



FACULTY OF PUBLIC HEALTH MEDICINE

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

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Abstracts.

Learning from a prolonged outbreak of tuberculosis associated with an intellectual disability daycentre for adults, Ireland 2008-2023

Topic / Dept - Health Protection

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Co Author: Kieran O'Connor

Co Author: Colette O'Hare

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Co Author: Eimear Dwan

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Abstract:

This was a complex, prolonged tuberculosis outbreak in a daycentre for adults with intellectual disability in southeast Ireland. The population was particularly vulnerable with special considerations for Public Health management.

In 2023, a case of TB in an adult male who attends the daycentre led to a retrospective review of all cases and contacts associated with the facility (2008-2023). There were eight cases of active tuberculosis and 45 cases of latent tuberculosis associated with it. Contacts were stratified according to risk and offered screening, re-screening, or treatment, as appropriate.

The significance of this outbreak relates to its duration, the high infectivity of the index case and the vulnerabilities of the service users. Retrospective review of contacts highlighted the logistical difficulties relating to the initial contact investigations in 2008. This related to a significant change in guidance relating to the management of Latent TB Infection (LTBI), symptom recognition, diagnosis, drug interactions, adherence and monitoring within this cohort.

The public health team tailored their approach to meet the service user needs, demonstrating the importance of person-centred contact tracing in the disruption of infection transmission.

A Cross-Sectional Study of Alcohol and Drug-Related Medical Hospital Admissions Among Youth (15–24 Years Old) in Ireland During the COVID-19 Pandemic

Topic / Dept: Health Intelligence

Author: Sean Gunnigle

Co Author: Anne O'Farrell

Co Author: Bobby Smith

Abstract:

Objectives

This study aimed to investigate the effects of lockdowns on alcohol and drug-related medical hospital admissions among individuals aged 15-24 in Ireland.

Methods

Data from the Hospital Inpatient Enquiry (HIPE) database, covering emergency hospital admissions from 2017 to 2022, were analysed. Lockdown and control periods were identified, and admission rates for drug-related hospital admissions (DRHA) were calculated per population and per 100 all-cause admissions.

Results

We found that there was an increase in drug-related hospital admissions among individuals aged 15-24 years during the periods of severe lock down, comparing the three periods of lock down from 2020 to 2021 with corresponding weeks in control. The median rate of DRHA per million per week during the lockdowns was 23.8 (inter-quartile range [IQR] 19.0 – 29.9) while it was 18.2 (IQR 13.7-22.2) during the control weeks ($p < 0.001$). DRHA accounted for a median 3.81% of admissions during lockdown weeks while they comprised 2.16% during the control weeks.

Conclusion

Our findings suggest that an adverse effect of pandemic restrictions appears to be increased acute drug-related problems requiring medical management among youth aged 15-24 years.

Two linked cases of severe skin and soft tissue infections secondary to gluteal cosmetic filler injections

Topic / Dept: Health Protection

Author: Ciara Conlan

Co Author: Andrea King

Co Author: Mary Ward

The Abstract:

Public Health Dublin/Midlands were notified of two severe cases of skin and soft tissue infections linked with gluteal hyaluronic acid filler injections in a procedure known as a non-surgical Brazilian Butt Lift (BBL). The cases had attended the same aesthetics clinic on the same day.

A comprehensive investigation was undertaken, including a site visit in collaboration with Environmental Health to understand therapist training, infection prevention and control (IPC), procedure techniques and aftercare. The HPRA were consulted to investigate the filler devices. Microbiological investigation with whole genome sequencing confirmed relatedness of the bacterial isolates from both cases.

As a result of the investigation, this clinic voluntarily agreed to stop performing BBL procedures. The clinic agreed to implement recommended IPC measures. Subsequently this incident was presented to the office of the Chief Medical Officer.

Two previously healthy young women were hospitalised due to invasive cosmetic procedures. Cosmetic filler injections can be associated with severe complications. Currently, there are no restrictions on administration of these products in Ireland. These cases highlight the urgent need for regulation in this area.

Wholesome sex education and sexual knowledge associated with complete physical and mental well-being of young people in Ireland

Topic / Dept: Health Service Improvement

Author: Pratiksha Nagar

Co Author: Mary Codd

The Abstract:

Young people are at a crucial stage of development, therefore it is essential both mental and physical aspects of sexual health are addressed and taught to them comprehensively. Health Service Executive emphasises the need to address gaps necessitates informed plans for awareness, education, and policy decisions.

This is a cross-sectional observational study with sample size of 2,708. The association between sexual education/knowledge and participant's sexual behaviours like guilt was assessed using chi-square analysis. Logistic regression was employed to explore the relationship of sexual knowledge as determinant of subsequent health outcomes like crisis pregnancy.

The study encountered a median age of 23 years. Participants educated on emotions exhibited communication with parents, resulting in significant reductions in sexual complications and emotional turmoil. Crisis pregnancies decreased by 33% with planned sexual activity and by 47% with knowledge. Satisfied participants demonstrated good General Health Status.

Alarming statistics reveal that 1 in 3 individuals have experienced rape in Ireland. There are mandates in sexual education, still there is noticeable gap in addressing some crucial subjects focused in this study.

Health needs assessments of older people in Ireland and the United Kingdom: A literature review

Topic / Dept: Health and Wellbeing

Author: James O'Connell

Co Author: Regina Kiernan

The Abstract:

By 2051, one in four people in Ireland will be aged over 65 years. Ensuring that health systems are ready to make the most of this shift will be challenging but health needs assessment (HNA) can help systems prepare. This narrative review aimed to describe what HNAs of older people have been conducted in Ireland or the United Kingdom.

Research articles published in English on or after 1/1/2000 were eligible. PubMed, Google Advanced, Lenus, and The Irish Longitudinal Study on Ageing (TILDA) library were searched.

Nine studies were included. Older people have varying interpretations of what being healthy is but being physically and socially active are important. HNA should aim to identify the most vulnerable populations. However, they may not be readily identifiable using routine data. The Age-Friendly Cities Framework may be useful for structuring HNAs. Studies identified health needs relating to social exclusion, physical activity, housing, energy poverty and healthcare access. HNAs recommendations focused on prevention and empowering older people to promote their own health. Local interventions may have to be evidence-informed (rather than evidence-based) considering the local context, population, and resources available.

A health impact assessment of an urban transport strategy in Ireland: learnings from practice

Topic / Dept: Health and Wellbeing

Author: James O'Connell

The Abstract:

Decision makers face growing pressure to deliver sustainable development and unrelenting economic growth. This is a challenge when key resources are scarce. The Galway Transport Strategy (GTS) has brought this issue to the surface of public and political discourse (1). Although health is a policy priority, the health impacts of the GTS remain rarely discussed. To help secure a healthy population and inform how health impact assessment (HIA) can support a Health in All Policies (HiAP) approach, a HIA of the GTS was conducted. The Institute of Public Health's HIA guidance was applied. A steering committee was formed.

In the context of an ageing population, the GTS could have significant negative health impacts through its effects on physical activity and social isolation/loneliness. To report the findings to the local authority, the transport authority, the public and others, multiple channels were used. Engagement was built by being positive, offering solutions, translating knowledge effectively, focusing on key local issues and avoiding confrontation by working through the third and fourth dimensions of power. With demands on decision making processes growing, HIA can effectively promote HiAP and help secure a healthy population.

An outbreak of cryptosporidiosis among travellers to Salou, Spain in Autumn 2023

Topic / Dept: Health Protection

Author: Helen Byrne

Co Author: Aoife Colgan

Co Author: Patricia Garvey

Co Author: Paul McKeown (On behalf of IMT)

The Abstract:

In September 2023, HPSC was alerted to a cluster of cryptosporidiosis cases with recent travel to Salou, Spain. Subsequently, a national outbreak was declared.

A confirmed outbreak case was defined as a person with confirmed cryptosporidiosis infection with symptom onset \geq 06/08/23 with travel to Salou in 2 weeks prior to onset. A probable case was an epidemiologically linked person with gastrointestinal symptoms. An incidence rate ratio (IRR) for Resort A, Salou was calculated, comparing the number of confirmed cases who stayed at Resort A with those who did not.

In total, 69 cases met the outbreak case definition (52 confirmed, 17 probable). Cases were reported in 6 HSE-Areas. Among confirmed cases 60% were female and 63% were children. 13% cases were hospitalised, while 81% attended their GP. Onset dates ranged from 06/08-21/10/23. 62% of confirmed cases stayed in one resort in Salou (Resort A). Irish residents who visited Resort A were at least 87 times more likely (IRR 87 (95% CI 58-126, $p < 0.001$)) to be infected than those who did not visit the resort.

A national IMT was formed, and international colleagues were consulted. A source was not identified but amplification by swimming pool activities may have contributed.

Achieving a Tobacco Free Ireland whilst leaving nobody behind: An analysis of smoking & quitting behaviours in people with mental disorders in Ireland

Topic / Dept: Health Intelligence

Author: Maria Deery

Co Author: Ruth McDermott

Co Author: Paul Kavanagh

Co Author: Anne O'Farrell

The Abstract:

One in five adults smoke in Ireland and inequalities are widening. People with mental disorders risk being left behind as we move towards a Tobacco Free Ireland, but smoking and quitting behaviour are poorly described in this group. The objective of this study was to quantify & compare the prevalence of smoking, quitting behaviours and quit aid use among adults with & without a probable mental disorder (PMD).

A secondary analysis of the 2021 Healthy Ireland dataset was conducted. Descriptive statistics and logistic regression compared smoking & quitting behaviours across those with and without a PMD.

Smoking prevalence was higher in those with a PMD than those without (26.1%-v-16.9%, $p<0.001$). People with a PMD who smoke also had poorer health (41.8%-v-16%, $p<0.001$). There was no difference in positive intention to quit ($p=0.11$), quit attempts ($p=0.85$), or the odds of using help to quit($p=0.08$). Importantly, the study found that brief interventions from a GP are independently associated with intention to quit (aOR 3.18), quit attempts (aOR 2.12) and using support in a quit attempt (aOR 2.86).

These findings underline a gap in the provision of smoking cessation care and provides the evidence base for improved approaches to smoking cessation in Ireland.

Private well owners and drinking water quality in Ireland: A proposed Health Promotion initiative

Topic / Dept: Health and Wellbeing

Author: Aine Varley

Co Author: Abigail Murfitt

Co Author: Srihari Govind Kaliapuram Narendrakumar

Co Author: Janet R. Anthony

Co Author: Celine Murrin

The Abstract:

In Ireland, approximately 11% of people source their drinking water from private wells. Despite risk of contamination, private well owners in Ireland report poor adherence to primary protective actions (treatment, source maintenance and testing) (1). The impact of poor well maintenance is exemplified through verotoxigenic *Escherichia coli* (VTEC). Ireland has the highest rate of VTEC in Europe and cases are four times more likely to have consumed untreated well water than the general population (2).

This mixed-methods study is designed to develop evidence-informed interventions to improve private well maintenance, and thus improve population health, in Ireland. A Health Promotion initiative will be designed using the PRECEDE-PROCEED model, an eight-step health promotion planning and evaluation model for building and improving intervention programmes. A needs assessment will be conducted to establish key needs of the target audience and stakeholders. The results will be used with the results of a literature review to identify potential intervention strategies. A programme plan will be developed, delineating aims, objectives, interventions, timelines and evaluation plan. A co-design intervention approach with stakeholders proposed.

Commissioning a new Outbreak, Case and Incident Management and Surveillance System for Public Health post pandemic: Challenges and Opportunities

Topic / Dept: Health Protection

Author: Marie Casey

Co Author: Kathleen Brennan

Co Author: Louise Cullen

Co Author: Caroline Carpenter

Co Author: Noelle O'Loughlin

Co Author: Jennifer Doyle

Co Author: Susan Donnelly

Co Author: Roisin McLoughlin

Co Author: Orla Bruton

The Abstract:

Purpose and background

The purpose of this paper is to describe the process, challenges and opportunities encountered while preparing a tender for the first Outbreak, Case and Incident Management and Surveillance System for the Health Protection Service in Ireland.

