Inside the Irish Medication Safety Network

Who We Are, What We Do, &

How We Strengthen Medication Safety

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www.imsn.ie

Irish Medication Safety Network

About the IMSN

Voluntary, independent group of Pharmacists from public & private Irish hospitals with **goal to improve patient safety by reducing medication related harm.**

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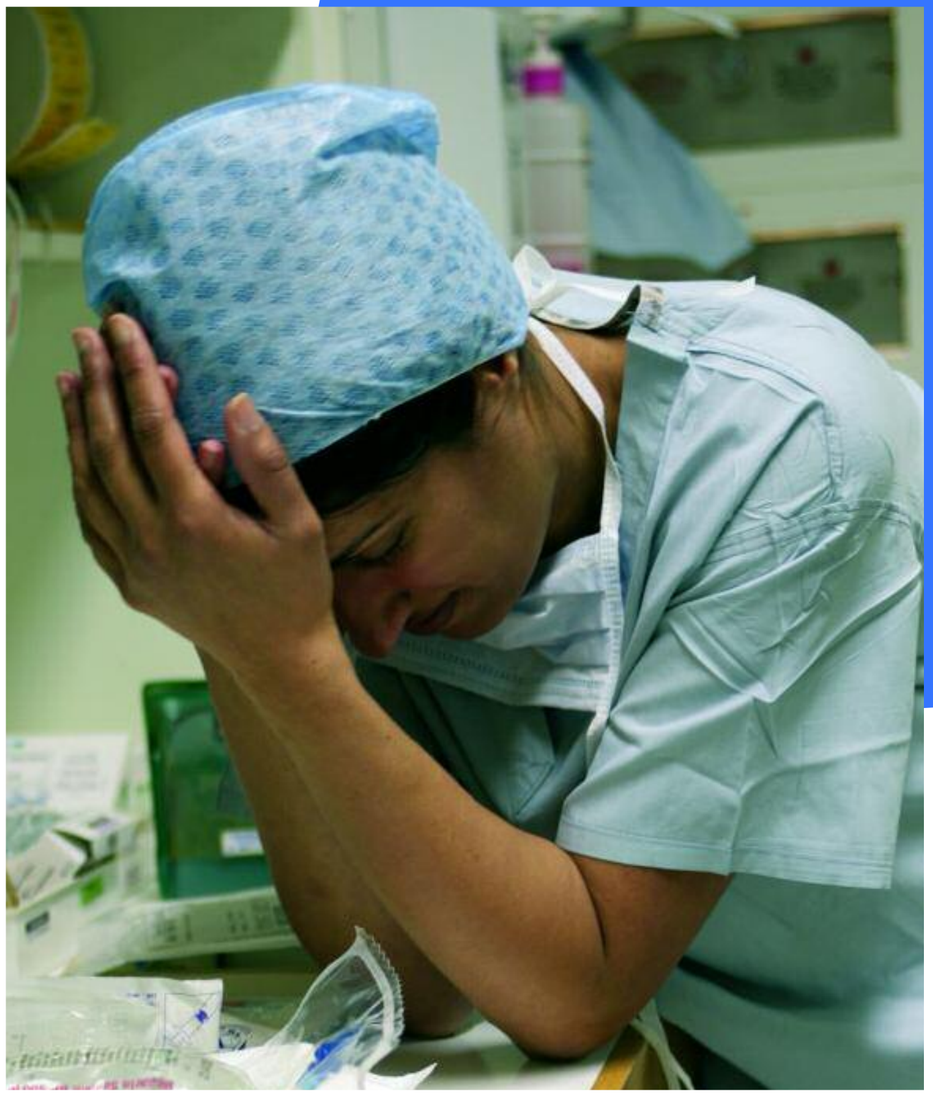
Everyone **makes mistakes.**

When patients are harmed,

all those involved – families, patients and staff can feel devastated.



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Pre-webinar Questions?

1. What are good examples of medication safety in your work practice?
2. What are the most significant medication safety challenges you encounter at work?

Rish reduction strategies for prevention of high risk medication error

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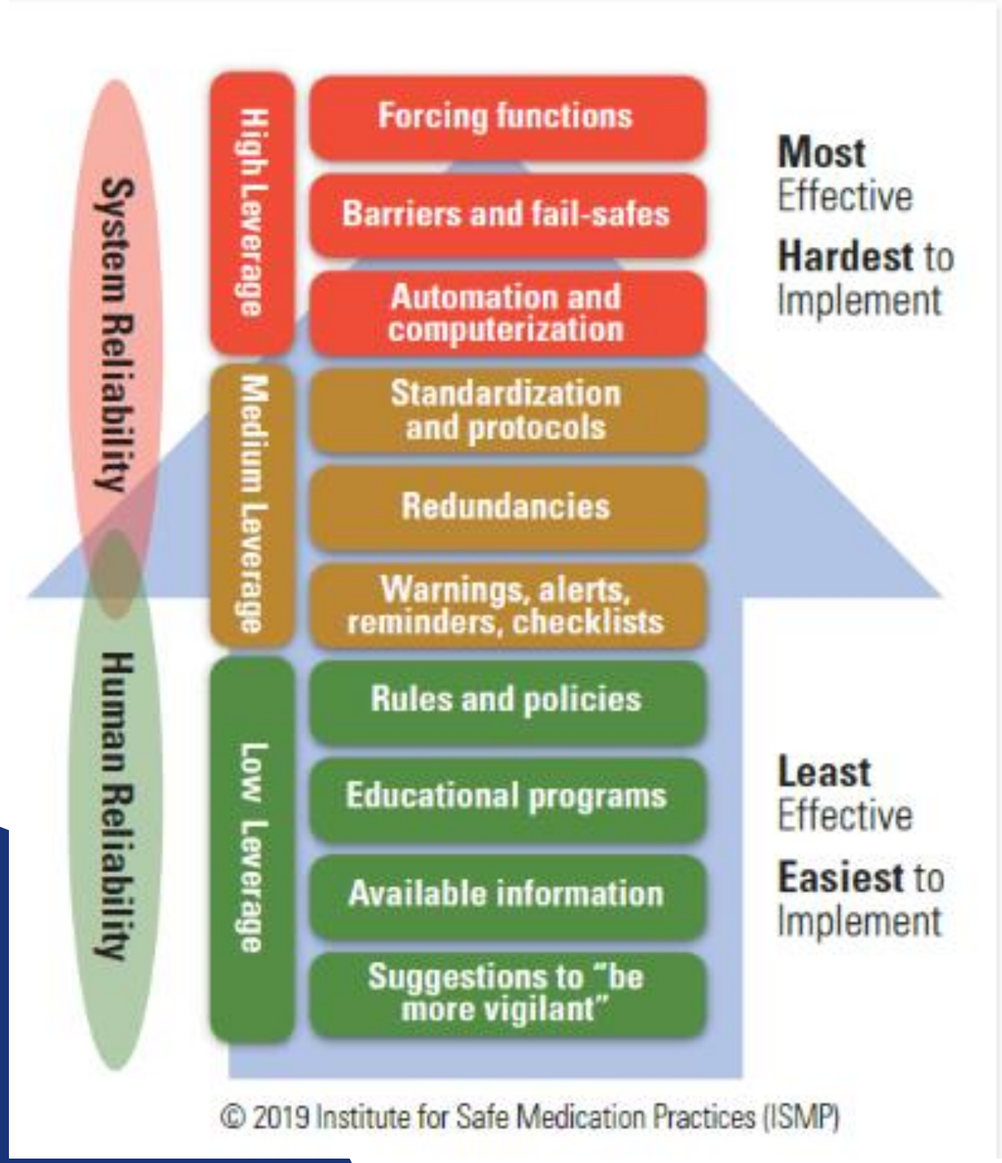

- Clinical review/med rec
- Process standardization
- Learning from incidents
- Safety huddles
- 10 Rights
- Technology

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Good examples of med safety at work

✓ **Strong commitment to developing and maintaining a safety culture**
Reporting, learning, and open communication underpin many practices (safety huddles)

✓ **Systemisation and standardisation are central**
Checklists, double checks, automation, e-prescribing safeguards, forcing functions, and structured workflows all reduce variability.

✓ **High-risk medications get special attention**
Policies, segregation, double signatures, labelling, and education all focus on high-alert meds.

✓ **Technology is increasingly leveraged for safety**
From smart pumps to digital alerts to emerging AI solutions.

✓ **Multidisciplinary teamwork is critical**
Pharmacists, technicians, nurses, prescribers, and specialist safety roles collaborate to reduce risk.

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Med safety challenges at Work

1. Prescribing safety
2. Buy in from other disciplines
3. Communication & information gaps
4. Transitions of care
5. Workload/**time** pressure
6. Digital/IT limitations – lack of EHR/eRxing
7. Sound-alike/look-alike (SALAD/LASA) risks & product variability
8. Medication administration training & processes
9. Patient counselling and understanding – generic changes

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How does IMSN reduce medication related harm?

