53) required over six weeks.

Discussion



National guidance to risk assess chronic shedders is needed to avoid lengthy absences from childcare and work.



A Rabies-Like Virus Exposure Incident with a Multifaceted One Health Response

Health Protection

M. O'Sullivan, J. Fanning

Abstract

There have been no indigenous cases of rabies in Ireland since 1903(1). Legal border controls exist to keep animal disease out. This rabies-like virus exposure incident, involving an imported sable, presented complex challenges to public health medical and veterinary investigators.

In Jan 2020, Public Health was notified of possible rabies suspect in a pet sable by the Dept. of Agriculture, Food and the Marine. The sable had originated in a high risk country(2). Its international and Irish movements were traced, relevant authorities alerted, human and animal contacts identified, risk assessments of potential exposures undertaken, an animal surveillance zone placed and press release issued.

Thirteen contacts received post-exposure treatment; three required human rabies immunoglobulin. No associated animal cases were identified. Definitive test results from the European Union Reference Laboratory for rabies (EURL) reported evidence of low levels of lyssavirus genetic material in the sable's brain samples. Based on this, rabies could not be ruled out.

The incident required a multifaceted response. Establishing the animal's likely infectious period was highly challenging. Associated learning will inform national guidance.



HPV Self-Sampling in Ireland: A Survey of CervicalCheck Sampletakers' Preferences, Knowledge, and Attitudes about HPV Self-Sampling

Health and Wellbeing

P. White, S. Al-Kalbani, S. Woods, R. Comer, S. Fitzgibbon, N. Russell, C. Mason Mohan
L. Heavey

Abstract

Self-sampling for HPV is an alternative to provider-collected HPV testing for cervical screening. Understanding sampletakers' attitudes towards self-sampling is crucial, as they play an integral role in screening. This study aims to understand sampletakers' knowledge and attitudes towards HPV self-sampling as a potential, additional screening method for cervical cancer.

An online, cross-sectional survey of HPV sampletakers in Ireland was conducted. Survey content was informed by a literature review and consultations with key stakeholders. It consisted of 18 questions and was disseminated via email to all eligible CervicalCheck sampletakers.

200 sampletakers completed the survey. 73% of respondents were aware self-sampling existed and 51% were aware the WHO recommends it as an additional screening method. Two thirds (67%) supported self-sampling as an additional screening method, while 9% did not and 24% were unsure. Improving screening uptake (74%) and reducing patient anxiety (20%) were the main reasons respondents supported self-sampling.

Knowledge about self-sampling among sampletakers in Ireland appears to be good and a majority would support self-sampling as an additional cervical screening method.



A Review of Migrant Catch-Up Vaccination roll-out in HSE Midwest

Health Protection

R. Mcnamara, M. Lynch, P. Fitzgerald, S. Oakley, A. McDonald, B. Cosgrove

Abstract

Primary immunisation is a priority need for migrants regionally and nationally. A team was formed from Public Health and Community Health to bring vaccination rates amongst Beneficiaries of Temporary Protection/International Protection Applicants aged 0-23 in line with general vaccination rates in Ireland.

The first six months of the catch-up campaign (Mar-Sep 23) was evaluated. This included a quantitative analysis of migrants targeted and rates of uptake and a qualitative review of challenges, lessons learned and future needs.

There were approximately 3,500 migrants in the target age range housed in residential sites in March 23. In six months, 216 individuals were vaccinated with 363 vaccines. The average rate of uptake was 12.5% (range 2-71%). Challenges were explored including language barriers, children with prior immune reactions, consent issues and migrant movement.

Continuous evaluation of targeted health protection initiatives such as this is important to determine impact. Recommendations were formed including enhancing communication around existing vaccine programmes, increasing clarity around medical governance and the driving the need for national agreements with residential sites regarding on-site vaccination.



Action Design Research Project to Augment the impact of National Patient Safety Alerts

Health Service Improvement

R. Mcnamara, L. Klotzbach, S. Manning, C. Hogan, N. Palacios, J. Gormly, M. B. Mannix

Abstract

This action design research project¹ aimed to evaluate the dissemination process and expand the reach of the National Patient Safety Alerts (NPSAs) to all areas of the health system. Alerts are generated under the National Quality and Patient Safety Directorate (NQPSD) in response to adverse incidents, new evidence etc.

Multiple stakeholder engagement meetings were held with patient safety leads across NQPSD. Interviews were conducted with local patient safety officers, elucidating their experience in managing NPSAs and challenges that they encountered distributing alerts to staff.

Several pain points were identified. The relevance of each NPSA was not clear to every institution and there was a lack of clarity around who was responsible to implement the recommendations of the alert. Duplication of alert receipt was taking place, and the sole use of email was unlikely to reach many frontline staff.

A new template for the NPSAs was developed which was clear, instantly recognisable and visually alarming. A Digital Communications Toolkit was developed to allow dissemination in multiple formats including messenger app and PowerPoint. The Local Action Plan for distribution was augmented to clarify implementation and validation role.