Currently there is a national surveillance system (CIDR) in place, but there is no clinical record system in place for the public health management of cases, incidents and outbreaks.

Methods

Development of the specification of the system was an iterative process involving engagement with counterparts in international Public Health agencies, incorporation of lessons learned during the pandemic, and requirements input from staff champions in the Health Protection Service in Ireland.

Results

A detailed requirements specification was developed utilising details from an existing tender and expertise from the Health Protection Service in Ireland and HSE eHealth staff, which was published in October 2023.

Implications

A key opportunity was the ability to share learning with international counterparts. A key challenge

is that there are few existing systems deployed internationally, despite the recent pandemic. This is for a myriad of reasons.

Exploring the impact of policy measures targeting solid fuel use on air quality and human health - a literature review

Topic / Dept: Health Protection

Author: Ciara Carroll

Co Author: Keith Ian Quintyne

The Abstract:

Air pollution is a major environmental health risk, with the combined effects of ambient outdoor and indoor air pollution estimated to cause 6.7 million premature deaths per year. In Ireland, the burning of solid fuels is a major source of air pollution. This literature review aimed to explore the impact of policy measures targeting solid fuel use on air quality and human health.

Primary research articles using quasi-experimental methods to evaluate the effects of solid fuel policies on PM_{2.5} and PM₁₀ concentrations, cardiovascular mortality and morbidity, and respiratory mortality and morbidity were identified, appraised and synthesised.

The introduction of policy measures to reduce solid fuel use was associated with significant reductions in PM_{2.5} and/or PM₁₀ in all studies. Bans on smoky coal and residential wood burning were associated with a reduction in hospital admissions due to asthma and chronic obstructive pulmonary disease, and ischaemic heart disease, respectively.

To date, few studies have considered the health impacts of policies targeting solid fuel use. This review has highlighted the importance of adjusting for secular changes in morbidity and mortality when evaluating the impact of these interventions.

A survey of the PPV23 vaccine programme in the top 4 general practices with the highest annual uptake in 2023.

Topic / Dept: Health Service Improvement

Author: Alice Quinn

Co Author: Aparna Keegan

The Abstract:

Background

The National Immunisation Advisory Committee recommended a 23-valent polysaccharide vaccine (PPV23) for the elderly and those aged 2 to 64 years with immunosuppressive conditions or co-morbidities.

Purpose

The purpose of this study is to understand the top practices, what they do to increase uptake of the PPV23.

Methods

Eight practices were selected to participate based on high uptake of PPV23 vaccine. A semi structured interview was devised and administered as a telephone survey.

Results

The response rate was 50 %. All four practices co-administered PPV23 with the flu vaccine and offered it opportunistically including at the chronic disease management (CDM) appointments. All practices offered the vaccine all year around, co-administered the PPV23 vaccine with the flu vaccine or COVID-19 vaccines and sent the reminders regarding PPV23 in a text message for the flu vaccine. All practices used the NIAC guidance. There was variation in other training completed. Each practices had specific tips. All four practices said they did not use the leaflets that the NIO send but did use the posters.

Implication: GPs report that the CDM programme focuses on vaccination check at health checks.

Parents' feedback on the public health management of a school outbreak of invasive meningococcal disease

Topic / Dept: Health Protection

Author: Antonia Cooper

Co Author: Silvia Bel-Serrat

Co Author: Anthony Breslin

The Abstract:

Chemoprophylaxis was given to students in a post-primary school (n=457), following 3 cases of invasive meningococcal disease. In order to gather perspectives on the quality of communication and any reported side effects, an anonymous cross-sectional survey was circulated to the parents via email. Descriptive analysis is presented and potential areas of improvement discussed.

96 responses were received (response rate 28%). Most of the respondents considered that: communication was easy to understand (87% agreed/strongly agreed), it was properly explained why the antibiotic was given (93% agreed/strongly agreed), they could ask questions (90% agreed/strongly agreed), and the side effects were explained (76% agreed/strongly agreed). Side effects were reported by 5 respondents; 1 sought medical attention. Comments queried the timing of the intervention, delays in school reporting the case to parents and vaccination.

The online questionnaire facilitated rapid collection of responses during the outbreak response. Overall, parents were satisfied with the communication from the HSE and few side effects were reported. Identified areas for improvement include further discussion of side effects and rationale of timing of the intervention.

Elective placements for TCD medical students in the Department of Public Health HSE Dublin and Midlands

Topic / Dept: Health and Wellbeing

Author: Ciara Catherine Kelly

Co Author: Irene Gorman

Co Author: Christopher Carroll

Co Author: Una Fallon

Co Author: Noel McCarthy

Co Author: Fionnuala Cooney

The Abstract:

Specialty exposure during medical school influences subsequent career choice. We describe the development of elective student placements in our Public Health Department (PHD).

A collaboration to oversee the electives was established between PHD and Trinity College Dublin (TCD). A working group formed which developed learning objectives and an elective plan. The elective included approximately 15 1:1 tutorials across public health domains, attendance at PHD meetings and a literature review-based project.

Between October and November 2023, two students (one per month) were attached to the PHD. At the end of each elective, students presented project findings to the PHD team for discussion. Debrief sessions gathered feedback from the students, the working group and the TCD partner. Student feedback was overwhelmingly positive. Taking pairs of students at the same time may increase efficiency and capacity.

A collaborative approach to planning and coordinating these first electives was crucial to its success. We are building on this experience to continue and expand electives with an increased number of students being facilitated by our PHD later this year. Application and evaluation materials were refined which can be shared.

“Prepare to Protect”- Irish Health System Emergency Preparedness for High Consequence Infectious Diseases

Topic / Dept: Health Protection

Author: Jane Salmon

Co Author: Mairin Colette Carmel Boland (nee Hayes)

Co Author: Denise Long

Co Author: David Menzies

Co Author: Deirdre Morley

Co Author: Cillian Fearghaios De Gascun

Co Author: Brian Keogan

The Abstract:

Viral haemorrhagic fevers (VHF) are diseases with potential to cause severe illness and mortality, defined as High Consequence Infectious Diseases (HCID). A national HCID steering committee was set up in 2022 to oversee preparedness of the Irish health system to respond to such events in line with European Centre for Disease Prevention and Control (ECDC) guidance (1).

Following a tabletop exercise evaluating operational gaps, the committee developed a manual to guide assessment, management and response to an adult case of VHF. The manual describes various scenarios in which a case may present, outlining roles and responsibilities of all stakeholders. The inclusion of contact details and links to forms and protocols provide easily accessible information to ensure appropriate and timely action.

Simulation Exercises Aistriú and Volare will test the in-country transfer of a VHF case to the National Isolation Unit and an international Medevac transfer to Germany and will be an opportunity to practise and assess aspects of the manual.

Preparedness is a vital tool in managing public health emergencies. The manual along with other measures will allow a safe, effective and interoperable response to future HCID incidents in Ireland.

Positive findings from evaluation of the pilot introduction of fully subsidised nicotine replacement therapy in Ireland.

Topic / Dept: Health Intelligence

Author: Peter Naughton

Co Author: Aishling Sheridan

Co Author: Edward Murphy

Co Author: Martina Blake

Co Author: Paul Kavanagh

The Abstract:

Smoking is the leading preventable cause of death with a disproportionate burden in disadvantaged groups.¹ In 2022, the Tobacco Free Ireland Programme piloted fully subsidised nicotine replacement therapy (NRT) at selected stop smoking services. This study evaluated the impact of this intervention on smoking cessation.

Quit status was self-reported and stratified according to service users' eligibility to receive free NRT. Differences in quit status and NRT use were analysed using between groups. Logistic regression identified factors associated with smoking cessation.

Individuals who were eligible for free NRT had higher NRT uptake (67% vs 40%, $p < 0.001$) and higher quit rates at four (47% vs 28%, $p < 0.001$) and twelve (31% vs 20%, $p < 0.001$) weeks. Regression analysis demonstrated that NRT use was significantly associated with smoking cessation (OR 1.72, 95%CI 1.12 – 2.66, $p = 0.013$).

This study confirms the real-world effectiveness of NRT and highlights the benefit of removing financial barriers to accessing this essential medicine. If the goal of a tobacco free Ireland is to be realised for all, targeting interventions to intensify services offered to disadvantaged groups are required.

Feta safe than sorry - gastroenteritis outbreak associated with contaminated cheese with resultant large removal of product from sale internationally

Topic / Dept: Health Protection

Author: Fiona McGuire

Co Author: Mary Ward

Co Author: Ethel Murphy

Co Author: Elaine Smyth

The Abstract:

A gastroenteritis outbreak among attendees at a catered HSE event was notified in October 2023. No faecal samples were available. An outbreak control team was convened. A retrospective cohort study hypothesised that "those who attended the event and subsequently became unwell did so as a result of event food consumption". Epidemiological, environmental, and microbiological investigations commenced. An outbreak-specific food questionnaire was distributed. Food business inspection, obtaining food samples, was completed by EHOs. Illness attack rate was 25%. Associations were identified between illness and specific foods. Multivariable regression highlighted: feta salad (OR=36.22 [95% CI 2.24-585.52] p=0.01), and turkey (OR=12.57 [95% CI 1.12-140.58] p=0.04). Most (93%) turkey consumers had also consumed feta salad. Microbiology of unopened feta cheese, sourced by the caterer from a supermarket, was positive for E coli at 1.7×10^5 . The Food Safety Authority of Ireland corroborated separate GI illness complaints from a family consuming this feta. The supermarket voluntarily withdrew the product internationally. Despite no faecal pathogen detection, epidemiological evidence led to the international withdrawal of over 1000 units of feta

Creating Ireland's first TB strategy: Striving to End Tuberculosis – A Strategy for Ireland 2024 - 2030

Topic / Dept: Health Protection

Author: James O'Connell

Co Author: Mary O'Meara

Co Author: Eamonn O'Moore

The Abstract:

Tuberculosis (TB) remains a threat in Ireland. Increasing populations of vulnerable people, including migrant communities, may increase the risk of TB. Case management and contact tracing may grow in complexity. To protect public health, a strategic effort is required. Recent reform mean now is the opportune time for this.

Striving to End Tuberculosis – A Strategy for Ireland 2024-2030 sets out a shared vision for Ireland to achieve the End TB Strategy objectives (1). Devised with the National TB Advisory Committee, it is a framework of priorities, objectives, actions, enablers and principles (health equity, total care, collaboration, innovative and agile working). Priorities include addressing social determinants, prevention, detection, treatment and care, workforce planning and understanding TB. Key actions include improving testing and treatment for vulnerable populations; use of technology; implementation of a selective BCG programme; and improve communication with target populations. Key enablers will be strong leadership, effective management and a strengthened workforce. With a fully resourced implementation plan, this strategy will secure public health from the threat of TB - 'No one is safe until everyone is safe'.

Examination of patients presenting to the Emergency Department as “Apparently Drunk”

Topic / Dept: Health and Wellbeing

Author: Michael Hanrahan

The Abstract:

Alcohol misuse significantly affects health services, particularly Emergency Departments (ED). The aim of this study was to assess alcohol-related ED presentations in the Mercy University Hospital, Cork, to inform service delivery.

This cross-sectional study used routinely collected data from ED triage. All ED presentations where the patient was recorded as “apparently drunk” on the Integrated Patient Management System in 2022 and 2023 were included.

In total, 1,662 ED presentations were examined. There was an 18% increase in patients presenting as “apparently drunk” from 2022 to 2023. The majority of patients were male (72%) and 65% were aged 20-49 years. People experiencing homelessness accounted for 23% of presentations. One-fifth of patients were also coded as having an injury at triage. Just 3% of these patients were admitted to hospital and 38% self-discharged from ED.