Collaborative network sharing information, identifying risks & developing & contributing to medication risk mitigation guidance

- Heads up – shared learning
- Establish working groups & Collaborate/engage with relevant stakeholders in provision of guidance on high-risk medicines and processes
- sharing good practice via website & conferences

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IMSN Medication Safety Engagement

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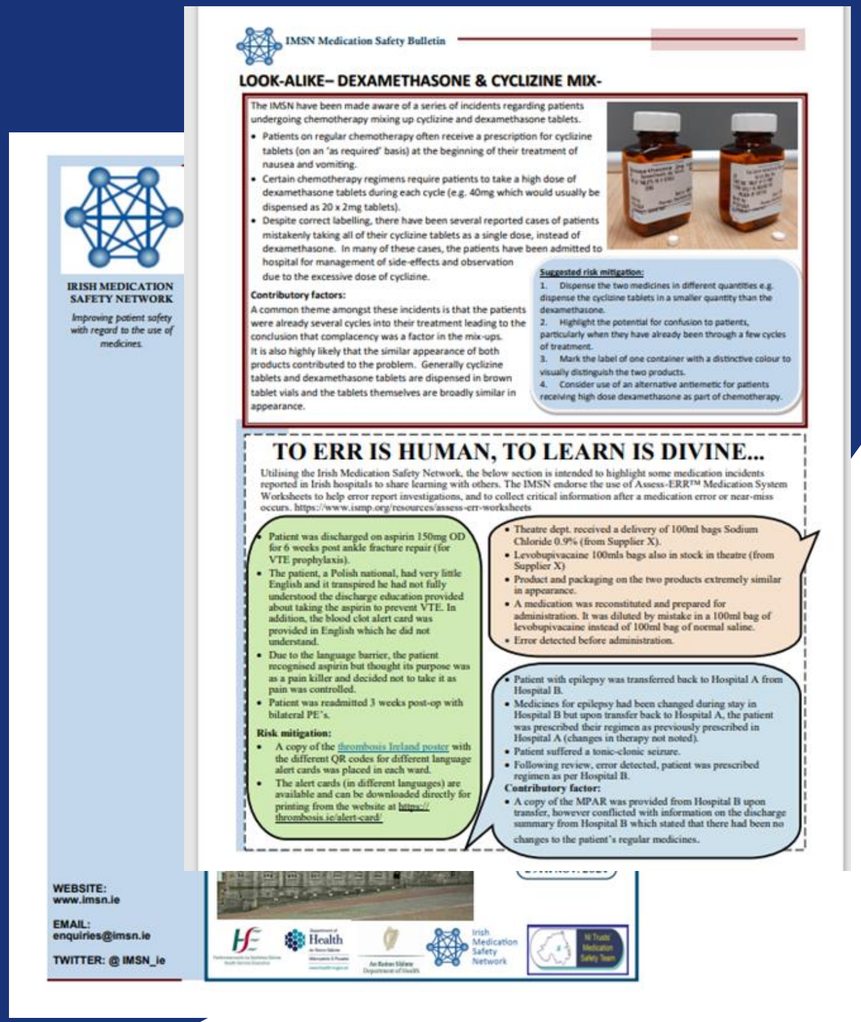
IMSN Publications & Activity

- Alerts – *high risk drugs & processes*
- Briefing Documents
- Guidance
- Bulletins
- Contributors to guidance
- Annual conference
- e-Health working group



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IMSN Sound Alike Look Alike Drugs

"it deosn't mttaer in waht oredr the ltteers in a wrod are the olny iprmoatnt tihng is taht the frist and lsat ltteer are in the rghit pcale" Surprisingly, many people can. This may explain why the following similar-sounding drugname pairs were frequently involved in errors / near misses in a recent survey of Irish hospitals.

SALADs refers to look-alike and sound-alike drug names and look-alike product packaging which can cause confusion resulting in potentially harmful medication errors.

Amlodipine	⟷	Amitriptyline
Atenolol	⟷	Allopurinol
Carbamazepine	⟷	Carbimazole
Propranolol	⟷	Prednisolone

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Briefing Document on Sound-Alike Look-Alike Drugs (SALADs) in the Hospital Setting

This document is intended to be used in conjunction with the IMSN ***SALAD Bar: a list of reported Sound-Alike Look-Alike Drugs which have been confused or have potential for confusion*** (available on www.imsn.ie)

Publication Date: October 2024 (version 3)

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SALAD Bar

of reported Sound-Alike Look-Alike Drugs that have been confused or have potential for confusion

2024 (version 3)

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Recent IMSN Publications

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SAFETY ALERT
Time Critical Medicines

ISSUE

Medicine doses may be omitted or delayed in hospital for a variety of reasons[1]. The most common incident category reported on the National Incident Management System (NIMS) for the period 2019 to 2022 was 'omitted / delayed dose' accounting for approximately 23% of all medication incidents reported.[2] There are **time-critical medicines** and **clinical conditions** where **delays or omitted doses can cause serious harm** (including fatal outcomes).[3]

The *Institute of Safe Medication Practices* (ISMP) defines time critical medicines as medicines where delayed or early administration of more than 30 minutes from the prescribed time for administration may cause harm or result in substantial sub-optimal therapy or pharmacological effect.[4] *An omitted dose* is any dose that is not administered before the next dose is due.[5]

EVIDENCE OF HARM

- **Case 1:** Patient was diagnosed with pulmonary embolus. Stat dose of enoxaparin was prescribed but does not appear to have been given. Patient arrested and died.[1]
- **Case 2:** A patient was on Tazocin® (piperacillin/tazobactam). A mixed culture showed one isolate resistant to Tazocin®. The patient's antibiotic was changed to Meropenem. The first dose of Meropenem was only given 24 hours later as apparently it was sent to the wrong place. The patient was admitted to the Intensive Care Unit with sepsis.[1]

HOW TO REDUCE THE RISKS

- Each hospital should identify a local list of Time Critical Medicines relevant to the services and treatments provided and display this list to inform patients and staff. Table 1 outlines suggested medicines to include in local lists. Think administer to **'PATIENT ASAP'**.
- Each hospital should consider a specific time frame within which time critical medicines must be administered.
- Hospitals should identify patients on Time Critical Medicines as soon as possible on arrival.[6]
- Ensure medicines management procedures include guidance on the importance of prescribing, supplying and administering time critical medicines including what steps to take when a medicine has been omitted or delayed.[1]
- Review and, where necessary, make changes to the supply processes for time critical medicines within and out-of-hours to minimise risk.[1]

TABLE 1. SUGGESTED DRUGS TO INCLUDE IN LOCAL TIME CRITICAL MEDICINES LIST

Drug Name / Class	Potential Consequence of Omitted / Delayed Dose
Parkinson's Disease/ Movement Disorders medication	Loss of movement control *(See IMSN Parkinson's disease series 2024)*[7,8]
Anticoagulants e.g. enoxaparin, warfarin, rivaroxaban, apixaban, dabigatran, edoxaban	Thrombus formation and serious embolism (PE/stroke)
Transplant/ Immunosuppressants	Disease flare or transplant rejection
Insulins	Poor glycaemic control, symptomatic hyperglycaemia, diabetic ketoacidosis
Epilepsy Medicines	Loss of seizure control
Narcotics (Opioids)	Loss of pain control
Treatment with steroids	Treatment failure; acute adrenal insufficiency if abrupt withdrawal after prolonged usage
Antimicrobial	Potential worsening of systemic infection and deterioration of condition
STAT dose (prescribed for immediate administration)	
Antidotes	Failure to reverse toxicity resulting in patient harm
Psychotropics e.g. clozapine	Missed doses or delayed doses may lead to the need for re titration resulting in worsening of the mental state and prolonged hospital stays.

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Best Practice Guidelines for Prescribing and Monitoring of Lithium Therapy

Lithium Therapy
Patient Information Booklet

Building a Medication Safety Programme in Acute Care in Ireland: Fundamental Steps

Version 2, March 2023

Irish Medication Safety Network

A Guide Compiled by:

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in collaboration with and on behalf of the IMSN

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Briefing Document on Medication Use and Falls Risk

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High Risk Drugs

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Safety Alert
Direct Oral Anticoagulants (DOACs)

Issue
Direct Oral Anticoagulants (DOACs), previously known as NOACs (Novel Oral Anticoagulants) are licensed for various indications including the prevention and treatment of venous thromboembolism (VTE) and for non-valvular atrial fibrillation (Afib). There are four DOACs currently licensed in Ireland – a direct thrombin inhibitor dabigatran (Pradaxa®), and three factor Xa inhibitors: apixaban (Eliquis®), edoxaban (Lixiana®), and rivaroxaban (Xarelto®).

DOACs are high-risk drugs, with risks including bleeding or haemorrhage, particularly when prescribed:
- in combination with medicines increasing the bleeding risk
- In patients with renal impairment, chronic or acute (e.g. with sepsis), which prolongs the half-life of these drugs

Dabigatran does have a reversal agent, idarucizumab; however at present, there is no reversal agent available for factor Xa inhibitors and if bleeding occurs, prolonged supportive treatment may be required

- Stroke or venous thromboembolism can result from omission or under-dosing. DOACs have a short duration of action so omission of even one dose may rapidly lead to a loss of anticoagulant effect.
- Failure by healthcare professionals to recognise these medicines as belonging to the DOAC therapeutic class

Evidence of Harm
- A patient who had been taking dabigatran for 2 years developed acute kidney injury associated with an infection. This resulted in accumulation of dabigatran, contributing to a major haemorrhage.
- A patient was discharged from hospital on rivaroxaban, which was subsequently omitted from his prescription in the community. The patient suffered a stroke.
- A patient on rivaroxaban was commenced on dronedarone in an out-patient clinic. The patient was admitted 2 weeks later with a gastrointestinal
- A patient was admitted on apix
Patient experienced a GI bleed. D
prescribed.