Successful control of a protracted scabies outbreak in an extended migrant family utilising the National Infectious Disease Isolation (IDI) facility

Health Protection

E. Horgan, O. Jackson, T. O’Gorman, P. Barrett, M. O’Sullivan

Abstract

Some migrant groups are disproportionately affected and burdened by infectious diseases.[1] This report highlights the successful outcome of a protracted scabies outbreak affecting an extended migrant family which involved significant public health support.

Outbreak was notified to Public Health following several rounds of unsuccessful treatment. Public Health coordinated two further attempts. Key challenges included language and cultural complexities, extended family unit of 15, overcrowded conditions, suboptimal treatment adherence, school absenteeism and the ethical implications of inadequate treatment of minors.

Outbreak management involved comprehensive family engagement, concomitant treatment of infected persons and their close contacts as well as environmental decontamination. The outbreak control team advised referral of the extended family to the National IDI Facility. The family agreed. Arrangements required extensive multidisciplinary input, time-wise and resource-wise. Satisfactory treatment resulted in eventual outbreak closure.

Outbreak control in congregate living facilities can be challenging and resource intensive. This outbreak highlights the vulnerabilities, needs, and inequalities experienced by migrants.



Sexual Health in the Midwest: A post pandemic profile and multi-disciplinary response

Health Protection

M. Barnes, K. Beatty

Abstract

Since 2021, Ireland [1] and other jurisdictions [2] reported increasing rates of sexually-transmitted infections (STIs) when compared to the pre-pandemic period.

Public Health Mid-West (PHMW) developed a regional sexual health profile by comparing the number of Chlamydia and Gonorrhoea notifications and stratifying this data against key indices including gender, age and modes of transmission.

The results indicated:

- Chlamydia= +20%. Gonorrhoea= +41% (2019-2022)
- Higher levels of Chlamydia in females (60% *) and Gonorrhoea in males (78%*) in 2022. (*of all cases)
- Gonorrhoea transmission: predominantly gbMSM since 2017: increase in heterosexual in 2023
- Increase in the use of home testing

The results prompted PHMW to establish a regional multi-disciplinary, cross-organisational sexual health and well-being committee which designed and delivered a multi-platform sexual health awareness campaign targeting local, national and online audiences.

Public Health has a crucial role in informing and advising the public on their sexual health and possible implications of STIs. PHMW intends to expand the awareness initiative to effectively communicate with underserved communities through collaboration with the regional committee.



Paediatric Invasive Group A Streptococcal Morbidity and Mortality in Ireland 2023-23: A Retrospective Chart Review

Health Protection

O. Cotter, D. Foley, F. Cloak, M. Ward, C. Ó Maoldomhnaigh, U. Fallon, P. McKeown

Abstract

The Irish age specific death rate in invasive Group A Streptococcal (iGAS) patients under the age of 18 has risen from 0.10 to 1.43 per 100,000 population, since the upsurge in paediatric iGAS activity in October 2022 .1 This review aims to differentiate the factors in more severe presentations.

This retrospective review included iGAS hospitalisations under the age of 16, notified from 1st October 2022 to 30th June 2023. Data was sourced from hospital medical records, under the Medical Officer of Health mandate.2

There were 183 hospitalised iGAS cases during this period and a 74% (137) response rate for this review. The median age on admission was 4 years and 17% (24) required intensive care (PICU) treatment. On admission, 28% (38) were co infected with varicella and 36% (50) with a respiratory viral infection. The review identified a number of cases not notified to Public Health during this upsurge.

There has been considerable mortality and morbidity due to this iGAS upsurge. The key areas for Public Health messaging should focus on promoting uptake of childhood influenza seasonal vaccination and highlighting the statutory obligation to inform the MOH of notifiable infectious disease.



Seroprevalence of chronic Hepatitis C virus in Ireland: informing birth cohort HCV screening policy

Health Service Improvement

K. O'Brien, C. Dillon, C. Dillon, J. Finuacane, E. Brabazon, G. Martin, M. Carton, L. Whitton, N. Murphy, K. Browne, J. Connell, M. O'Grady, A. McCormick, D. Igoe

Abstract

Treatment of Hepatitis C virus (HCV) infection with direct-acting antivirals can safely and effectively cure 95% of infections. The aim of this collaborative study was to identify HCV seroprevalence in the Irish adult population to inform future national HCV screening strategies.

Between June 2022 and May 2023, anonymised residual sera from adults tested in primary care were collected in regional laboratories. HCV antibody testing, and if positive, HCV antigen testing, were undertaken in the National Viral Reference Laboratory.

The prevalence of HCV (antigen positive) was 0.12%, 95%CI [0.07%, 0.23%] (10/8029); in males 0.20%, 95%CI [0.1%, 0.39%] and females 0.05%, 95%CI [0.01%, 0.18%]. For adults born between 1965-1985 (birth cohort), the prevalence estimate was 0.19%, 95%CI [0.09%, 0.41%].

Birth cohort testing was recommended by the Health Information and Quality Authority (HIQA) in 2017 to target people living in Ireland with undiagnosed HCV. However, in view of the high costs and the lower prevalence estimates in this study, an alternative targeted approach may be more appropriate. These results, pooled with other studies, have been submitted to HIQA for consideration.