Alcohol-related ED visits are rising. Enhanced community and social support may reduce these visits, but broader policies are essential to curb excessive alcohol consumption. This includes advocating to amend the proposed Sale of Alcohol Bill which, if passed, is likely to further increase alcohol-related injuries requiring hospitalisation.

Acceptability and clinical utility of adiposity measures in preteens: findings from the ROLO longitudinal birth cohort study

Topic / Dept: Health and Wellbeing

Author: Sophie Callanan

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Co Author: Ciara McDonnell

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The Abstract:

Limited research has investigated young people's opinions on measures of obesity (1). This study aimed to describe young people's views on adiposity measures utilised in a longitudinal birth cohort and the utility of neck (NC) and mid-upper arm (MUAC) circumference as less invasive indicators of preteen body composition.

Secondary analysis of 9-11-year-olds (n=408) from the ROLO longitudinal birth cohort study. Body mass index (BMI), skinfold thickness, waist circumference (WC), NC, MUAC, and dual-energy x-ray absorptiometry scans were obtained at 9-11-years of age. A subgroup completed an acceptability questionnaire post study visit and took part in public and patient involvement (PPI).

No participants rated the ROLO study measurements as unacceptable methods. In PPI discussions, most young people agreed that NC was an easy measure of adiposity, and one participant viewed it as uncomfortable. In adjusted models, NC and MUAC were positively associated with BMI z-score, WC, sum of skinfolds, and body fat % in preteens ($p < 0.001$ for all).

NC and MUAC may serve as simple and less burdensome indicators of adiposity. Our findings may help researchers and clinicians when designing acceptable adiposity assessments for youth.

Would a HPV self-sampling option appeal to under- and never screened populations in the Republic of Ireland? Results of a cross sectional survey

Topic / Dept: Health Service Improvement

Author: Sinéad Woods

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Co Author: Nóirín E Russell

Co Author: Patricia Fitzpatrick

Co Author: Caroline Mason Mohan

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The Abstract:

Human papillomavirus (HPV) self-sampling has been recommended by the WHO as an additional method of cervical cancer screening (1). This study aimed to determine the acceptability of HPV self-sampling in the Irish context.

An anonymised, cross-sectional survey was distributed via a hybrid approach to women aged 20-65 living in the Republic of Ireland (2). The preferences of respondents were assessed pre and post exposure to self-sampling information.

2024 surveys were completed. 59% (n=1194) regular attenders, 14.8% (n=300) were under-screened, 18.8% (n=381) never screened and 7% (n=149) were under 25. Pre-explanation, 42% of total respondents would prefer clinician-based screening, 51% would choose a form of self-sampling, 6% did not know and 1% would not attend. Results post explanation show an increase of those opting for self-sampling (53%) and a decrease in those who did not know (4%). 65% of never screened and 62% of under-screened women would choose self-sampling compared to 41% of regular attenders.

The findings demonstrate that a self-sampling option would appeal to never and under-screened eligible women, while a substantial proportion of regular attenders would continue to opt for clinician-based screening.

An audit of the effectiveness and timeliness of responses to suspect measles notifications in a regional department of public health

Topic / Dept: Health Protection

Author: Antonia Cooper

Co Author: James O'Connell

Co Author: Aidan Ryan

Co Author: Regina Kiernan

The Abstract:

Measles outbreaks can have dire consequences. Preventing these requires effective and timely frontline response. To determine the effectiveness of the area public health response, measles notifications received in 2023 were audited against local protocol and HPSC guidance standards. There were 23 notifications 1st Jan-30th Sept. The median age was 4 years (IQR 2-11). 87% (20/23) were Irish nationals. Forty-three percent (10/23) met the measles clinical criteria. Fifty-two percent (12/23) were vaccinated/immune. A public health risk assessment was documented for 78% (18/23). One third (32%) were notified ≥ 1 day after their first presentation to their GP. Public health made contact with all cases on the day of notification. Oropharyngeal swabs were taken in 39% (9/23), of whom 89% (8/9) had it on the same day. The median time between test conduct and reporting was 3 days (IQR 3-5). One high risk suspect notification, in a congregate setting had 101 contacts, was assessed and managed within 2 days. No confirmed measles occurred in this period. The public health response was effective and timely. The risk assessment documentation, the need for immediate notification and the avoidance extremely low risk notifications could be improved.

Failure of sterilisation in two dental practices: Public Health Management

Topic / Dept: Health Protection

Author: Dr Helen Cooper

Co Author: Kevin Reid

Co Author: Anthony Breslin

The Abstract:

We describe and contrast two cases of failure of sterilisation of dental devices in community dental practices, and the subsequent public health management of the exposed patients.

The first incident occurred following an interruption to electricity supply overnight in a private dental practice, causing a timed autoclave process not to occur. Risk assessment in this case resulted in each exposed patient undergoing screening for blood borne viruses – all of which were negative.

The second incident occurred in a HSE dental department, due to omission of the autoclave process entirely. After risk assessment, the two exposed paediatric patients were advised blood borne virus screening was not necessary, though parents elected to have one child screened. Community IPC visited the premises and made recommendations on changes to practice.

These two cases highlight the potential for transmission for blood borne viruses in dental settings, though in this instance the risk to individual patients was considered low. Human error contributed to the exposure in both instances, but these cases also raise the possibly need for increased training and oversight of infections prevention measures in community settings.

Sexting practices and their associations with health and behaviours among adolescents in the west of Ireland

Topic / Dept: Health and Wellbeing

Author: Julianne Harte

Co Author: Aine McNamara

Co Author: Abigail Collins

The Abstract:

Sexting, defined as the sending or receiving of sexually explicit content via electronic means has become increasingly prevalent among adolescents (1). This study investigates the prevalence of sexting among 15-16 year olds in the West of Ireland and its associations with substance use, mental and sexual health outcomes and victimisation.

A cross-sectional secondary analysis of The Planet Youth West Survey 2020 (n=4,366) was undertaken. A multinomial regression model was developed to identify independent predictors of sexting which was divided into three categories: active sexting, passive sexting only and no history of sexting.

Among adolescents, 54.8% had experience of sexting with 25.4% and 29.4% reporting engaging in active and passive sexting respectively. Identified predictors of sexting include being female, more parental control, increased social-media usage, substance use, engagement in sexual intercourse and risky sexual behaviours, experience of victimisation and higher levels of depression.

Results suggest that sexting has become relatively commonplace among adolescents highlighting a need for a clear sexting definition, rigorous longitudinal research, and educational initiatives.

An evaluation of Patient and Public Partnership in the National Screening Services utilising the Public and Patient Engagement Evaluation Tool (PPEET)

Topic / Dept: Health Service Improvement

Author: Caroline Walsh

Co Author: Estelle McLaughlin

Co Author: Caroline Mason Mohan

The Abstract:

Patient engagement is increasingly seen as a vital component of a high performing health system. In 2023, the National Screening Service (NSS) completed the implementation of its first Patient and Public Partnership (PPP) Strategy¹. Evaluating engagement is essential to ensure that practices are effective and to demonstrate their impact².

An impact evaluation was conducted using the Public and Patient Engagement Tool (PPEET)². Patient partners (n=26) and all NSS staff (n=511) were invited to participate in an online survey. Response rates for patient partners and NSS staff surveys were 37% (n=12) and 17.4% (n=87), respectively. One hundred percent of patient partners agreed that the Strategy is achieving its objectives and 91% felt their contributions make a difference to the work of NSS. Sixty-five percent of staff agreed the Strategy has been successfully implemented and 83% report that PPP values are demonstrated across NSS.

Our findings show that patient partners and staff agree that the objectives set out in the PPP strategy were achieved and demonstrates the value of patient engagement in the healthcare setting. The use of validated tools such as PPEET are necessary to effectively monitor engagement in an organisation

Enabling GPs to deliver recommended stop smoking care through electronic referral

Topic / Dept: Health Service Improvement

Author: Aishling Sheridan

Co Author: David McConaghy

Co Author: Martina Blake

Co Author: Paul Kavanagh

The Abstract:

Improved stop smoking care in primary care offers an opportunity to prevent chronic disease and improve public health. For healthcare professionals, recommended stop smoking care can be summarised as “Ask, Advise & Act”. This study describes the impact on of enabling electronic referral to HSE stop smoking services.

In April 2021, an integration between the HealthLink system and QuitManager, the patient management system for Stop Smoking Services went live, enabling electronic referral from GP systems to Stop Smoking Services. On receipt, referral processors contact the client, and offers them stop smoking support. The HSE tracks the number of referrals and the outcome of these referrals on a monthly basis.

In 2023, 3,566 referrals were received from GPs; this compares to 707 in 2021 and 1,857 in 2022. In 2023, 51% accepted service, 37% were uncontactable, 1% duplicate referrals and 11% declined service. Highlighting of the availability of electronic referral during an ICGP webinar resulted in an increased number of referrals (n=445) and number of practices (n=236) referring in November 2023.

This study highlights how better enabling good practice in primary care can improve stop smoking care provision.

“Why would you ask me that?!” GP and GP Trainee’s knowledge and attitudes towards STI screening in General Practice

Topic / Dept: Health Service Improvement

Author: Katie Hickey

Co Author: Colm Cox

Co Author: Naoihse Guerin

Co Author: Aisling Cronin

Co Author: Sarah Griffin

The Abstract:

The HSE recommends that “Sexual health screening should be an integral component of any routine health check”. This study’s purpose is to understand the current practice of Sexually Transmitted Infection (STI) screening amongst GPs in Ireland and hypothesize barriers to its provision.

A cross sectional descriptive study was conducted. Data was retrieved via an online survey which was distributed to practicing GPs using the platform SurveyMonkey. Quantitative results were analyzed and qualitative data obtained was collated for common themes.

Of the 154 responses, 85% were comfortable initiating the topic of STI screening. Knowing a patient socially would make 57.4% less likely to discuss STI screening. 43.5% indicated hesitancy to discuss STI screening during telephone consultations. 43.8% specified time constraints as the biggest barrier and 62% cited insufficient training.

Time is a significant barrier to STI screening in GP. Perhaps directing patients to newly introduced publicly funded home testing (SH:24) may alleviate this issue.

Many GPs cited funding as a barrier. Perhaps fee per item payment through the GMS contract might secure the provision of STI screening, ensuring GPs are reimbursed for work performed.

Public Health is Calling: An Evaluation of Novel Phone Communication Guidelines using the Model for Improvement

Topic / Dept: Health Service Improvement

Author: Ann Marie Murray

Co Author: Laura Smith

Co Author: Fionnuala Cooney

Co Author: Andrea King

Co Author: Irene Gorman

The Abstract:

A quality improvement intervention on phone communication with the public for the Health Protection multidisciplinary team (MDT) in a regional department involved the development of a novel document on guidelines on phone communication, followed by three scenario-based role play sessions by the MDT and subsequent refinement of the phone communications document.

This intervention was evaluated using the model of improvement¹ to guide our Plan, Do, Study Act (PDSA) Cycle. Answering five questions using a Likert scale the MDT self-reported their phone communication skills confidence before and after the intervention.

Responses were received from 24 participants pre-intervention and 20 post-intervention. Answers were converted to weighted averages. Increased confidence was reported on all components. 'Knowing where to access telephone communication for Public Health' (+1.567) had the largest increase, 'knowing what to do if dealing with a difficult call' (+0.325) had the lowest.

The phone communications document is an important item in our department's induction pack and is being used during the current second PDSA cycle focusing on requested training for calls involving sexual history taking.

Increasing breastfeeding rates through clinician education

Topic / Dept: Health and Wellbeing

Author: Brian Keating

The Abstract:

Aims

To investigate the impact of short education sessions on clinicians' confidence and knowledge.

Methods

GP and Paediatric clinicians completed assessments of their knowledge on physiological benefits of breastfeeding and confidence in counselling parents.