How to Reduce the Risks
- **Organisations must have proces**
- **All healthcare professionals m**
indications, cautions, dosing and
safe use. Ensure product informati
- **Ensure doses are appropriate.**
renal impairment, dose reduction/a
- **Patients must understand thes**
recognise signs of bleeding or an

Pay | Pensions and Retirement | Leave

Staff › Information for healthcare professionals › Clinical Design and Innovation (CDI) Publica

National Clinical Programme for Venous Thromboembolism

Publications for National Venous ThromboEmbolism Programme (NVTEP)

+ Publications

+ Translated blood clot alert cards

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Safety Alert - Once Weekly Oral Methotrexate

Issue
Methotrexate is an antimetabolite, primarily used orally **once weekly** in the treatment of rheumatoid arthritis, psoriasis and Crohn's disease. Methotrexate is a high-risk drug, i.e. serious patient harm can occur as a result of errors involving incorrect frequency (daily rather once weekly), incorrect strength tablets, incorrect strength tablets, or from an adverse drug reaction. Care must be taken with methotrexate use at all stages of medication use, including at transitions of care.
(Note this alert does not cover the use of methotrexate in haematology or oncology.)

Evidence of Harm
Numerous adverse events have occurred worldwide as a result of preventable errors. Some examples include:
- A hospital in-patient received 15mg methotrexate orally daily instead of the intended weekly dose for 8 days, resulting in death from bronchial pneumonia as a consequence of bone marrow suppression caused by methotrexate toxicity. (Ireland)(1)
- A patient was prescribed, dispensed and administered methotrexate 10mg orally daily, instead of the intended once weekly dose in community and in hospital. The patient died. (UK)(2)
- A GP prescribed a daily dose of oral methotrexate for a flare-up of psoriasis. The pharmacist queried the dose but was reassured it was correct and despite concerns dispensed the prescription. Patient subsequently died of complications of methotrexate toxicity. (Australia)(3)

How to Reduce the Risks in hospitals
- Keep only one strength of oral methotrexate (2.5mg) in stock.
- Prescribe, dispense and administer oral methotrexate **ONCE WEEKLY** (usual dose range 7.5mg – 25mg orally once weekly), specifying the day of the week.
- Specify the number of tablets ("10mg, i.e. 4 x 2.5mg tablets") to be taken per dose.
- **Ensure that the patient understands their therapy, including dose and frequency, when and where monitoring will be carried out, the signs and symptoms of toxicity and what to do if they occur. Provide written information to patients.**
- Folic acid 5mg once weekly orally is indicated to reduce mucositis and gastrointestinal side effects. It should be administered on a different day of the week to methotrexate(4).
- Be aware of methotrexate contra-indications and cautions, symptoms of adverse reactions and toxicity, the appropriate monitoring to carry out and potential interactions with other drugs, e.g. NSAIDs as they can reduce renal function and thus decrease the clearance of methotrexate(5).
- Write the drug name in full: never abbreviate.
- In hospitals, the Drug Chart should clearly indicate which day methotrexate is due. Cross out the remaining days on the prescription as shown:

Guidance for Pharmacists on Safe Supply of Oral Methotrexate

Pharmaceutical Society of Ireland

Version 2 January 2015

Contents

SECTION 3

Irish Medication Safety Network

Safety Alert
Risk of Cross-Contamination with Insulin Preparations

Issue
Insulin pens (both disposable prefilled pens and re-useable pens) and insulin cartridges are for Single Patient Use only. During injection, blood and biological matter can regurgitate into the insulin cartridge. Using a cartridge or pen already used for another patient exposes the second patient to any blood-borne pathogens the initial patient may be infected with, e.g. hepatitis B virus (HBV), hepatitis C virus (HCV), and/or the human immunodeficiency virus (HIV).[1, 2] In order to prevent vial contamination and patient exposure which may result from unsafe injection practices, multi-dose insulin vials should also be dedicated to Single Patient Use only.[3,4]

Evidence of Harm
A study detected squamous and / or epithelial cells in needles and cartridges following an injection from an insulin pen in almost two-thirds of cases.[5] Another study detected regurgitated blood in 4.1% of cartridges.[6] There were similar findings in a further analysis of 125 pens where 5.6% tested positive for a variety of cell types or haemoglobin.[7]

In a survey of 5,446 healthcare professionals, 51 professionals reported reusing a syringe to obtain an additional dose from a multi-dose vial and then leaving the vial for use on another patient.[4] According to the WHO a 'silent epidemic' exists in relation to unsafe injection practice generally and it estimates that such unsafe practices account for a large proportion of new viral infections occurring worldwide annually (42% of HCV infections, 33% of HBV infections and 2% of HIV infections).[8]

How to Reduce the Risks
Safe Administration
- Insulin pens should never be used for more than one person, even when the needle is changed[9], 'ONE PERSON, ONE PEN'. Changing the cartridge in the pen does not make the device safe for multi-patient use.[10]
- Eject the disposable needle from the insulin pen into a sharps bin immediately after use[3], 'ONE NEEDLE, ONE

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Best Practice Guidelines for the Safe Use of Insulin in Irish Hospitals

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SAFETY ALERT

Risk of permanent skin staining due to extravasation of intravenous iron infusions

ISSUE

Parenteral iron may be indicated for the treatment of iron deficiency when oral iron preparations are ineffective, unsuitable or there is a clinical need to replenish iron stores rapidly.[1] Permanent skin staining can occur if there is extravasation (leakage of fluid) into the surrounding tissues.[1,2,8] An increase in reports of iron staining in recent years has been attributed to increased use of intravenous (IV) iron.[2] While skin staining can occur with intramuscular or IV iron , this safety alert focuses on IV administration.

EVIDENCE OF HARM

Staining has been reported with various iron products, and one study cited an incidence of 1.3%.[4] It is usually light to dark brown in colour but it can also be black, bluish, purple or grey.[5] In many cases, staining is permanent[8] and may have psychological implications for the patient if it is cosmetically unacceptable.[5]

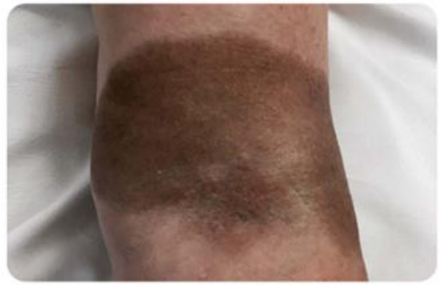

Figure 1. Image of skin staining with intravenous iron infusion[3]

Reproduced from Haemosiderin pigmentation after intravenous iron infusion, Pérez-Pevida B, Kamocka A, BMJ 2018;360:k69 with permission from BMJ Publishing Group. Ltd.

HOW TO REDUCE THE RISKS[2,5,6]

1. **Ensure appropriate and prudent use of IV iron.**[2] Hospitals may wish to consider whether it is feasible and beneficial to develop order and administration proformas and / or to restrict stocking of IV iron products to certain areas.
2. **Local hospital IV administration guidelines should highlight the risk of skin staining and provide guidance on risk minimisation measures, monitoring during administration and managing extravasation.**
3. **Hospitals should consider implementing State Claims Agency advice to provide service users with comprehensive information to include the risks, benefits, and alternatives to IV iron infusion and obtain informed consent.[2] Educate patients to keep their arm still and straight during the infusion and to alert their nurse immediately to signs of the drug 'leaking'[2]** e.g. pain, swelling, and feelings of pressure or pricking at the infusion site. Early cessation of the infusion may reduce the amount of solution that enters the tissues and could lessen the extent of staining.[5] Note: some patients report no pain or other symptoms during the infusion and the discolouration appears hours or days later.[6]
4. **Avoid giving IV iron when fewer staff members are available to monitor the infusion.**[2] IV iron infusion is rarely urgent.[2]
5. **Infusion site may influence extravasation risk due to potential for vessel damage related to cannula movement.**[5]
   - In the event of multiple attempts at cannulation, consider postponing the administration of IV iron.[6]
   - Sites of non-flexion are recommended e.g. distal veins of forearms. Avoid cannulation at sites of flexion.[2,5,6]
   - Use largest appropriate vein and smallest suitable cannula (20- to 24-gauge).[7]
   - Secure the cannula and use an extension set to minimise catheter movement.[2,5,6]
   - Do not cover the IV site with a bandage which prevents visual inspection.[2,5,6]
   - Ensure the patency of the vein before administration with a sodium chloride 0.9% flush.[2,5,6]
   - Ensure the infusion duration is in accordance with the product information.[6]
   - Monitor closely for signs and symptoms of extravasation.[2,5,6]
   - Flush cannula with sodium chloride 0.9% after administration.[7]
6. **Manage extravasation promptly and appropriately**[5,6]
   - Stop the infusion immediately
   - Disconnect the giving set
   - Aspirate any residual drug from the cannula
   - Remove cannula
   - Apply a cold compress to treat swelling or soreness (not shown to prevent spread of stain)
   - Ideally, clinical photographs should be taken to record the extent and facilitate monitoring
   - Develop an appropriate follow up plan
   - Consider referral to Dermatology or Plastics- laser therapy may be a treatment option
   - Report in line with local reporting policies.