Breastfeeding rates over the past five years in the MidWest compared to national rates and priorities for improvement identified

Health and Wellbeing

A. O'Connell, B. Mellett

Abstract

Exclusive breastfeeding is recommended by the World Health Organisation as optimal nutrition for infants for the first 6 months of life. Ireland has had comparatively low rates over the past 70 years. This report aimed to determine what percentage of mothers are breastfeeding in any capacity at the primary Public Health Nurse (PHN) visit and at the three month visit in each county in the MidWest and compare this to the national average and to the national target. Results showed a steady increase in breastfeeding rates nationally over the past 5 years. In 2022, nationally, 62.35% of infants were being either exclusively or non-exclusively breast fed at the primary visit. This is approaching the target of 64%. All counties in the MidWest lagged behind the national average, with rates of 48.4% in Limerick, 57.05% in Clare and 54.22% in North Tipperary. The target for the three month visit is 46%. At this visit, the gap between county Limerick (34%) and North Tipperary (31%) with the national target had widened. Key regional stakeholders were consulted to identify areas for improvement and initial priorities for action developed - reducing stigma, increasing awareness and specialised supports. Implementation of these is ongoing.



Survey of National and Regional datasets to assess their potential to support targeted service planning

Health Intelligence

C. Hayes, G.M.M. Sayers, N. McCarthy, H. L. Stafford, Johnson

Abstract

This survey reviewed the content of national and regional health datasets to assess their potential to support service planning and sub-population targeting at many geographical levels.

The Health Information and Quality Authority catalogue (v.4) of health and social care datasets (129) was examined. Relevant datasets were selected by consensus. A variable list was constructed to focus on geographic granularity, and measures of inclusivity building on previous work.⁽¹⁾ An online survey of the presence of parameters was sent to the database managers (40) using Microsoft Forms. Analysis was descriptive.

The survey response rate was 70% (28/40). Age was recorded on all databases and sex on 93%. Socio-economic, medical card and education status were poorly recorded (29%, 21%, and 18% respectively). Race, ethnicity or cultural details were recorded by 50%, and disability by 36%. County was recorded by 86%, Health Region by 40%, electoral division by 36%, and CSO small area by 29%.

Existing datasets have large gaps in variables that could support targeted health service planning. A standardised approach to the inclusion of critical parameters within health datasets is required to support the full implementation of Sláintecare.



Reduced Verotoxigenic *Escherichia coli* notifications in adults and urban residents following introduction of COVID-19 measures, Ireland, 2015-2021

Health Protection

C. Nielsen, A. Colgan, P. McKeown, P. Garvey

Abstract

Nationwide restrictions were introduced in Ireland on 12-03-2020 to reduce spread of SARS-CoV-2. We assessed if notified Verotoxigenic *Escherichia coli* (VTEC) incidence changed after introduction of restrictions in Ireland.

We conducted an interrupted timeseries analysis using negative binomial regression of VTEC notifications 2015-2021, accounting for secular trend and seasonality. Interruption was a binary variable (< vs > 12-03-2020). The effect of the interruption was assessed overall and in different sub-populations.

There were 5,663 VTEC notifications 2015-2021. While we did not detect an overall reduction, VTEC notifications reduced after 12-03-2020 among ≥ 15 -year-olds [25% (95% CI 8-38)] and urban residents [49% (95% CI 27-64)]. No change was detected for other sub-populations.

Activities affected by pandemic restrictions likely had a greater impact on reported incidence in persons with less rural environmental exposure, urban dwellers and adults. This was consistent with an expectation of persisting exposure to VTEC risk factors such as private well use during the period of pandemic restrictions. These analyses may prove useful to support public health messages to limit VTEC infection by environmental exposure.



Respiratory Virus Testing Capacity and Practices in Acute Hospital Settings in Ireland; Results from a National Laboratory Survey

Health Protection

A. McKenna

Abstract

The COVID-19 pandemic has driven substantive changes to respiratory virus testing capacity and practice in Ireland. The Health Protection Surveillance Centre (HPSC) conducted a survey of testing practices for SARS-CoV-2, influenza, respiratory syncytial virus (RSV) and other respiratory viruses (ORV) in acute hospital laboratories in Ireland in summer 2023.

The survey was conducted using Qualtrics inviting participants from 40 hospital laboratories. The response rate was 75%, 30 of 40 laboratories responded. All 30 laboratories conduct on-site respiratory virus testing using RT-PCR. Singleplex RT-PCR SARS-CoV-2 testing was reported by 19 (63%) sites. Multiplex RT-PCR respiratory virus testing was reported by 28 (93%) sites. Daily testing services were reported by 27 sites (90%) for SARS-CoV-2, by 28 sites (97%) for influenza, and by 24 sites (89%) for RSV. Ten (33%) sites also reported using near patient testing for respiratory virus testing, most (80%) using molecular methods.

The survey demonstrates widespread availability of respiratory virus testing for SARS-CoV-2, influenza and RSV across Ireland with most laboratories undertaking daily year round testing for SARS-CoV-2, most are using multiplex RT-PCR testing.