A short tutorial on the science of breastmilk targeted at healthcare professionals was devised.

Results

Most participants had no formal breastfeeding education, and all respondents felt further training in breastfeeding would be beneficial to their practice. Average pre-tutorial knowledge scores were poor at 24% indicated physiology was poorly understood. After the intervention average knowledge scores increased over 45% to 70%, and subjective coincidence levels greatly increased^[LSEP]

Conclusions

A short science-based presentation greatly increased knowledge and confidence scores in doctors and nurses of all levels. Clinicians acknowledged the importance of increasing breastfeeding rates to ameliorate healthcare inequalities, however lack the knowledge-base to adequately counsel and explain the benefits to parents. Short, targeted education sessions should be formally introduced to postgraduate training programmes in GP, obstetrics and paediatrics

Prevalence and Factors Associated with E-Cigarette Use in a Third Level Institution - a Cross-sectional Study

Topic / Dept: Health and Wellbeing

Author: Catherine Hayes

Co Author: Niamh Kennedy

Co Author: Darin Poon

Co Author: Jena Frain

Co Author: Amanda Lee

Co Author: Chun Hei Lee

Co Author: Martina Mullin

The Abstract:

Data on electronic cigarette (EC) use (vaping) in universities are limited. This study determined the prevalence and factors associated with EC use in an Irish university. Cross-sectional online survey of 22,362 students and staff of lifetime, current (previous 30 days), and dual cigarette and EC use. Reasons, perceptions, and attitudes including regulation were examined. Logistic regression identified factors associated with lifetime, current, and dual use. 2,683 participants responded, 12%; (undergraduates 71%, postgraduates 15%, staff 14%). 1539 (57%) had vaped at least once and 838 (31%) currently vaped. 42% of current vapers were dual users. Influence of family/friends (>65%), choice of flavours, easy availability, and vaping being allowed were key factors. 57% supported on-campus restrictions. Factors for lifetime/current vaping included younger age, undergraduate status, cigarette smoking (Adjusted Odds Ratio (AOR) lifetime = 9.3, 95% CI 6.1, 14.2, use of disposable vapes (AOR current = 3.18, 95% CI 1.6, 6.2). Vaping is highly prevalent, particularly in undergraduates. Dual use is frequent. Peer influence, choice of flavours, easy availability, and lack of regulation need to be addressed in tobacco control policies.

Profiling Long COVID in Ireland to inform health service improvement: a study of Long COVID symptom type, severity and risk and protective factors

Topic / Dept: Health Service Improvement

Author: Fiona McGuire

Co Author: Paul Kavanagh

Co Author: Una Fallon

Co Author: Patricia Carney

The Abstract:

Long COVID (LC) impacts 65 million globally. This study aimed to analyse data from the FADA retrospective cohort study of COVID-19 recovery, exploring LC's nature and severity in an Irish sample. The Modified COVID-19 Yorkshire Rehabilitation Scale categorised and quantified symptoms. Data analysis included logistic regression. Of 4,671 respondents, 2,338 (50.1%) self-reported LC. Most with LC were female (66%), White Irish (84.9%), and highly-educated (65.8%). 979 (41.9%) reported recovery. One-third with persistent LC were classified as "moderate/severe." Predominant symptoms were fatigue, (75.1%) cognitive impairment (68.5%) and dyspnoea (64.0%). Factors associated with both LC persistence and severity included: co-morbidities (aOR persistent LC 1.44 [95% CI 1.12-1.85], p=0.005; aOR moderate/severe LC 2.90 [1.92-4.37] p<0.001), smoking (aOR persistent LC 1.59 [1.11-2.28] p=0.01, aOR moderate/severe=1.65 [1.0-2.71] p=0.05), being physically active (aOR persistent LC 1.49 [1.16-1.92], p=0.002, aOR moderate/severe=1.69 [1.12-2.54], p=0.01). This study offers insights into LC symptom type, diversity, duration, and determinants, contributing to current LC understanding and laying a foundation for the tailoring of LC services.

Level of digital confidence in patients undergoing outpatient gastrointestinal endoscopy. Subgroup analysis from an observational study

Topic / Dept: Health Service Improvement

Author: Sean Fennessy

Co Author: Liam Mulcahy

Co Author: Brian O'Donnell

Co Author: Hugh Mulcahy

Co Author: Edel McDermott

The Abstract:

Our unit currently delivers endoscopy information to patients through a paper-based approach only. We want to assess the digital confidence (DC) of our patient cohort in using online information for health-purposes.

This was a cross-sectional study, where patients who attended the endoscopy department for endoscopy as outpatients were asked to participate in a questionnaire, incorporating questions about DC levels. Each respondent was scored out of 8, with a higher score indicating higher levels of DC. Descriptive statistics and bivariate analyses were used to assess for potential associations.

66.67% response rate(176/264 responded); 60.1% female; median age 53.8. Patients were divided into high(60.8%) and low(39.2%) DC scores. Only education level ($p<0.001$) was significantly associated with DC, when compared to Pobal Index($p=0.554$), gender($p=0.504$) and age($p=0.0504$). Those with low DC were more likely to want to receive their information via post ($p<0.001$).

This subgroup analysis shows that there is a significant divide in digital literacy levels in our patients. This is an important finding as it has not previously been documented and will significantly impact on provision of patient services in our department.

Sub-group analysis of non-participation in a tertiary centre patient experience questionnaire survey

Topic / Dept: Health Service Improvement

Author: Sean Fennessy

Co Author: Kira Casey

Co Author: Benjamin Leahy

Co Author: Hugh Mulcahy

Co Author: Edel McDermott

The Abstract:

Non-participants in healthcare surveys are more likely to be from lower socioeconomic groups (SEGs) and younger patients(1). We wanted to assess our cohort to see if our data was in keeping with the established literature.

We conducted a patient experience survey in our endoscopy department with consecutive enrolment. Age, sex, postcode and reason for refusal were recorded for those who declined to participate to compare to those who consented to participate. We used Pobal Index (PI) as a proxy for SEG. Descriptive statistics and bivariate analysis were conducted.

PI data were available for 267 patients; n=95(35.6%) declined to participate, n=171(64.4%) completed survey. Please see table 1 for demographic data. 19%(18/95) who declined were from lower SEGs, versus 37%(63/171) in those who completed the survey. People from higher SEGs were less likely to participate in our survey($p=0.003$;OR 0.4;95%CI 0.22-0.73). Those under 45 were more likely to participate than over 45($p<0.001$;OR 0.27;95%CI 0.14-0.55).

This study is important as it examines social inclusion in our patient experience survey. It shows higher rates of participation than previously documented. This data will be further validated in our upcoming RCT.

Let's Get Walking: a pilot initiative to support staff health and wellbeing through change in Public Health HSE Dublin and Midlands

Topic / Dept: Health and Wellbeing

Author: Ciara Catherine Kelly

Co Author: Grainne O'Kane

Co Author: Dermot Edwards

Co Author: Jenny Lee

Co Author: Daniel McCrossan

Co Author: Laura Smith

Co Author: William Farmer

Co Author: Ciara Conlan

Co Author: Una Fallon

Co Author: Fionnuala Cooney

The Abstract:

Maintaining staff health and wellbeing (HWB) throughout Public Health Reform is an ongoing priority for the Department of Public Health HSE Dublin and Midlands. In this context, a pilot Workplace Walking Groups initiative was established in November 2023 to increase workplace physical activity and build team relationships.

This 4-week initiative was led by the departmental HWB Committee. Staff joined across 3 sites. Lunchtime walks were arranged for 1-2 days per week. WhatsApp groups and email supported group communication. Quantitative data on registration and attendance were collected via Microsoft Excel. A virtual focus group was held to gather staff feedback.

Group registration (n=10, n=9, n=5) and weekly attendance varied by site (n=10, n=9, n=5). Key benefits noted by participants included physical activity, building relationships with colleagues, and getting fresh air. The main barrier was the impact of work schedules on attendance. There was broad support for re-establishment of Workplace Walking Groups for 2024.

This pilot initiative achieved its dual aim of increasing physical activity and social connection among staff. Learning from this pilot informed the launch of a 3-month Walking Groups term for Spring 2024.

Development of an interventions toolkit for communities to encourage participation in screening

Topic / Dept: Health Service Improvement

Author: Alice Le Bonniec

Co Author: Lynn Swinburne

Co Author: Caroline Mason Mohan

The Abstract:

The National Screening Service runs four national population screening programmes for breast, cervical, bowel cancers and diabetic retina screening. They focus on looking for early signs of disease in healthy people. There is evidence that some population groups with higher incidence of disease are less likely to participate in screening (e.g. people living in communities with high deprivation). As part of a Community Screening Champion Programme, a toolkit was created to enable community health workers to implement local interventions to support people to participate in screening. The toolkit was developed using a behavioural science approach and methods from the Community Preventive Task Force [1].

The toolkit includes 7 steps to develop a local intervention: (1) Involving the community and identifying available resources; (2) Specify a target group; (3) Assessing community needs (barriers and enablers to screening participation); (4) Involving members of the community in the intervention design; (5) Planning the intervention; (6) Developing and implementing the intervention and (7) Evaluating the intervention. This toolkit enables the use of local knowledge within a framework of intervention design based on community needs.

A qualitative evaluation of a cross system quality improvement initiative to strengthen the public health management of chronic hepatitis B

Topic / Dept: Health Service Improvement

Author: Ciara Conlan

Co Author: Charmaine Zahra

Co Author: Mary Browne

The Abstract:

Engagement with St James's Hospital (SJH) was initiated by Public Health (PH) Dublin/Midlands as part of a QI project on the public health management of chronic hepatitis B (HBV). We aimed to understand close contact management and improve enhanced surveillance form (ESF) return. Through 3 multi-stakeholder meetings, an understanding of hepatitis B pathways was developed including improvement opportunities. We sought to evaluate the experience of working together by disseminating a survey to all 15 participants.

There was a 67% response rate. All 10 respondents agreed/strongly agreed that the approach was inclusive and they learned from the experience. 9 respondents agreed/strongly agreed that the project strengthened their relationships with other disciplines. An open question on the benefits of working together revealed the benefits of relationship building, understanding the work of other disciplines and sharing common experiences. Improvement suggestions included taking a structured QI approach from the outset.

PH Dublin/Midlands will take the learning from this QI project to continue collaborative efforts to deliver comprehensive public health management of chronic HBV. A quantitative evaluation of ESF return is planned.

Managing Typhoid Contacts

Topic / Dept: Health Protection

Author: Lili Peterson

Co Author: Siti Mardhiah Muhamad Fauzi

Co Author: Sarah Doyle

Co Author: Carlos Mejia Chew

The Abstract:

Two asymptomatic close contacts of a Typhoid case were screened due to high-risk work (food handling) and found to be carriers.

Despite not meeting the Health Protection Surveillance Centre definition for a case of Typhoid, they were asked to remain off due to the risk of transmission and potential severity of the disease. This led to several issues, including, concern over the legal implications of enforcing compliance and the sustainability of unemployment, as they worked zero-hour contracts. Social supports were limited and their visa status restricted redeployment options. Hence, antimicrobial treatment to achieve carrier state eradication was sought using a regimen with minimal evidence of achieving success, given the limited options due to high degree of antimicrobial resistance of the Salmonella typhi serotype. Whole genome sequencing carried out on the three samples concluded that they represented individual acquisitions of a highly clonal S.typhi serotype, rather than a 3-person chain of transmission. Environmental Health conducted a review of the practices within the facility finding them compliant, which lead to debate about whether asymptomatic carriers should be restricted from high-risk work.

Enabling Population Based Planning for the new HSE Health Regions: A Public Health Hub and Spoke Collaboration.