Patient Safety Together: learning, sharing and improving

PSS 03/2024 V2

PATIENT SAFETY SUPPLEMENT

Date published: 09 Oct 2024

Preventing Extravasation / Tissue Infiltration Injury

This Patient Safety Supplement aims to raise awareness among patients and healthcare staff of the risk of extravasation or tissue infiltration injury during intravenous (IV) treatment. IV treatment person's vein using a vascular access device. Extravasation/tissue infiltration is the accid solution such as medication, blood or fluids from a vein into the surrounding tissue. Whi tissue infiltration can cause harm, some solutions, including chemotherapy drugs, dye (c and specific antibiotics may cause more serious injury, and iron solutions can cause perm Injuries caused can range from mild to severe and can result in damage to tissues and ca and/or rash (erythema), swelling and blistering. In more serious cases or if left undiagno treated, injuries can lead to infection, death of the tissue (necrosis), and/or possible perr limb involved.

The supplement will also assist patients and healthcare staff in recognising the signs and extravasation / tissue infiltration. This will support initiating timely and appropriate trea some cases prevent such an injury completely.

Ann's Story

Ann was admitted to hospital with severe shingles affecting her face painful infection caused by a virus. On admission Ann was prescribed used antiviral medication), which was administered intravenously us device in her hand. Initial doses were administered without any issue, Ann reported that her hand was painful when the device was used. An increasing pain and on day three the device was removed and a new other arm, however her arm continued to be very painful and her hand very swollen. Mec pain relief, but Ann was not medically reviewed at this time. Four days after the device wa remained very swollen and painful, she was reviewed by the medical team and a diagnos infection of the skin) was made and treatment (antibiotics and pain killers) started. Within a hand was extremely painful. A further review was carried out where an extravasa compartment syndrome (build-up of excess pressure within an enclosed space in the body was then reviewed by a Consultant Plastic Surgeon and was immediately sent for surgery t in her hand and arm. Ann required a prolonged hospital stay requiring multiple surgeries complication, ultimately resulting in permanent disability including finger amputation and

To help prevent an extravasation / tissue infiltration injury before you start

- Does the treatment need to be given IV? Can it be given o
- Has the patient been given clear information by the presc benefits of drug groups which may cause harm if extravas to the treatment?
- Is local guidance/policy for intravenous care and consent
- Is a care bundle* for the vascular access device being mai
- Do the staff and the patient/relevant person know the potential risks of the infus symptoms of extravasation / tissue infiltration to look out for?
- Has the patient been educated to alert staff immediately to any concerns?
- Will the patient be able to report their concerns? Consider condition, age, langua

*A care bundle is a grouping of evidence based best practices to improve care. All elements of t adhered to for every person every time the procedure is performed.

Signs and symptoms of extravasation/tissue infiltration may include:

- Discomfort, pain, stinging, leakage and burning at injection site. Note: stinging does not always signify an issue but if concerned ask the staff to check
- Recent IV treatment or a vascular access device near the area of concern
- Blood return at the vascular access device can be absent or sluggish
- Sudden change in infusion pressure when infusing a medication / fluid
- Skin changes around device or venepuncture site (area where blood sample has including erythema, hardening (induration), blistering, pallor or staining (followi
- Swelling at vascular access site including along the pathway of the vein which ca
- Symptoms can appear immediately but can be delayed for hours or days after di
  - Patient/relevant person knows the signs and symptoms to look out for and to
  - Clinicians are aware to assess vascular access device / infusion history as devi

What to do if you suspect an extravasation/ tissue infiltration may have occ

- STOP the infusion immediately and mark the outline of the
- Do not flush the line or remove the cannula (may cause fu tissue infiltration) but disconnect any IV tubing from the ca
- Explain to the patient what is happening and what the nex

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Parkinson's Ireland

Irish Medication Safety Network

SAFETY ALERT
Alert 1 in a series

Parkinson's Ireland

Reducing harm from omitted and delayed Parkinson's Disease medication

ISSUE

Parkinson's Disease (PD) is the fastest growing neurological disorder globally, with numbers expected to double by 2040.[1] PD medication is time critical medication.[2] Delays in receiving PD medication can cause "off" episodes, triggering rigidity and tremor in the patient.[3] Other associated complications include: confusion, worsening of PD symptoms and distress.[4,5,6] Omitted or delayed doses can impair patients' swallow, increase aspiration risk, render them immobile, prone to falls and fractures, leading to permanent reduction in their baseline condition, with potential progression to Neuroleptic Malignant Syndrome, or death.

EVIDENCE OF HARM

The following is a patient's own experience following the delayed prescribing and administration of PD medication:

'Four years ago I was walking with the aid of a Zimmer frame. I fell and was admitted to hospital with a broken arm. I didn't get my Parkinson's medication for a day and when I did – not the right dose. I left hospital in a wheelchair, never to walk again. The right medication on time with early mobilisation would have seen me walk again, after all I didn't break my leg.'

HOW TO REDUCE THE RISKS

Prescribing PD medication:

a) Urgently **obtain an accurate medication history**[1,7] (from patient/carer, patient's Parkinson's Passport[7], Pharmacy, GP)

b) **Do not stop** these medicines abruptly[6,7]

c) State the **exact times** on the medication chart (replicating the patient's unique regimen)[7]

d) **Manage nil-by-mouth (NPO) status** – obtain prompt specialist guidance* for patients with PD with swallowing difficulties or those in the peri-operative period, before adjusting the medication regimen. **Even when fasting, patients with PD should not miss doses.** Minor delays in dosing (up to 30 minutes) can have a significant impact on symptom control.[4,6,7]

e) Dopamine agonist patch (rotigotine) formulations, and apomorphine may be suitable options when patients with PD are NPO.[4] Seek specialist guidance* for complex treatment regimens.

Supplying PD Medication

a) Make PD medication **stock in clinical areas including the emergency department** (ED) to ensure 24 hour availability.[2,9]

b) **Prioritise dispensing** of PD medication orders received to pharmacy.

Administering PD medication:

Self-medication for patients with PD is considered the gold standard of care.[2,5,8] Consider implementation of a self-medication policy to allow eligible patients with PD to self-medicate.[2,8]

a) Prioritise patients with PD for medication administration rounds, thus reducing the risk of late dosing.[2] Administer at the **exact time** specified on the medication chart – **on time, every time.**[1,2,8] Consider appointing dedicated nurse to manage administration.[8]

b) Administer **levodopa medication** at least 30-40 minutes before or 60-90 minutes after meals (due to absorption disruption from consuming protein). Ensure adequate water intake. Observe for constipation and manage appropriately.[8] **Involve the patient/carer** in the administration process where feasible.[2]

c) **Replace controlled-release and modified-release preparations** with an equivalent dose of immediate release Sinemet® or dispersible Madopar®, where a patient with PD has **swallowing difficulties** or a feeding tube in situ.[7]

Education

a) **Focus education** of healthcare professionals in areas that frequently encounter patients with PD e.g. ED/AMAU, surgical and orthopaedic units. Parkinson's Ireland is available to facilitate education and training.[8]

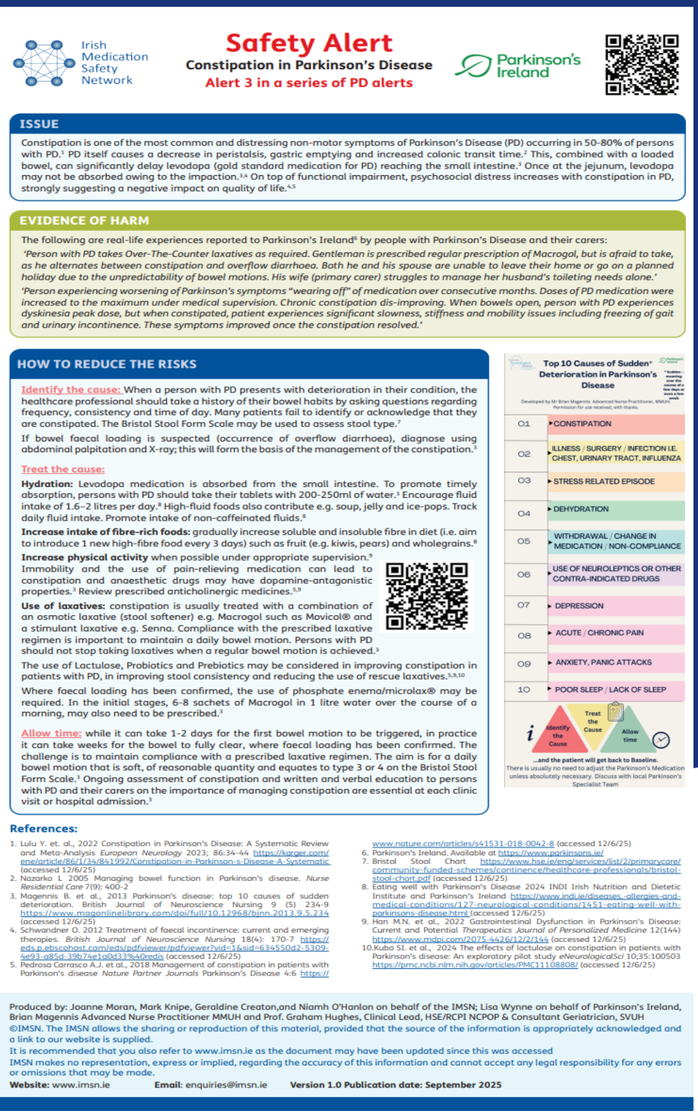
b) *Specialist Guidance can be sought from a Consultant Neurologist, Hospital Pharmacist, PD Nurse Specialist, Speech and Language Therapist, Dietitian and by utilising an approved PD dose conversion calculator. [8,12,13]