Topic / Dept: Health Service Improvement

Author: Ciara Catherine Kelly

Co Author: Mary Browne

Co Author: Declan Joseph McKeown

Co Author: Geraldine Martina Mary Sayers

Co Author: Naomi Petty-Saphon

Co Author: Luninda Ryan

Co Author: Stephen Barrett

Co Author: Jennifer Martin

The Abstract:

Sláintecare aims to deliver the right care, in the right place, at the right time. To achieve this, a key strategic objective of HSE Health Regions implementation is to support a population-based approach to service planning and delivery. This includes Population Health Profiles. From December 2023 to March 2024, a Public Health (PH) Hub and Spoke collaboration worked to develop standardised Population Profiles for each Region.

The Hub and Spoke approach consisted of a Population Profile Group formed with representation from regional PH Departments (Spokes) and National PH Teams (Hub). This Group designed and developed standardised profiles through consensus building approaches (surveys, a facilitated workshop and targeted consultation). Existing HSE Population-Based Planning (PBP) governance structures provided oversight.

The 6 standardised Population Profiles, published March 6 2024, provide insights across key demographic parameters. A new webpage provided greater accessibility to the profiles and associated resources.

Strong collective PH leadership through a Hub and Spoke collaboration underpinned this successful first step in the PBP journey. This learning will inform the next phase of profile development in 2024.

Implementation of a Data log system for Tuberculosis Contact Tracing- A Public Health Quality Initiative

Topic / Dept: Health Service Improvement

Author: Parvathi Theyagarajan

Co Author: Sivasankari Manickam

Co Author: Ruth McDermott

Co Author: Mark McLoughlin

Co Author: Zara Abidin

Co Author: Yvonne Williams

Co Author: Deirdre O'Connor

Co Author: Doris Obialor

The Abstract:

Efficient and accurate patient documentation is paramount to delivering high-quality care. We present a comprehensive overview of the Department of Public Health Dublin and Midlands's recent initiative to streamline the tuberculosis (TB) contact tracing documentation processes by transitioning from manual paper-based records to a digital log system.

We explored the inherent challenges associated with manual documentation, including potential for errors and inefficiencies. An implementation strategy and rollout plan was created which included training relevant staff on key system features. Anticipated benefits included improved workflow efficiency and enhanced accuracy in patient records.

The system was launched in April 2022, incorporating continuous feedback from team members. The system tracks key metrics from our region's patient population, such as the number of TB cases detected, percentage contact-traced, treatment success rates and rates of drug resistance. This streamlined data collection facilitates efficient monitoring and evaluation of the region's TB control programme.

This project underscores the importance of embracing technology to optimise patient documentation processes and enhance the quality of care delivered.

The impact of chronic kidney disease (CKD) and diabetes on hospitals, 2013-2022

Topic / Dept: Health Intelligence

Author: Anne O'Farrell

Co Author: Declan Joseph McKeown

Co Author: Howard Johnson

The Abstract:

Increases in life expectancy and in cases of diabetes mellitus (DM) have led to greater numbers of people with both DM and chronic kidney disease (CKD). This study describes the impact of DM and CKD in Irish hospitals from 2013 to 2022.

All cases of DM and CKD were extracted from the Hospital Inpatient Enquiry System (HIPE). Direct age-standardised using the EU standard population as reference.

During the study period, among CKD patients, there was an increase in DM from 19.9% to 21.7% ($p < 0.001$). Whereas the age-standardised inpatient rate for CKD without DM decreased by 22.7% from a rate of 304.6 per 100,000 in 2013 to 235.4 per 100,000 in 2022 ($p < 0.001$), the rate for combined CKD and DM increased by 6.4% from a rate of 200.9 per 100,000 in 2013 to 213.7 per 100,000 in 2022. This pattern was observed in both OPD and inpatient discharges. Length of stay and bed day use for patients with CKD and DM all increased significantly during the study period, as did the proportion with Stage 5 CKD.

The results show significant increases in need for complex care in this population. Significant strategic planning into the future is needed to ensure the best available care in the most appropriate setting for this patient group.

Epidemiology of severe acute respiratory infection (SARI) deaths in 2022: findings from one SARI sentinel hospital site, Ireland

Topic / Dept: Health Protection

Author: Tuba Yavuz

Co Author: Diane Bredin

Co Author: Roisin Duffy

Co Author: terra Fatukasi

Co Author: Margaret Fitzgerald

Co Author: Lisa Domegan

Co Author: Johanna Mary O'Donnell

The Abstract:

Severe acute respiratory infections (SARI) surveillance was established in Ireland in July 2021 at one tertiary adult hospital. The aim of this study is to describe SARI deaths in 2022.

Descriptive statistics were used to describe the characteristics. The difference in deaths between males and females was compared using the chi-squared test, a p value of < 0.05 was statistically significant. Analyses were conducted using R Studio.

The SARI case fatality rate was 12% and crude mortality rate was 28 per 100,000 population aged ≥ 15 years (n=86, median age: 79 years). Males accounted for a significantly higher proportion (n=54, 63%, p=0.017). The majority had an underlying medical condition (n=85, 99%) and received respiratory support (n=80, 93%). Pneumonia was reported as the most common complication (n=22, 26%). Among SARI deaths, 28%(n=24) were positive for SARS-CoV-2, 6%(n=5) were positive for influenza, and 6%(n=5) were positive for Respiratory Syncytial Virus(RSV).

The high mortality rates among hospitalised SARI patients emphasise the public health importance of SARI surveillance. The greater burden of SARS-CoV-2 on SARI deaths, compared to influenza and RSV highlighted the ongoing impact of the COVID-19 pandemic in 2022.

HPSC - National Notifiable Disease Hub; Meeting statutory reporting needs using a new approach to disease reporting

Topic / Dept: Health Intelligence

Author: Patricia Garvey

Co Author: Eoghan McCarthy

Co Author: Piaras O'Lorcain

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Co Author: Anthony Ortiz

Co Author: Eimear Keane

Co Author: Niamh Lynch

Co Author: Catherine (kate) Timoney

Co Author: Ajay Oza

Co Author: Geraldine Casey

Co Author: Suzanne Mary Cotter

Co Author: Anjush Arya

Co Author: Katie O'Brien

Co Author: Michael Carton

Co Author: Cesar Alves

Co Author: Greg Martin

The Abstract:

Historically, HPSC has met its statutory reporting remit via static outputs for fixed time periods. The aim of this project was to provide epidemiological analyses of core variables for 79 notifiable diseases in a dynamic reproducible timely way.

Using disaggregate data extracted from CIDR, transformed into aggregate values in R, and uploaded to ARCGIS online, we have created dynamic visualisations of notifiable disease data.

Part 1 of the hub displays data reported in the most recent week, featuring graphs that illustrate the weekly values and comparisons with earlier time periods. Part 2 displays a five-year analyses of trends, overall and by sex, age group, etc. Metrics available include counts, rates, and 5-week moving averages. A comparison with an average weekly count in the period 2017-2019 provides context. The hub has benefits for a range of stakeholders: for policymakers, it provides richer insights on infectious epidemiology from a single point of access; for regional public health

colleagues, it enables ready evaluation of the current local situation; for academic partners/the media, it reduces the need to submit specific data requests, and for the public, a better understanding of infectious disease in Ireland.

Are Irish Travellers now displaying the health and population patterns that the General Irish Population experienced in the 1940s?

Topic / Dept: Health Intelligence

Author: Brigid Quirke

Co Author: Catherine Cecily Mary Kelleher

The Abstract:

The aim of this study is to compare the General Irish Population pyramids based on census data from 1841 to 2022 with Traveller population data from 1986 to 2022. Historically it is argued that Travellers experienced similar population patterns to the general population 80 years previously. Using archived data from the Health Research Board Traveller study (1987); Traveller families from AITHS (2010); CSO Traveller census data from 2002 to 2022 and general Irish population (GP) census data from 1841 to 2022, converted into percentages in 5-year age groups with standardised axis to facilitate comparability. Then the patterns were interpreted.

The Irish population experienced population expansion prior to the famine, followed by severe contraction, impacted subsequently by mortality and emigration. From the 1960s there was growth and stabilisation. By contrast, this pattern was not observed in the Traveller population, who always experienced higher fertility, higher mortality and lower life expectancy. 1.9% of Travellers > 65yrs in 2008 Vs 11% of GP, in 2022 4.5% of Travellers >65 Vs 15% of the GP.

The hypothesis the Travellers historically had a similar population pyramid to the General Irish Population is a fallacy. Traveller patterns are more similar to developing country profiles, with recent evidence of slow growth in survival rates, though the demographic gap continues to grow. These findings also have health policy and planning implications.

Exploring parent-reported barriers to supporting healthy child behaviours: A scoping review

Topic / Dept: Health and Wellbeing

Author: Ellen Cosgrave

Co Author: Sarah O'Brien

Co Author: Veronica Conti

Co Author: Roisin Guiry

Co Author: Orlaith Potter

Co Author: Eamon Keogh

Co Author: Sorcha NicMhathuna

Co Author: Anne Pardy

Co Author: Abigail Collins

The Abstract:

One in four Irish children are affected by overweight or obesity, with higher rates among disadvantaged groups.¹ Parents play a key role in influencing child behaviour.

To inform HSE strategies for childhood obesity prevention a scoping review of parent-reported barriers to supporting healthy child behaviours was conducted in January 2024. A systematic search of Ovid Medline, Ebsco Medline, Ovid Embase and Google Scholar yielded 101 records; 20 were eligible for inclusion.

Barriers to healthy eating included lack of time, cost, lack of knowledge and cooking skills, conflicting information regarding healthy nutrition and persuasive marketing. Barriers to physical activity included parents' own low activity levels, child preferences for sedentary activities and lack of access to affordable, safe local facilities. Barriers to screen time regulation included lack of time, low parental self-efficacy, prevailing social norms, the ubiquity of screens and a lack of safe, affordable alternative play activities.

Knowledge generated from this study is being used by the HSE Healthy Weight for Children initiative to inform strategies, interventions and communications to support parents to promote healthy behaviours for their children.

A decade of population-based screening for colorectal cancer in Ireland: Lessons from four rounds of BowelScreen

Topic / Dept: Health and Wellbeing

Author: Philippa White

Co Author: Alan Smith

Co Author: Therese Mooney

Co Author: Patricia Fitzparick

Co Author: Pádraic MacMathúna

Co Author: Hilary Coffey

The Abstract:

Population screening for colorectal cancer (CRC) has been available through BowelScreen since 2012. We report on screening uptake, colonoscopy outcomes and performance characteristics of faecal immunochemical testing (FIT) during BowelScreen's first decade.

FIT and colonoscopy participation, and colonoscopy outcomes are described. Differences in FIT uptake over time and by age and sex were compared. FIT positivity rates, positive predictive value (PPV) of FIT for CRC and number needed to scope (NNTScope) to detect CRC were calculated.

Overall uptake of FIT was 42%. FIT uptake was higher in women than men (46% v 38%, $p < 0.001$) and in older (65-69 years) versus younger age group (60-64 years; 45% v 39%, $p < 0.001$). Attendance at index (first) colonoscopy was 81%. 1.8 CRCs were detected for every 1,000 people screened. The PPV of FIT for CRC was 5%. The NNTScope to detect CRC was 21. Men compared to women had significantly higher FIT positivity rates (5% v 3%, $p < 0.001$), cancer detection rates (2.5/1,000 v 1.2/1,000, $p < 0.001$) and PPV of FIT for CRC (5% v 4%, $p < 0.001$).

Strategies to increase uptake and sex-tailored screening approaches could improve screening effectiveness.

Large multi-pathogen outbreak in a nursing home in early 2024

Topic / Dept: Health Protection

Author: Aisling Moore

Co Author: Ciara Carroll

Co Author: Suzanne Mary Cotter

The Abstract:

Responding to outbreaks involving multiple pathogens in complex settings is challenging. We describe the management of a multi-pathogen outbreak in a residential care facility (RCF). Public Health Dublin and North East (PH DNE) declared an acute infectious gastroenteritis (AIG) outbreak in the RCF on 04/01/2024, and an acute respiratory virus (ARV) outbreak on 14/01/2024. An outbreak control team was convened and a site visit performed by PH DNE with the community support team to provide targeted infection prevention control advice. There were 27 influenza cases (attack rate [AR] 18.5%), 12 COVID-19 cases (AR 8.2%) and 2 norovirus cases (AR 1.3%) in residents. 3 (1.7%) staff had positive antigen tests. A further 31 (21.2%) residents had AIG symptoms; 21 residents (14.4%) and 32 staff (17.8%) had ARV symptoms. There were 8 deaths linked to the outbreak. 50% of residents had completed winter vaccination. Challenges included difficulties accessing testing for staff and delays receiving test results. Outbreak control in RCFs requires a high index of suspicion for ARVs, even when antigen tests are negative. Greater engagement with general practitioners and improved access to testing for staff would enhance winter preparedness.

A narrative literature review to inform the development of a health threats preparedness framework in Ireland.

Topic / Dept: Health Protection

Author: James Gilroy

Co Author: Louise Marron

Co Author: Michelle Williams

Co Author: Randal Parlour

Co Author: Mairin Colette Carmel Boland (nee Hayes)

The Abstract:

A key objective of Ireland's Health Protection Strategy is to enable preparedness, prevention, early detection and optimal response to health threats from all-hazards.

We conducted a narrative literature review to inform health threats preparedness framework development. We carried out literature searches in two phases, from 2017-2022, and an updated search covering 2022-2024, to ensure all relevant, recent literature was captured.

Health threats preparedness should include a risk-based, all-hazards, One Health approach, aligned with legislation. Multisectoral partnerships, collaboration and communication nationally and internationally are key, alongside clear governance structures and monitoring and evaluation. Adequate resources are required to operationalise effective and sustainable preparedness. Public health leadership must be to the fore.

Development of a health threats preparedness approach is legislatively mandated under EU legislation. This evidence review highlights priority areas for the development of a strengthened health threats preparedness framework. This framework supports the development of a strengthened emerging health threats function in Ireland.

Smoking and awareness of smoking as a risk factor for cancer in the Traveller Community in Ireland

Topic / Dept: Health and Wellbeing

Author: Patricia Fitzpatrick

Co Author: Aela O'Flynn

Co Author: Reuel Jalal

Co Author: Kate Frazer

Co Author: Regina Joye

Co Author: Mary Brigid Collins

Co Author: Lynsey Kavanagh

Co Author: Una Kennedy

Co Author: Triona McCarthy

Co Author: Brigid Quirke

Co Author: Maria McEnergy

Co Author: Aine Lyng

Co Author: Patricia Fox

The Abstract:

The 2010 AITHS noted an 11–15-year shorter life expectancy for Irish Travellers than general population. This study examined differences in smoking and awareness of smoking-related risk factors for cancer between Travellers and the general population.

A cross-sectional survey, adapted from NCCP's 2022 National Survey on Cancer Awareness, was completed in partnership with Primary Health Care for Traveller projects through interviews with Travellers (May - December 2023); results were compared with the 2022 general population survey.

483 Travellers and 2874 general population participated. Daily/occasional smoking was higher in the Traveller study (35.4% vs 16.5%; $p < 0.001$). Similar numbers reported smoking as risk factor for cancer (82.8%/87.8%), while fewer in the general population noted passive smoking (10.2% vs 38.5%; $p < 0.001$). More Travellers agreed/strongly agreed that smoking can only cause cancer if a long-term heavy smoker (46.6% vs 25.5%; $p < 0.001$); fewer agreed/strongly agreed a former smoker can get cancer after long-term quitting (70.2% vs 83.8%; $p < 0.001$).

Smoking rates are high, and awareness of some smoking risks are lower in the Traveller community; targeted & mainstreaming measures are required.

Reducing avoidable repeat sample rates for the HSE National Newborn Bloodspot Screening Programme: A quality improvement initiative

Topic / Dept: Health Service Improvement

Author: Ellen Cosgrave

Co Author: Loretta O'Grady

Co Author: Paul Marsden

Co Author: Catherine Harvey

Co Author: Mohammed Elsammak

Co Author: Abigail Collins

The Abstract:

Avoidable repeat National Newborn Bloodspot Screening Programme (NNBSP) samples cause anxiety for parents, distress to babies and delays in screening results. The avoidable repeat rate for the NNBSP was 4.2% between 2020-22;¹ internationally, acceptable comparable thresholds range from $\leq 0.3\%$ - $\leq 2\%$.² This quality improvement project aimed to reduce NNBSP avoidable repeat rates in line with international standards.

Data on the reasons underlying NNBSP avoidable repeats were collected and examined in October 2023 to identify common modifiable reasons for avoidable repeats. Results were presented to the NNBSP Governance Group and interventions to minimise avoidable repeats were co-developed.

Approximately 70% of avoidable repeats were related to sample-taking issues; 4% were due to inaccurate identification details. A National Healthy Childhood Programme newsletter and NNBSP memo were sent to sample-takers with instructions on how to reduce the likelihood of common modifiable reasons for avoidable repeats.

Common reasons for avoidable repeats were identified and action targeting underlying factors was implemented. The avoidable repeat rate and modifiable reasons necessitating repeat samples will be re-examined in October 2024.

First case of *Brucella Canis* in Ireland: A Rough Guide

Topic / Dept: Health Protection

Author: Neil Hyland

The Abstract:

Introduction

Brucella canis is endemic in animals in the Americas and Eastern Europe. Cases have been reported in the UK, but not yet in Ireland. Infections are acquired through the oronasal route by contact with infected dogs, particularly with aborted fetuses or secretions. Human infections are rare but children and the immunocompromised are at increased risk.

Case Details

In 2023 a woman moved from Mexico to Ireland with her 4 year old male dog. He had a history of intermittent lameness and evidence of discospondylitis, a sign of brucella in canines. The dog was otherwise well. There were no canine contacts of case and he lived alone with his owner.

Management

No treatment of the dog was recommended in the absence of symptoms. The owner of the dog was assessed at a local infectious disease clinic.

Discussion

Guidelines on the management cases are equivocal. Antibiotics may be considered in symptomatic animals but courses are prolonged and recurrence is common, in the absence of repeated exposures. Neutering and euthanasia may also be considered. Globally, there is an increase in cases, leading to the probability of more cases in the future. Notification is not mandatory in the EU/UK so cases may be underreported.

Interrupting the chain of transmission: TB contact tracing during times of COVID19. A single centre experience.

Topic / Dept: Health Service Improvement

Author: Kira Casey

Co Author: Sean Fennessy

Co Author: Pasqueline Lyng

Co Author: Sarah O'Beirne

The Abstract:

The Public Health and Respiratory teams working in the SVUH TB clinics noted that following the COVID19 pandemic, there appeared to be fewer contacts screened per active TB index case. Our audit set out to review the data on this, looking at the 3 years pre pandemic(2017-2019) and 4 years thereafter(2020-2023).

We performed a retrospective cohort study of active index TB cases that required contact tracing from 2017 to 2023. Data collection and analysis was carried out from February to March 2024.

Data from 2017-2019 calendar years, prior to the COVID19 pandemic, noted an average of 4.77 contacts per index TB case (total 107 index cases, 510 contacts). Data from 2020-2022 noted 3.03 contacts (total 59 index cases and 179 contacts). Now 2023 data is appearing closer to that of pre-pandemic times (22 index cases, 100 contacts, 4.54 contacts per index case).

Our study aimed to assess if some persisting changes following from the COVID19 pandemic, particularly in remote work environments would reflect a lower number of TB contacts per index case. In line with global concerns, our data highlights the ongoing workload of TB contact tracing locally and the importance of resource allocation for these services.

“One man’s waste is another man’s treasure” - the National Wastewater Surveillance Programme

Topic / Dept: Health Protection

Author: Gwendoline Deslyper

Co Author: Eve Robinson

Co Author: Lisa Donegan

Co Author: Jane Salmon

Co Author: Darren Dahly

Co Author: Teresa Hanley

Co Author: Howard Johnson

Co Author: Eadaoin Joyce

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Co Author: Charlene Bennett

Co Author: Jeff Connell

Co Author: Daniel Hare

Co Author: Cillian Fearghaios De Gascun

Co Author: Wim Meijer

Co Author: Joanne Chadwick

Co Author: Hannah Murphy

Co Author: Sukanya Dudeja

Co Author: Mariela Gutiérrez

Co Author: Niamh Martin

Co Author: Michael Carr

Co Author: Gabriela Gonzalez

The Abstract:

The National Wastewater Surveillance Programme (NWSP) was established in 2021. We describe the NWSP and its development plans.

We sample from 29 public wastewater treatment plants (WWTP) weekly, and the Ringsend WWTP twice weekly, covering approximately 70% of the population. We analyse for SARS-CoV-2 viral load and for specified variants. Since November 2023, we perform SARS-CoV-2 sequencing on Ringsend samples to determine circulating lineages. Since February 2023 we test Ringsend samples for poliovirus type 2 (PV2).

SARS-CoV-2 viral loads in wastewater have correlated with other COVID-19 indicator activity. The programme has also demonstrated the early detection of emerging SARS-CoV-2 variants compared to clinical samples; detection of BA.2.75 two weeks prior to the first clinical sample and the emergence of JN.1 in 2023. PV2 has been monitored since X and to date PV2 has not been detected.

Wastewater surveillance complements other surveillance methods. From 2025, the proposed Urban Wastewater Treatment Directive will mandate wastewater surveillance for specified targets and the EU Wastewater Integrated Surveillance for Public Health initiative will support the NWSP to achieve this requirement.

Factors affecting COVID-19 Outcomes in Ireland: Findings from a National Database of 1,408,249 cases diagnosed between 2020-2022.

Topic / Dept: Health Protection

Author: Shiraz Syed

Co Author: Patricia Fitzpatrick

Co Author: Catherine Cecily Mary Kelleher

The Abstract:

Serious outcomes of COVID-19 include ICU admission or death. Multiple risk factors exist which may contribute. The aim of the study was to assess roles of smoking, body mass index, metabolic and underlying clinical conditions in ICU admissions and death among those with COVID-19 in Ireland.

The analysis comprised all 1.4 million adult patients who tested positive with COVID-19 between April 2020 and December 2022. Central Statistics Office data was used. Key variables above were used for univariate and multivariate analysis with outcomes; ICU admission and death with COVID-19.

Mean age was 42 years and 53% were males. Current/ex-smokers (2.4 (2.2-2.6)), males (1.8, (1.7-1.9)), and individuals with an underlying clinical condition (10.2 (7.9-13.2)) were each significantly associated with ICU admission in multivariate models. The combined effect of metabolic status & age had a significantly reduced impact of risk of death for admitted patients overall, with a 1.5% decrease for each unit change in the interaction term (OR=0.98 (0.97-0.99)).

This comprehensive study confirmed international findings of poor outcomes in COVID-19, though clinical drivers for ICU and mortality may differ in hospitalised patients.

GP's use of video and telephone consultation - Implications for physical activity promotion

Topic / Dept: Health and Wellbeing

Author: Chris Callaghan

The Abstract:

The COVID-19 pandemic led general practitioners (GPs) to adopt video and telephone consultation (VC/TC) as part of routine practice. The potential impact on physical activity (PA) promotion and prescription for older adults, in routine practice, was unknown. The aim of this paper is to understand how VC/TC have impacted on the routine promotion of PA to older adults in GPs consultations. A mixed method, cross-sectional study of Health Care Professionals including Physios, GPs, Occupational Therapists and Public Health Nurses was conducted in Ireland and Northern Ireland in 2020. An online survey included responses from 36 GPs in addition to interviews with 10 GPs, explored awareness of PA guidelines, PA promotion during consultations to older adults (65+ years) and the impact on routine practice of moving to VC/TC during the pandemic. GPs from across the Island of Ireland agreed that PA promotion is part of routine practice. Analysis of interviews with GPs highlighted a need to develop practitioners' knowledge of the guidelines and themes around the use of VC/TC in routine practice. Positive themes highlighted that VC/TC enabled GPs to consult with a greater number of patients, thus prioritising face to face consultation.