References:

1. Darsey ER, Bloem BR. The Parkinson Pandemic-A Call to Action. JAMA Neurol. 2018 Jan 1;75(1):9-10. doi: 10.1001/jamaneurol.2017.3299. PMID: 29131880 [accessed 1/8/24]
2. Parkinson's UK, Every minute counts: Time critical Parkinson's medication on time, every time (2018). Available at https://www.pdhub.org/learn/patient-safety-in-health-and-care/conditions/neurological-conditions/every-minute-counts-time-critical-parkinsons%E2%80%99s-medication-on-time-every-time-parkinsons-uk-september-2021-r101230 [accessed 11/6/24]
3. Masood N, Jimenez-Shahed J. Effective Management of "OFF" Episodes in Parkinson's Disease: Emerging Treatment Strategies and Unmet Clinical Needs. Neuropsychiatr Dis Treat. 2023 Jan 25;19:247-266. doi: 10.2147/NDT.S273121. PMID: 36721795; PMCID: PMC9884436. [accessed 19/6/24]
4. NSW Health. Safety Notice 025/23: Updated - Medication management in Parkinson's Disease (2023). Available at https://www.health.nsw.gov.au/pbm/Documents/2023-sn-025.pdf [accessed 13/6/24].
5. National Institute for Health and Care Excellence. NICE Guideline NG71 (2017) Parkinson's Disease in Adults. Available at https://www.nice.org.uk/guidance/ng71/resources/parkinsons-disease-in-adults-pdf-1837629118981 [accessed 19/6/24]
6. Richard G, Redmond A, Panugonda M, Bradley D. Parkinson's Disease Medication Prescribing and Administration During Unplanned Hospital Admissions. Mov Disord Clin Pract. 2022 Jan 25;9(3):334-339. doi: 10.1002/mdc3.13408. PMID: 35402654; PMCID: PMC8974884. [accessed 19/6/24]
7. Grissinger M. Delayed Administration and Contraindicated Drugs Place Hospitalized Parkinson's Disease Patients at Risk. P T. 2018 Jan;43(1):10-39. PMID: 29290668; PMCID: PMC5737245. [accessed 19/6/24]
8. Parkinson's Ireland Available at https://www.parkinsons.ie/
9. Ortiz, M.S. (2020). "On time - every time" A new strategy for dosing levodopa in hospital. J Pharm Pract Res, 50: 339-344. https://doi.org/10.1002/jpp.1641 [accessed 19/6/24]
10. Parkinsons Excellence Network, Calculator available from https://www.parkinsons.org.uk/professionals/resources/nil-mouth-medication-dose-calculators-and-guidelines

Reviewed by: Geraldine Creaton, Mark Knipe, Joanne Moran, and Niamh O'Hanlon on behalf of the IMSN & Lisa Wynne, Kathy Foley & Dr Cormac Mehigan on behalf of Parkinson's Ireland.

Website: www.imsn.ie **Email:** enquiries@imsn.ie **Version 3** Publication Date: September 2024



Irish Medication Safety Network

Safety Alert
Constipation in Parkinson's Disease
Alert 3 in a series of PD alerts

Parkinson's Ireland

ISSUE

Constipation is one of the most common and distressing non-motor symptoms of Parkinson's Disease (PD) occurring in 50-80% of persons with PD.[1] PD itself causes a decrease in peristalsis, gastric emptying and increased colonic transit time.[2] This, combined with a loaded bowel, can significantly delay levodopa (gold standard medication for PD) reaching the small intestine.[3] Once at the jejunum, levodopa may not be absorbed owing to the impaction.[3,4] On top of functional impairment, psychosocial distress increases with constipation in PD, strongly suggesting a negative impact on quality of life.[4,5]

EVIDENCE OF HARM

The following are real-life experiences reported to Parkinson's Ireland[6] by people with Parkinson's Disease and their carers:

'Person with PD takes Over-The-Counter laxatives as required. Gentleman is prescribed regular prescription of Macrogol, but is afraid to take, as he alternates between constipation and overflow diarrhoea. Both he and his spouse are unable to leave their home or go on a planned holiday due to the unpredictability of bowel motions. His wife (primary carer) struggles to manage her husband's toileting needs alone.'

'Person experiencing worsening of Parkinson's symptoms "wearing off" of medication over consecutive months. Doses of PD medication were increased to the maximum under medical supervision. Chronic constipation dis-improving. When bowels open, person with PD experiences dyskinesia peak dose, but when constipated, patient experiences significant slowness, stiffness and mobility issues including freezing of gait and urinary incontinence. These symptoms improved once the constipation resolved.'

HOW TO REDUCE THE RISKS

Identify the cause: When a person with PD presents with deterioration in their condition, the healthcare professional should take a history of their bowel habits by asking questions regarding frequency, consistency and time of day. Many patients fail to identify or acknowledge that they are constipated. The Bristol Stool Form Scale may be used to assess stool type.[7]

If bowel faecal loading is suspected (occurrence of overflow diarrhoea), diagnose using abdominal palpation and X-ray; this will form the basis of the management of the constipation.[3]

Treat the cause:

Hydration: Levodopa medication is absorbed from the small intestine. To promote timely absorption, persons with PD should take their tablets with 200-250ml of water.[3] Encourage fluid intake of 1.6-2 litres per day.[8] High-fluid foods also contribute e.g. soup, jelly and ice-pops. Track daily fluid intake. Promote intake of non-caffeinated fluids.[8]

Increase intake of fibre-rich foods: gradually increase soluble and insoluble fibre in diet (i.e. aim to introduce 1 new high-fibre food every 3 days) such as fruit (e.g. kiwis, pears) and wholegrains.[8]

Increase physical activity when possible under appropriate supervision.[9] Immobility and the use of pain-relieving medication can lead to constipation and anaesthetic drugs may have dopamine-antagonistic properties.[3] Review prescribed anticholinergic medicines.[5,9]

Use of laxatives: constipation is usually treated with a combination of an osmotic laxative (stool softener) e.g. Macrogol such as Movicol® and a stimulant laxative e.g. Senna. Compliance with the prescribed laxative regimen is important to maintain a daily bowel motion. Persons with PD should not stop taking laxatives when a regular bowel motion is achieved.[3]

The use of Lactulose, Probiotics and Prebiotics may be considered in improving constipation in patients with PD, in improving stool consistency and reducing the use of rescue laxatives.[5,9,10]

Where faecal loading has been confirmed, the use of phosphate enema/microlax® may be required. In the initial stages, 6-8 sachets of Macrogol in 1 litre water over the course of a morning, may also need to be prescribed.[3]

Allow time: while it can take 1-2 days for the first bowel motion to be triggered, in practice it can take weeks for the bowel to fully clear, where faecal loading has been confirmed. The challenge is to maintain compliance with a prescribed laxative regimen. The aim is for a daily bowel motion that is soft, of reasonable quantity and equates to type 3 or 4 on the Bristol Stool Form Scale.[3] Ongoing assessment of constipation and written and verbal education to persons with PD and their carers on the importance of managing constipation are essential at each clinic visit or hospital admission.[3]

Top 10 Causes of Sudden* Deterioration in Parkinson's Disease

*Sudden - according to your time frame. Could be over days or even a few days or over a few weeks

Developed by Mr Brian Magennis: Advanced Nurse Practitioner, Mater Hospital. Permission for use received, with thanks.