Breast Cancer Screening and Deprivation in Ireland: Findings from 10 Years of BreastCheck.

Topic / Dept: Health and Wellbeing

Author: Philippa White

Co Author: Alice Brennan

Co Author: Joe McDevitt

Co Author: Deirdre Ellen Anne Murray

Co Author: Caroline Mason Mohan

Co Author: Alan Smith

Co Author: Patricia Fitzpatrick

Co Author: Therese Mooney

Co Author: Fidelma Flanagan

Co Author: Maeve Mullooly

Co Author: Niamh Bambury

The Abstract:

BreastCheck is Ireland's organised breast cancer screening programme. This study aimed to explore inequalities in terms of screen-detected breast cancer cases in Ireland in 2009-2018. Data on all female breast cancer cases diagnosed in 2009-2018 in Ireland were extracted from the National Cancer Registry Ireland (NCRI). Unadjusted risk ratios (RRs) and their 95% confidence intervals (95% CIs) were calculated to explore the associations between deprivation and breast cancer detected through screening and of late-stage breast cancer detected through screening. In women of screening-age, there was no difference across deprivation quintiles in terms of risk of having breast cancer detected through screening. During the 2009-2013 period in women with screen-detected breast cancer, the risk of having late-stage breast cancer detected on screening increased with deprivation. This trend reversed in 2014-2018, however, and there was no association found between deprivation and late-stage breast cancer in women with screen-detected breast cancer. Overall, regardless of level of deprivation, screening-age women in Ireland have a similar risk of having breast cancer detected through screening, and, in recent years, of having late-stage breast cancer detected on screening.

Establishing a dashboard at the Health Protection Surveillance Centre (HPSC): The development, impact, challenges and lessons learned.

Topic / Dept: Health Protection

Author: Mairead Madigan

Co Author: Brenda McManus

Co Author: Eoghan McCarthy

Co Author: Anthony Ortiz

Co Author: Miriam Kelly

Co Author: Ajay Oza

Co Author: Gillian Cullen

Co Author: Eve Robinson

Co Author: Johanna Mary O'Donnell

Co Author: Lisa Domegan

The Abstract:

Background

During the emergency phase of the COVID-19 pandemic, when HPSC experienced an unprecedented demand for epidemiological data, a daily COVID-19 Data hub was created. This has evolved into a Respiratory Virus Notification data hub, displaying weekly COVID-19, influenza and respiratory syncytial virus (RSV) data. We detail it's development, challenges, impact as well as lessons learned.

Methods:

Collaborative partnerships between statisticians, infectious disease modelling experts, data analysts, public health doctors, communications specialists and epidemiologists across the HPSC, HSE and Department of Health were formed. The Computerised Infectious Disease Reporting system (CIDR) provided laboratory confirmed cases. Data management was done with Statistical Package R. The hub was designed using ArcGIS hub.

Results

The COVID-19 hub launched to the public in April 2021. On November 22nd 2023, the COVID-19 hub migrated the Respiratory Virus Notification data hub. This season, the Respiratory hub has been viewed 26,413 times.

Conclusion

The HPSC dashboard provided timely and accurate information to the public, media, clinical staff and Public Health colleagues, presenting key public health messages.

Deduplication of CIDR: Automating mundane and repetitive tasks

Topic / Dept: Health Service Improvement

Author: Catherine Timoney

Co Author: Donna Kilmartin

Co Author: Louise Cullen

The Abstract:

The Computerised Infectious Disease Reporting system (CIDR) is the national repository for notifiable diseases. CIDR was developed to manage the surveillance and control of infectious diseases in Ireland. There are 80 diseases notified on CIDR and over 1 million notifications in the last two years alone.

Validation processes exist regionally and nationally ensuring data is accurate and complete. Duplicate notifications are a known issue that require epidemiological skills to determine if they are genuine duplicates or separate incidences of the same disease. Identification of duplicates is laborious and time intensive. Presently, epidemiological staff perform this task quarterly using Excel and report it taking one hour per disease.

A HPSC project with the Department of Public Health West & North West was established to create an automated tool to address this issue. This tool is written in R and can identify potential duplicates from any number of records, currently taking less than ten seconds to analyse approximately 15,000 records.

This work puts automated tools into the hands of skilled staff and removes the laborious data manipulation tasks from their workload. When complete the tool will be shared with all regions.

Sexually transmitted infections (STIs) in young people aged 15-24 years in Ireland; 2019-2023.

Topic / Dept: Health Protection

Author: Martha Neary

Co Author: Angeline McIntyre

Co Author: Kate O'Donnell

Co Author: Mary Archibald

Co Author: Derval Igoe

The Abstract:

Ireland like other European countries¹ is experiencing a large increase in sexually transmitted infections (STIs) with young people aged 15-24 years disproportionately affected.

Data are based on all STI notifications between 2019 and 2023 and were extracted from Computerised Infectious Disease Reporting (CIDR) system on 1st February 2024.

In 2023 almost 2% of females and 1% of males aged 15-24 years had an STI. Chlamydia and gonorrhoea account for 93% of all STI notifications in young people. Since 2019 the gonorrhoea notification rate has increased disproportionately up 294% in young females compared to an 66% increase in the chlamydia notification rate, in young males the increases were 116% and 27% respectively. The HSE Home Testing service introduced in 2022 has increased capacity for STI testing and diagnosis. Chlamydia and gonorrhoea notifications in young people have increased by 52% and 196% respectively since 2019 and home testing accounts for 48% chlamydia and 29% of gonorrhoea notifications in 2023, indicating the increase in gonorrhoea notifications is not due to better case ascertainment.

Awareness, ready access to testing, treatment, and partner notification are key to limit spread of STIs in young people.

The development and implementation of a national measles contact tracing database in Ireland

Topic / Dept: Health Intelligence

Author: Síle Kelly

Co Author: Catherine Tomoney

Co Author: Orla Bruton

Co Author: Louise Marron

Co Author: Augustine Pereira

The Abstract:

Contact tracing is essential to measles response and informs prompt public health action. The Measles Contact Tracing Database Team (MCTDT), with the support of the Measles IMT, developed, piloted and operationalised a national measles contact tracing tool to facilitate an efficient and standardised process.

The beta version developed in a regional department of Public Health was amended and enhanced through consultation and consensus within the MCTDT and with regional departments of Public Health.

The interface is a user friendly excel spreadsheet for use by clinicians with dynamic content, supporting public health risk assessment and action. An automation and analysis system, with R-script, then creates an area database providing a summary of cases, contacts and epidemiological links for monitoring actions, and a pseudoanonymised dataset for merging into a national database for reporting on epidemiology of contacts to IMT. Training was provided to regions by the MCTDT.

The MCTD provides a practical, standardised, dynamic database to assist Public Health clinical teams. It allows for easy regional and national analysis and later for disease network analysis. The national rollout has received positive initial feedback.

The Laura Brennan HPV Catch Up Campaign in the Mid-West

Topic / Dept: Health Protection

Author: Claire Sharkey

Co Author: Fintan Walsh

Co Author: Rachel McNamara

Co Author: Breda Cosgrove

The Abstract:

As part of the Laura Brennan HPV catch up campaign, Public Health HSE Mid-West aimed to use innovative communication strategies to encourage individuals to avail of the HPV vaccine with a particular focus on hard-to-reach groups.

Through radio interviews, local newspaper and social media, the vaccine and upcoming clinics in the region were advertised. Information days were held at Freshers' Week events in third level institutions before on-site vaccine clinics. Areas of high deprivation were identified and agreements made to set up vaccine clinics in these areas. Local traveller health professionals were consulted and adapted information pieces were created for the traveller population. Family resource centres and domestic abuse refuges were approached to advertise upcoming clinics. Teaching sessions were done in the local youth service. In Limerick Prison, we engaged with prisoner health advocates who spread information and leaflets to all cells regarding the upcoming on-site clinic.

HPV vaccine uptake increased from 48 to 167 vaccines per month.

Cervical cancer and 5-year mortality from all cancers is significantly higher in the most deprived.

Improving HPV vaccine uptake in this population is imperative.

Supporting influenza and COVID-19 vaccination uptake among healthcare workers in the Dublin & Midlands Hospital Group

Topic / Dept: Health and Wellbeing

Author: Ciara Conlan

Co Author: Ethel Murphy

Co Author: Grainne O’Kane

Co Author: Andrea King

Co Author: Laura Smith

Co Author: Parvathi Theyagarajan

Co Author: Fiona McGuire

Co Author: Noelle O’Loughlin

Co Author: Benjamin Aniugbo

Co Author: Ruth McDermott

Co Author: Mary Ward

Co Author: Una Fallon

Co Author: Fionnuala Cooney

The Abstract:

The Dublin Midlands Hospital Group (DMHG) requested Public Health support to improve sub-optimal uptake of influenza and COVID-19 vaccination among healthcare workers (HCWs). Our team agreed to provide in-person education sessions after first providing a briefing to heads of service (HOS).

Enquiry was made on reasons why HCWs were not receiving vaccinations. Responses were categorised into nine themes and a bespoke presentation was developed for HOS and HCWs. The briefing to HOS focused on supporting them in communicating about vaccines to worried staff, managing vaccine hesitancy and vaccine fatigue and how to counter common myths.

Eighty HCWs availed of sessions across three sites. Onsite presentations made the benefits of vaccinations clear to HCWs, with one site reporting 93% of staff feeling more confident in promoting vaccination.

Lessons identified included fostering earlier collaborative vaccination planning and embedding vaccination into the culture of the institution. Public Health training of site champions would enable

delivery of sessions to staff at convenient times and places. Access, incentives, and co-alignment of influenza and COVID-19 vaccine clinics were identified as instrumental in promoting uptake.

INAUGURAL NOCA NPMR REPORT ON MORTALITY IN CHILDREN AND YOUNG PEOPLE IN IRELAND: 2019-2021

Topic / Dept: Health Service Improvement

Author: Cliona McGarvey

Co Author: Michael Barrett

Co Author: Martina Healy

Co Author: Niamh Beirne

Co Author: Karina Hamilton

Co Author: Fionnola Kelly

The Abstract:

Background: The National Paediatric Mortality Register (NPMR) aims to provide accurate information on deaths in children and young people (CYP) in Ireland. This report aims to analyse patterns, causes and potential preventability of CYP mortality in Ireland from current data sources.

Methods: Analysis of death registration information of children 0-18yrs (2019-2021), review of existing CYP mortality datasets and international best practice.

Results: 892 deaths were identified; 61% (<1yr); 23% (1-14 yrs); 16% (15-18 yrs). Post-infancy the leading cause of death is injury; 22% (1-14-yrs) and 56% (15-18yrs). Neoplasms were the second leading cause of death in children >1yr; 20% (1-14yrs), 17% (15-18yrs). The greatest proportion (24%) of injury fatalities in 1-14yr olds were due to road traffic collisions (RTCs) followed by homicide (18%). Among 15-18yr olds, the leading causes of injury fatality were ligature strangulation (58%) and RTCs (17%).

Conclusion: More granular detail is required to prescribe evidence based change to reduce the number of premature deaths. The NPMR has issued 5 key recommendations for a national database designed to analyse data and report trends in rates and factors impacting on CYP mortality.

The association between quit advice from health care providers and quit attempt among smoker in nationally representative sample in Oman, a cross sec

Topic / Dept: Health and Wellbeing

Author: Salma Rashid Kalbani

The Abstract:

Tobacco use is a global epidemic, with two out of three smokers trying to quit (1). In Oman, little progress has been made in implementing best practice in stop-smoking program(2). This study aims to examine the association between healthcare worker advice and their quit attempts.

Using secondary data from STEPS 2017, across-sectional analysis was conducted. A univariate and multivariate regression analysis was performed to investigate the association between quit advice and quit attempt (the primary outcome of interest).

A total of 6743 participants (97% response rate) took part in this survey; 7.6% were smokers. Quit attempts were significantly higher among smokers with higher educational attainment (AOR = 3.35, $p < 0.0001$), and higher income groups (AOR = 2.21, $p = 0.007$) than their counter groups. When adjusting for possible confounders, providing advice by a health care worker to quit smoking was associated with a 3.13 times increased chance to attempt quitting (AOR 3.13, $p = 0.003$).

This is the first nationally representative study to examine the association between quit advice and quit attempts in Oman. Quit advice from a health care provider increases quit attempts, yet, further research is required.

Verotoxin-Producing E.coli (VTEC) Outbreak at a Voluntary Residential Healthcare Facility

Topic / Dept: Health Protection

Author: Orla Therese Irene Cotter

The Abstract:

In January 2024 The Department of Health Public Midlands were notified of 8 VTEC cases at a voluntary residential healthcare facility. The outbreak control team (OCT) experienced several challenges in responding to an outbreak in this setting.

In addition to instituting control measures, the OCT investigated several potential sources, including milk pasteurised on site, a private drinking water supply and the potential for a common food exposure.

All well water samples were compliant with the parametric values set out in the European (Drinking Water) Regulations 2023.(1) The Department of Agriculture investigated pasteurisation processes and testing did not yield evidence of contamination. A chicken meal prepared onsite was identified as a common exposure, however this was found not to be statistically significant after a survey of all residents, RR 0.72 (95% CI 0.17 – 3.14) p= 0.65.

The exact source of VTEC in this outbreak was not determined, but control measures successfully prevented further transmission. The OCT made several recommendations to this facility. These included connection to a public mains supply, discontinuation of milk pasteurisation on site and clarification of clinical governance structures.

Screen and social media use and adolescent mental health

Topic / Dept: Health and Wellbeing

Author: Fionn Donnelly

The Abstract:

Adolescent mental health has deteriorated in Ireland in the past 10 years. There has been a large increase in diagnosis of several mental health conditions, including suicidal ideation and self-harm. A major change which coincides with this shift in adolescent mental health is the wide availability of image based social media, and smartphone use.

Using data from the Planet Youth survey 2021, I examined the relationship between different types of screen use, and validated mental health problem scores for secondary school students in Cavan, Monaghan and North Dublin.

I found significant associations between high levels of screen use and worse mental health scores. For all types of screen use, high use (4 hours or more per day) was associated with worse mental health scores. There was a large difference between male and female students in both their mean mental health scores, and the proportion of variance explained by different types of screen use. Social media use was the greatest risk factor, and female students were three times as impacted by this factor as males.

This research is in consistent with existing literature demonstrating a bigger impact from heavy social media use on girl's mental health compared to boys.

A REVIEW OF STRUCTURES SUPPORTING MORTALITY DATASETS FOR CHILDREN AND YOUNG PEOPLE IN IRELAND

Topic / Dept: Health Intelligence

Author: Cliona McGarvey

Co Author: Michael Barrett

Co Author: Martina Healy

Co Author: Niamh Beirne

Co Author: Karina Hamilton

Co Author: Fionnola Kelly

The Abstract:

Background: The National Paediatric Mortality Register (NPMR) aims to provide accurate information on deaths in children and young people (CYP) in Ireland to drive improvements in care and reduce the number of deaths. This study aims to describe current data sources and processes for reporting CYP mortality data in Ireland.

Methods: Scoping review of existing CYP mortality datasets and current notification systems. Potential and limitations of available CYP mortality data sources are outlined.

Findings: To date, data relating to CYP deaths have been extracted from multiple databases with resultant gaps in information. No Irish database exists that meets the required data needs. They lack detail to permit classification, descriptors, and modifiable factors contributing to death. Current death registration processes result in untimely reporting of data on child deaths. Best practice international models exist such as the National Child Mortality Database (NCMD), England.

Conclusion: A national database of standardised, high quality data on CYP mortality is required to allow review of contributory factors and timely reporting of mortality statistics. The NPMR has issued recommendations for establishment of such a database.

An online profile and map resource for population-based planning

Topic / Dept: Health Intelligence

Author: Declan Joseph McKeown

Co Author: Siobhan McCarthy

Co Author: Mary Browne

Co Author: Naomi Petty-Saphon

Co Author: Geraldine Martina Mary Sayers

Co Author: Stephen Barrett

Co Author: Lucinda Ryan

Co Author: Jennifer Martin

The Abstract:

Population-based planning depends initially on the ability to describe a population. This is the concept behind population profiling, a function that is available within the Health Atlas Finder (HAF). However, for those who are not familiar with HAF, or its ability to provide profiles for areas from Health Regions (HR) down to Small Areas (200 persons), an online resource will provide pre-packaged maps and profile reports.

With a “quick pick” selector of 16 parameters, a profile is provided for each of the 96 Community Healthcare Networks (CHN). Maps are provided for each CHN showing: the road network and boundary; a deprivation map; and a population density map. CHNs are sorted on a landing page into the six new HRs. Departments of Public Health have agreed for each HR profile to be available also. The online resource was launched in early March 2024 and has proven a popular and intuitive addition to other population-based planning tools. It is hoped that it will prove to be useful to all staff, especially those unfamiliar with mapping and profiling, and that those who use the resource may choose to learn more about the increased functionality available within HAF.

Devising a Quality Management System for PPPGs- "A SOP for SOPs."

Topic / Dept: Health Service Intelligence

Author: Orla Therese Irene Cotter

Co Author: Benjamin Aiugbo

Co Author: Parvathi Theyagarajan

Co Author: Yvonne Williams

The Abstract:

The Quality, Risk and Safety (QRS) Committee of the Dublin Midlands Department of Public Health, identified the need for a Quality Management System (QMS) for all policies, procedures, protocols and guidance (PPPG) documents. The overall aim of the QMS was to standardise PPPGs across the department as two Public Health teams merged into one area, as part of the Public Health reform process.

The QMS had several objectives: describe the governance of PPPGs across each discipline, provide a contemporaneous record of all PPPGs in use, identify individual PPPGs due for review and to ensure and expired or defunct PPPGs are appropriately archived.

A QRS subgroup was convened to progress this work. Its work included:

1. Agreeing a standard PPPG template document
2. Collating all department PPPGs into a master document
3. Establishing a naming conventional for PPPGs
4. Developing a standard operating procedure (SOP) for the QMS itself

This quality improvement initiative will ensure the development and maintenance of high quality PPPGs across all disciplines in our Department. The QMS will also reduce risk that may arise from the adherence to out of date PPPGs.

Establishment of Regional Senior Health Promotion & Improvement Officers - Cancer Prevention Network

Topic / Dept: Health and Wellbeing

Author: Aine Lyng

Co Author: Triona McCarthy

Co Author: Maria McEnery

Co Author: Adrienne Lynam

Co Author: Una Kennedy

Co Author: Breda Neville

Co Author: Heather Burns

The Abstract:

The HSE National Cancer Control Programme (NCCP) is engaged in implementation of the National Cancer Strategy 2017-2026.

Keeping with the NCCP focus on prevention and early diagnosis of cancer, regional roles of Senior Health Promotion & Improvement Officer–Cancer Prevention (SHPIO-CP) have been established. They are funded by the NCCP and allocated to ensure representation in each new HSE Health Region.

The role sits in HSE Health & Wellbeing within the relevant CHO (or future HSE Health Region) and supported by the NCCP public health team. The SHPIO-CPs formed a Cancer Health Promotion & Improvement Practitioner Network, co-chaired by NCCP and HSE Health & Wellbeing. The Network is a forum for collaboration and shared learning.

They SHPIO-CPs are implementing initiatives in their regions, focusing on local needs, to reduce cancer risk and improve cancer early detection.

The roles, and collaboration, creates access to cancer prevention and early diagnosis initiatives, building connections with colleagues working on similar programmes, strengthening work and avoiding duplication. The Network enables information sharing between NCCP, National Programmes and staff engaged in delivery of cancer prevention and early diagnosis.

Back to the Future – Learning from CIDR to inform future infectious disease system development

Topic / Dept: Health Protection

Author: Shane Creagh Piper

Co Author: Tamara Ringwood

Co Author: Joanne Moran

Co Author: Louise Cullen

Co Author: Elaine Brabazon

The Abstract:

On the 20th anniversary of the launch of Computerised Infectious Disease Reporting system (CIDR) in Ireland, this study aims to review overall infectious disease notifications and highlight key areas of learning through two decades of health protection in Ireland and 2 global pandemics.

All infectious disease notification aggregate data from 2004 to 2023 were extracted from CIDR.

Meetings and a survey with a selection of key stakeholders were also undertaken.

Between 2004 to 2023, a total of 2,263,607 events and 35,937 outbreaks were reported on CIDR.

The highest count of notifications for disease category, when excluding COVID-19, was HIV/STIs. In

2022, the highest annual number of notifications on CIDR was recorded at 968,073. Those at risk in

Ireland of having a notifiable disease reported on CIDR has risen from 2004 (CIR 218/100,000) to

2023 (CIR 1822/100,000). In other words, approximately 2 out of every 100 people in Ireland were

notified to CIDR with an infectious disease in 2023. Stakeholders identified aspects to CIDR that will

be important in future systems development.

As we plan for a successor system, learning from overall epidemiological trends and how public health used CIDR will be a guide for the future.

Group A Streptococcus (GAS) in the Mid-West; A review of GAS results and audit of IGAS Management

Topic / Dept: Health Protection

Author: Katie Margaret Corridan

Co Author: Melaine Barnes

Co Author: Anne Murray

The Abstract:

Ireland experienced an unseasonal upsurge in IGAS from Oct 2022 to Aug 2023. The case definition was expanded in Dec 2022 to include non-sterile GAS with clinical symptoms consistent with severe infection. As a result the Department followed up GAS results in non-sterile sites to determine if IGAS case definition was satisfied.

All laboratory GAS results reported to the Department from Oct 2022 to Aug 2023 were identified using the internal infectious disease log. Each case file was reviewed. CIDR was used to verify IGAS cases. Case management was audited using the HPSC IGAS guidelines.

143 GAS results were reported to the Department during this period. 27% of these were confirmed IGAS of which 73% were notified from non-sterile sites. 41% of IGAS cases were in children. Case management was compliant with HPSC guidelines in providing information and provision of timely, appropriate chemoprophylaxis to high-risk contacts in 100% of cases.

This study provides greater detail of the IGAS case epidemiology and enables estimation of workload associated with reviewing GAS results. This study prompted a review of reporting protocols of GAS results from the laboratory. The audit provides evidence of consistent, quality service.

Investigation of an Outbreak of Carbapenemase-Producing Enterobacterales (CPE) in a Residential Care Facility (RCF).

Topic / Dept: Health Protection

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The Abstract:

CPE creates challenges in healthcare settings. Acquisition of CPE is primarily associated with acute hospitals and guidelines for screening in Ireland focus on this setting with set criteria for testing as recommended by Antimicrobial Resistance & Infection Control Guidelines (2022).

In November 2022, the Department of Public Health Dublin North East was alerted by Our Lady's Hospital Navan about two admissions from a single RCF with CPE colonisation detected following rectal swab screening on admission. Surveillance identified a further 6 cases linked to this RCF and 2 cases living in the local community adjacent to the RCF. Whole genome sequencing showed similar genotype in all samples.

This poster will outline how spread of CPE was identified and relevant control measures were determined.

Investigation involved surveillance, identification of risk factors and implementation of infection control measures. . A site visit identified potential risks and indicated optimum prevention and control advice.

Collaboration and shared learning between the acute hospital and the Department of Public Health is important for prompt recognition and control of CPE spread in RCF settings.