01	CONSTIPATION
02	ILLNESS / SURGERY / INFECTION I.E. CHEST, URINARY TRACT, INFLUENZA
03	STRESS RELATED EPISODE
04	DEHYDRATION
05	WITHDRAWAL / CHANGE IN MEDICATION / NON-COMPLIANCE
06	USE OF NEUROLEPTICS OR OTHER CONTRA-INDICATED DRUGS
07	DEPRESSION
08	ACUTE / CHRONIC PAIN
09	ANXIETY, PANIC ATTACKS
10	POOR SLEEP / LACK OF SLEEP

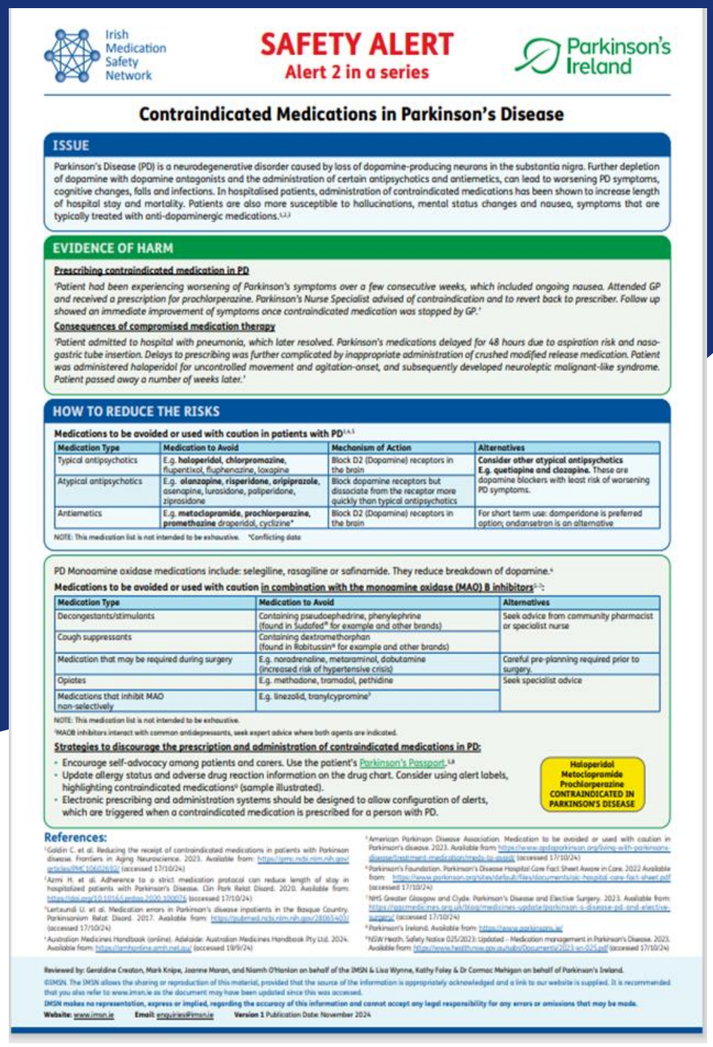
...and the patient will get back to Baseline.
There is usually no need to adjust the Parkinson's Medication unless absolutely necessary. Discuss with local Parkinson's Specialist Team

References:

1. Lulu Y. et. al., 2022 Constipation in Parkinson's Disease: A Systematic Review and Meta-Analysis *European Neurology* 2023; 86:34-44 https://karger.com/ene/article/86/1/34/841992/Constipation-in-Parkinson-s-Disease-A-Systematic (accessed 12/6/25)
2. Nazarko L 2005 Managing bowel function in Parkinson's disease. *Nurse Residential Care* 7(9): 400-2
3. Magennis B. et al., 2013 Parkinson's disease: top 10 causes of sudden deterioration. British Journal of Neuroscience Nursing 9 (5) 234-9 https://www.magonlinelibrary.com/doi/full/10.12968/bjnn.2013.9.5.234 (accessed 12/6/25)
4. Schwandner O. 2012 Treatment of faecal incontinence: current and emerging therapies. *British Journal of Neuroscience Nursing* 18(4): 170-7 https://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=16&sid=63450d2-5309-4e93-a85d-39b74e1a0d33%40redis (accessed 12/6/25)
5. Pedrosa Carrasco A.J. et al., 2018 Management of constipation in patients with Parkinson's disease *Nature Partner Journals* Parkinson's Disease 4:6 https://www.nature.com/articles/s41531-018-0042-8 (accessed 12/6/25)
6. Parkinson's Ireland. Available at https://www.parkinsons.ie/
7. Bristol Stool Chart https://www.hse.ie/eng/services/list/2/primarycare/community-funded-schemes/continence/healthcare-professionals/bristol-stool-chart.pdf (accessed 12/6/25)
8. Eating well with Parkinson's Disease 2024 INDI Irish Nutrition and Dietetic Institute and Parkinson's Ireland https://www.indi.ie/diseases,-allergies-and-medical-conditions/127-neurological-conditions/1453-eating-well-with-parkinsons-disease.html (accessed 12/6/25)
9. Han M.N. et al., 2022 Gastrointestinal Dysfunction in Parkinson's Disease: Current and Potential *Therapeutics Journal of Personalized Medicine* 12(144) https://www.mdpi.com/2075-4426/12/2/144 (accessed 12/6/25)
10. Kubo SI. et al., 2024 The effects of lactulose on constipation in patients with Parkinson's disease: An exploratory pilot study *eNeurologicalSci* 10;35:100503 https://pmc.ncbi.nlm.nih.gov/articles/PMC11108808/ (accessed 12/6/25)

Produced by: Joanne Moran, Mark Knipe, Geraldine Creaton,and Niamh O'Hanlon on behalf of the IMSN; Lisa Wynne on behalf of Parkinson's Ireland, Brian Magennis Advanced Nurse Practitioner MMUH and Prof. Graham Hughes, Clinical Lead, HSE/RCPI NCPOP & Consultant Geriatrician, SVUH

Website: www.imsn.ie **Email:** enquiries@imsn.ie **Version 1.0 Publication date: September 2025**



Irish Medication Safety Network

SAFETY ALERT
Alert 2 in a series

Parkinson's Ireland

Contraindicated Medications in Parkinson's Disease

ISSUE

Parkinson's Disease (PD) is a neurodegenerative disorder caused by loss of dopamine-producing neurons in the substantia nigra. Further depletion of dopamine with dopamine antagonists and the administration of certain antipsychotics and antiemetics, can lead to worsening PD symptoms, cognitive changes, falls and infections. In hospitalised patients, administration of contraindicated medications has been shown to increase length of hospital stay and mortality. Patients are also more susceptible to hallucinations, mental status changes and nausea, symptoms that are typically treated with anti-dopaminergic medications.[1,2,3]

EVIDENCE OF HARM

Prescribing contraindicated medication in PD

'Patient had been experiencing worsening of Parkinson's symptoms over a few consecutive weeks, which included ongoing nausea. Attended GP and received a prescription for prochlorperazine. Parkinson's Nurse Specialist advised of contraindication and to revert back to prescriber. Follow up showed an immediate improvement of symptoms once contraindicated medication was stopped by GP.'

Consequences of compromised medication therapy

'Patient admitted to hospital with pneumonia, which later resolved. Parkinson's medications delayed for 48 hours due to aspiration risk and naso-gastric tube insertion. Delays to prescribing was further complicated by inappropriate administration of crushed modified release medication. Patient was administered haloperidol for uncontrolled movement and agitation-onset, and subsequently developed neuroleptic malignant-like syndrome. Patient passed away a number of weeks later.'

HOW TO REDUCE THE RISKS

Medications to be avoided or used with caution in patients with PD[4,5]

Medication Type	Medication to Avoid	Mechanism of Action	Alternatives
Typical antipsychotics	E.g. **haloperidol, chlorpromazine,** fluperlzinel, fluphenazine, loxapine	Block D2 (Dopamine) receptors in the brain	**Consider other atypical antipsychotics E.g. quetiapine and clozapine.** These are dopamine blockers with least risk of worsening PD symptoms.
Atypical antipsychotics	E.g. **olanzapine, risperidone, aripiprazole,** asenapine, lurasidone, paliperidone, ziprasidone	Block dopamine receptors but dissociate from the receptor more quickly than typical antipsychotics	
Antiemetics	E.g. **metoclopramide, prochlorperazine, promethazine** droperidol, cyclizine*	Block D2 (Dopamine) receptors in the brain	For short term use: domperidone is preferred option; ondansetron is an alternative

NOTE: This medication list is not intended to be exhaustive. *Conflicting data

PD Monoamine oxidase medications include: selegiline, rasagiline or safinamide. They reduce breakdown of dopamine.[4]

Medications to be avoided or used with caution in combination with the monoamine oxidase (MAO) B inhibitors[4,5]:

Medication Type	Medication to Avoid	Alternatives
Decongestants/stimulants	Containing pseudoephedrine, phenylephrine (found in Sudafed® for example and other brands)	Seek advice from community pharmacist or specialist nurse
Cough suppressants	Containing dextromethorphan (found in Robitussin® for example and other brands)	
Medication that may be required during surgery	E.g. noradrenaline, metaraminol, dobutamine (increased risk of hypertensive crisis)	Careful pre-planning required prior to surgery.
Opiates	E.g. methadone, tramadol, pethidine	Seek specialist advice
Medications that inhibit MAO non-selectively	E.g. linezolid, tranylcypromine[3]	

NOTE: This medication list is not intended to be exhaustive.
[3]MAOB inhibitors interact with common antidepressants, seek expert advice where both agents are indicated.

Strategies to discourage the prescription and administration of contraindicated medications in PD:

- Encourage self-advocacy among patients and carers. Use the patient's Parkinson's Passport.[1,8]
- Update allergy status and adverse drug reaction information on the drug chart. Consider using alert labels, highlighting contraindicated medications[5] (sample illustrated).
- Electronic prescribing and administration systems should be designed to allow configuration of alerts, which are triggered when a contraindicated medication is prescribed for a person with PD.

Haloperidol
Metoclopramide
Prochlorperazine
CONTRAINDICATED IN PARKINSON'S DISEASE

References:

1. Goldin C. et al. Reducing the receipt of contraindicated medications in patients with Parkinson disease. Frontiers in Aging Neuroscience. 2023. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10662835/ (accessed 17/10/24)
2. Azmi H. et al. Adherence to a strict medication protocol can reduce length of stay in hospitalised patients with Parkinson's Disease. Clin Park Relat Disord. 2020. Available from: https://doi.org/10.1016/j.prdoa.2020.100075 (accessed 17/10/24)
3. Lertxundi U. et al. Medication errors in Parkinson's disease inpatients in the Basque Country. Parkinsonism Relat Disord. 2017. Available from: https://pubmed.ncbi.nlm.nih.gov/28065405/ (accessed 17/10/24)
4. Australian Medicines Handbook (online). Adelaide: Australian Medicines Handbook Pty Ltd. 2024. Available from: https://amhonline.amh.net.au/ (accessed 19/9/24)
5. American Parkinson Disease Association. Medication to be avoided or used with caution in Parkinson's disease 2023. Available from https://www.apdaparkinson.org/living-with-parkinsons-disease/treatment-medications/meds-to-avoid/ (accessed 17/10/24)
6. Parkinson's Foundation. Parkinson's Disease Hospital Care Fact Sheet Aware in Care. 2022 Available from https://www.parkinson.org/sites/default/files/documents/pd-hospital-care-fact-sheet.pdf (accessed 17/10/24)
7. NHS Greater Glasgow and Clyde. Parkinson's Disease and Elective Surgery. 2023. Available from https://specialty.ngcs.org.uk/blog/medicines-update/parkinsons-disease-pd-and-elective-surgery/ (accessed 17/10/24)
8. Parkinson's Ireland. Available from https://www.parkinsons.ie/
9. NSW Health. Safety Notice 025/2023: Updated – Medication management in Parkinson's Disease. 2023. Available from https://www.health.nsw.gov.au/pbm/Documents/2023-sn-025.pdf (accessed 17/10/24)

Reviewed by: Geraldine Creaton, Mark Knipe, Joanne Moran, and Niamh O'Hanlon on behalf of the IMSN & Lisa Wynne, Kathy Foley & Dr Cormac Mehigan on behalf of Parkinson's Ireland.

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Irish Medication Safety Network

IMSN Work in Progress

- Omission of anticoagulation on discharge
- Purchasing for Safety
- 10 x overdose concerns in paeds
- Tranexamic acid Injection safety
- Buprenorphine Safety
- Collaboration with Parkinsons Ireland, Irish hospices, Move4Parkinsons on medication safety for PWP in Palliative care & End of Life

Medication Optimisation Update
Tara Kelly MPSI, Medicines Information Pharmacist, IPU; Lara Marín MPSI, Professional Services Pharmacist, IPU; and Sinéad McCool MPSI, Professional Services/IPU Professional Academy, IPU

Medication Optimisation Update

Helping patients optimise the use of their medication safely and effectively is a fundamental responsibility of community pharmacists.

Features in every edition of the IPU Review

Provides updates under 4 headings:

- Regulatory Update
- Professional Guidance
- Useful Reference Source
- IPU Practice Support

Irish Pharmacy Union

Regulatory update

Use of paracetamol during pregnancy
In September in the US, the FDA issued a letter to doctors stating that "in recent years, evidence has accumulated suggesting that the use of acetaminophen by pregnant women may be associated with an increased risk of neurological conditions such as autism and ADHD in children". It goes on to say; "To be clear, while an association has been described in many studies, a causal relationship has not been established, and there are contrary studies in the scientific literature . . . clinicians should consider minimising use of acetaminophen during pregnancy for routine low-grade fevers."

The messaging that hit the headlines was different and was alarming. Patients may need reassurance as to whether they can continue to use paracetamol safely in pregnancy.

In the EU, the EMA, the next day, released a news item stating that there is, "currently no new evidence that would require changes to the EU recommendations for use. As stated in the SPCs, a large amount of data from pregnant women who used paracetamol during pregnancy indicates no risk of malformations in the developing foetus or in newborns. In 2019, the EMA reviewed available studies and found that the results were inconclusive and no link with neurodevelopment disorders could be established. The EU will continue to monitor the safety of medicines containing paracetamol."

Advice for patients in the pharmacy:

- When needed, paracetamol can be used during pregnancy;
- Follow instructions and guidance when taking paracetamol;
- Always read the medicines information leaflet supplied with medication; and
- As with any medicine for acute treatment, it should be used at the lowest effective dose, for the shortest time possible, and as infrequently as possible.

Useful reference source

IMSN Safety Alert: Constipation in patients with Parkinsons Disease
Constipation is one of the most common and distressing non-motor symptoms of Parkinson's Disease (PD) occurring in 50 to 80 per cent of persons with PD. The Irish Medication Safety Network (IMSN), in collaboration with Parkinson's Ireland have prepared a third alert in a series of articles looking at safe medicines use in patients with PD. The September 2025 article is focusing on constipation in patients with Parkinsons.
The series of articles is available at imsn.ie/parkinsons-a3-2025.

IPU Practice support

IPU Community Pharmacy Committee (CPC) SABA sticker campaign
The IPU CPC are running a health promotion campaign regarding the overuse of short-acting beta agonist (SABA) inhalers. This aligns with the GINA Global Strategy in which SABA-only treatment for asthma in adults and adolescents is no longer recommended. This campaign highlights a crucial message to patients who are prescribed SABA reliever inhalers. It encourages them to avoid being over-reliant on their SABA inhaler, particularly if they are not using their inhaled corticosteroid (ICS) inhaler regularly. Consistent use of the ICS inhaler is essential for reducing asthma exacerbations and maintaining control of the condition.

As part of this campaign, the IPU and the Asthma Society of Ireland have developed reminder stickers which can go out to patients who are prescribed SABA inhalers to promote their safe use. The stickers can be stuck onto the box of SABA inhalers by the pharmacy team prior to collection by the patient. These stickers are included with this month's *IPU Review*.

Professional Guidance

There is a statutory requirement for pharmacies wishing to sell non-prescription medicines at a distance (Internet supply) to be registered with the PSI on the Internet Supply List (ISL). Registered pharmacies should have safety features in place on their websites to ensure and promote the safe and rational use of medicines. In addition to that, they are obliged to meet specific legal requirements, such as the display of an EU common logo on each page where non-prescription medicines are on view. The purpose of this logo is to assure consumers that they are purchasing from a legitimate source and thereby protecting public safety. More information on this topic, including how to register, is available at the PSI website, psi.ie

March 2024

Issue flagged to IPU by IMSN

Information published in IPU Review

Cyclizine and dexamethasone mix-ups

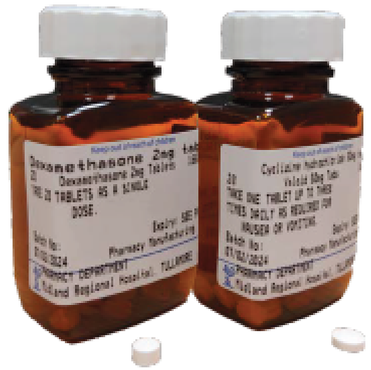
There have been sporadic reports from hospitals of patients mixing up cyclizine and dexamethasone tablets. Patients on regular chemotherapy often receive a prescription for cyclizine tablets (on an 'as required' basis), at the beginning of their treatment for nausea and vomiting. Certain chemotherapy regimens require patients to take a high dose of dexamethasone tablets during each cycle. In some cases, patients have mistakenly taken all of their cyclizine tablets instead of dexamethasone. In many of these cases, the patients have been admitted to hospital for management of side-effects and observation.

A common theme running through these incidents is that the patients were already several cycles into their treatment, leading to the conclusion that complacency is a factor in the mix-ups. It is also highly likely that the similar appearance of both products contributes to the problem. Generally, cyclizine tablets and dexamethasone tablets are dispensed in brown tablet vials and the tablets themselves are broadly similar in appearance.

Suggested ways to reduce the risk of patients selecting the wrong medicine are:

1. **Dispense the two medicines in different quantities, for example, dispense the cyclizine tablets in a smaller quantity, different to the dexamethasone amount;**
2. **Highlight the potential for confusion to patients when they are collecting their medicine, particularly when they have already been through a few cycles of treatment; and**
3. **Mark the label of one container with a distinctive colour to visually distinguish the two products.**

It can be useful to have contact details for your local oncology department or oncology pharmacist, so you can flag this issue to them, should it occur in your practice.



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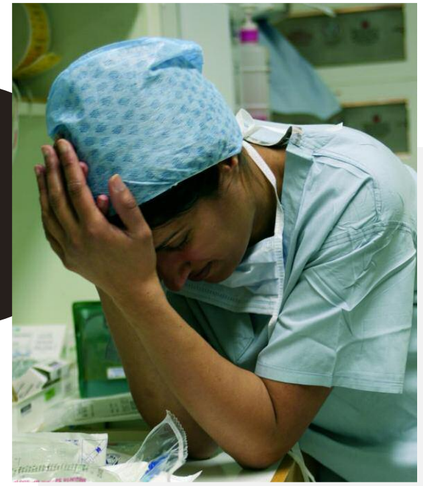
Supports available



Everyone **makes mistakes.**

When patients are harmed,

all those involved – families, patients and staff can feel devastated.

- HSE Resources for staff and organisations – Staff wellbeing following an incident https://www2.healthservice.hse.ie/organisation/qps-incident-management/open-disclosure/resources-for-staff-and-organisations/
- IIOP Courses & Events https://iiop.ie Open Disclosure, Medication without Harm, Managing Conflict in Pharmacy practice, Giving and receiving effective feedback,
- Practitioner health https://practitionerhealth.ie 085 760 1274

Irish Medication Safety Network

Useful resources

MEDICATION WITHOUT HARM
Global Patient Safety Challenge

World Health Organization

Before you take it...

KNOW your medicines and keep a list

CHECK that you are using the right medicine the right way

ASK your healthcare professional if you're unsure

World Health Organization · Irish Pharmacy Union · ICGP · HSE · Seirbhís Sláinte Nios Fearr a Forbairt · Building a Better Health Service · www.safermeds.ie

My pharmacy's name	
Phone number	
My family doctor's name	
Phone number	
Emergency contact name	
Phone number	

What is My Medicines List?
My Medicines List is a list of all the medicines and supplements you take.

Why should I use it?
Keeping an up-to-date list can help you know your medicines. It can also help you when discussing your medicines with a healthcare professional.

How should I fill it in?
To fill out My Medicines List, you need all your medicines in front of you. Another option is to ask your pharmacist to print out a list for you. Make sure you include all prescribed and over-the-counter medicines and supplements.

How should I use it?
Keep your list up to date. Bring it with you when attending any healthcare appointment. You may find it useful to keep a photo of this list on your phone.

How can I get another form?
To get another copy, you can print from www.safermeds.ie or ask for a copy at your local pharmacy.

HSE Building a Better Health Service · Seirbhís Sláinte Nios Fearr á Forbairt · National Quality Improvement Team

Plain English Approved by NALA

Information for people who take medicines and their families

My Medicines List

KNOW
CHECK
ASK

5 Moments for Medication Safety

Starting a medication
- What is the name of this medication and what is it for?
- What are the risks and possible side-effects?

Taking my medication
- When should I take this medication and how much should I take each time?
- What should I do if I have side-effects?

Adding a medication
- Do I really need any other medication?
- Can this medication interact with my other medications?

Reviewing my medication
- How long should I take each medication?
- Am I taking any medications I no longer need?

Stopping my medication
- When should I stop each medication?
- If I have to stop my medication due to an unwanted effect, where should I report this?

The *5 Moments for Medication* Safety are the key moments where action by the patient or caregiver can greatly reduce the risk of harm associated with the use of their medication/s. Each moment includes 5 critical questions. Some are self-reflective for the patient and some require support from a health professional to be answered and reflected upon correctly.

This tool for patient engagement has been developed as part of the third WHO Global Patient Safety Challenge: *Medication Without Harm*.

It is intended to engage patients in their own care in a more active way, to encourage their curiosity about the medications they are taking, and to empower them to communicate openly with their health professionals.

This tool is intended for use by patients, their families and caregivers, with the help of health professionals, at all levels of care and across all settings.

For more information, please visit:
https://www.who.int/patientsafety/medication-safety/5moments/en/

BLOOD CLOT ALERT CARD — Am I at risk?

WHAT CAN I DO TO HELP MYSELF?
- Ask for your risk of blood clots to be assessed, especially if you are in one of the higher risk groups listed opposite
- Walk and move as much as possible
- Drink plenty of fluids
- If directed to use stockings or medication to prevent or treat a clot follow instructions exactly
- Remember, a blood clot in the veins is more likely up to 90 days after being in hospital
- If you have any signs or symptoms of a clot, take **immediate action** to seek medical help

You have a HIGHER CHANCE of getting a clot in **HOSPITAL** than on an **AEROPLANE!**

YOU MAY BE AT HIGHER RISK IF YOU:
- are admitted to hospital and for 90 days after you go home
- have active cancer or receiving cancer treatment
- are pregnant or have had a baby less than 6 weeks ago
- become immobile (more than 3 days in bed / travel non-stop more than 6 hours / in a leg cast)

RISK MAY INCREASE FURTHER IF:
- you or a close relative had a blood clot
- you had surgery in the last 90 days
- you have thrombophilia (tendency to clot)
- you are on the oral contraceptive pill or HRT
- you have heart, lung or inflammatory disease
- you are over 60 years of age or are overweight
- you have varicose veins that become red and sore

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Irish Medication Safety Network

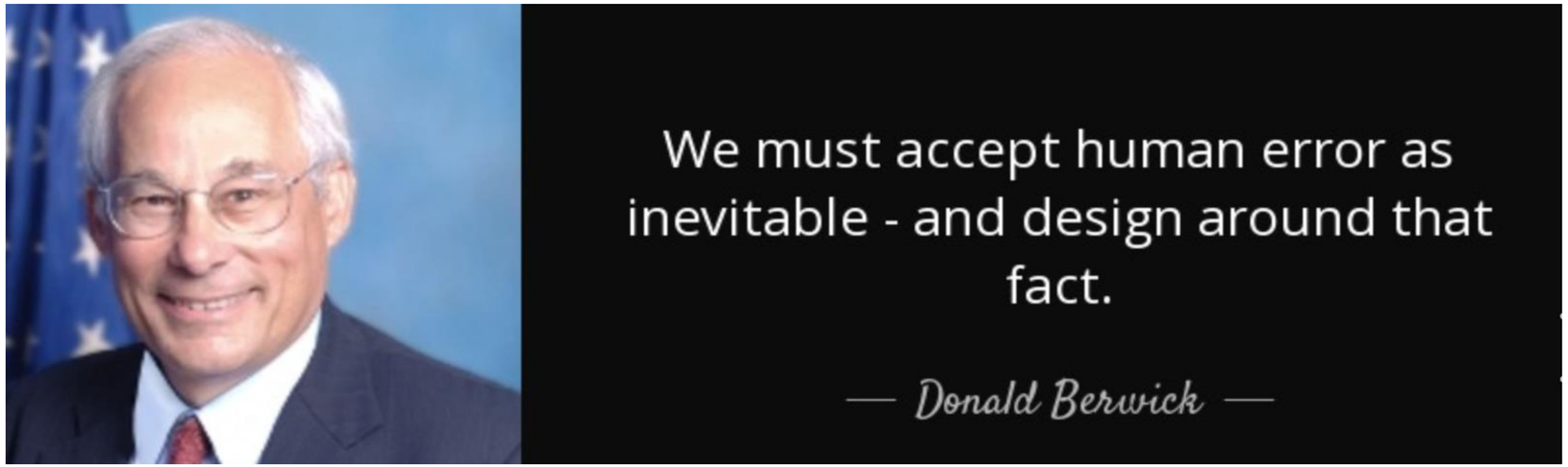
Useful Resources

- Australian commission on safety and quality in healthcare https://www.safetyandquality.gov.au/
- HSE & Medication safety available at https://www2.healthservice.hse.ie/organisation/qps-improvement/national-medication-safety-programme-safermeds/
- HSE National Clinical Programme for Venous Thromboembolism https://healthservice.hse.ie/staff/information-healthcare-workers/cdi-publications/nvtep/
- **HSE Patient safety and Open Disclosure support** Resources for staff and organisations
- Institute for Safe Medication Practices https://www.ismp.org
- Irish Medication Safety Network https://www.imsn.ie
- Irish Pharmacy Union https://ipu.ie
- Medication Safety Minute https://www.stjames.ie/services/pharmacy/medicationsafetyprogramme/
- New Zealand Health Quality & Safety commission https://www.hqsc.govt.nz/
- NICE (2015) Medicines optimisation: safe & effective use of medicines to enable the best possible outcomes https://www.nice.org.uk/guidance/NG5
- Patients for patient safety https://patientsforpatientsafety.ie/
- **Practitioner Health available at https://practitionerhealth.ie**
- State Claims Agency (2024) Learning through medication incident reporting Infographic Available at https://stateclaims.ie/uploads/inner/Infographic-Medication-Incidents-2024.pdf
- Textbook of Patient Safety & Clinical Risk Management https://link.springer.com/book/10.1007/978-3-030-59403-9
- **Uk Community Pharmacy Patient Safety Group https://pharmacysafety.org**
- WHO & medication safety https://www.who.int/initiatives/medication-without-harm

Irish Medication Safety Network

Any Questions?

1. IMSN Knowledge Exchange Event, RVEEH, Dublin Tues 8th Sept 2026
2. All island Medication Safety Conference, Belfast Met, Fri 27th Nov 2026



enquiries@imsn.ie