2021 update from Prescrire

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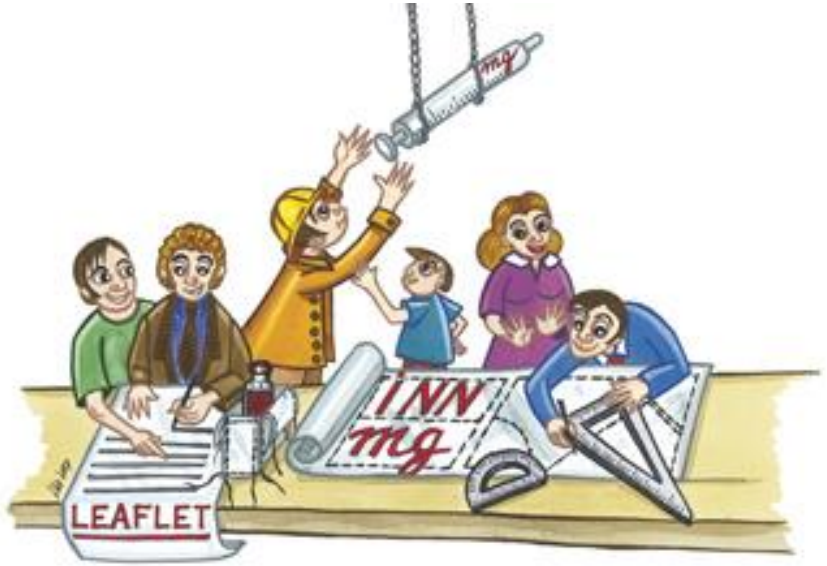
Prescrire Programme Éviter l'Évitable
(Preventing the Preventable)

Prescrire' current concerns on packaging



Issues from the systematic assessment of error risks related to new drugs and to packaging, naming, labeling, dosing devices, etc. by the Prescrire's Packaging Working Group

- Higher concentrated low molecular weight heparins (LMWH)
  errors risks due to same volumes, different concentrations
- Multidoses forms: unsafe whatever the route of administration
  - Oral drops
  - Injectables pen and cartridges

Higher concentrated LMWH different dosages but same volumes

- Lovenox° (enoxaparin)
- Error-prone situation, especially when these heparins are prescribed in mL or in mg, instead of using anti-Xa Units
- Similar concerns reported in Germany with Innohep° (tinzaparin)

Call for sharing information on this mix-up risk

Oral drops: built in droppers (1)

- Accurate dose, only if:
  - strictly vertical position of the bottle,
  - simple gravity, without movement,
  - exact count
- Overdoses in error when oblique holding, shaking of the bottle, pouring into an intermediate container with or without removal of the dropper tip from the bottle:
  - spoon (3 ml):
    300 mg of tramadol instead of the 20 mg prescribed (8 drops)
  - cups or dosing devices from other medicines
    (A 3-year-old child died of a tramadol overdose using a Doliprane° (paracetamol/acetaminophen) pipette), syringes, or transfers
- Unaccuracy of high doses too hard to count,
  several major sedatives: Clopixol° (zuclopenthixol), Largactil° (chlorpromazine), Haldol° (haloperidol)

Oral drops: built in droppers (2)

- Errors or accidental exposures with vitamin D in dropper bottles:
  - handling by children
  - ocular exposures
  - overdoses related to a defect:
    - defective dropper with a "jet" flow, instead of the expected limited flow
    - disassociation of the dropper tip spontaneously or following handling
    - leakage of the solution into the drip tray or cap
- Confusion between the number of drops per dose and the number of drops per kg of the child’s body weight
- A company's remorse: four months after marketing of a presentation with a dosing syringe, Teofarma went back and replaced Laroxyl° (amitriptyline) by a dropper

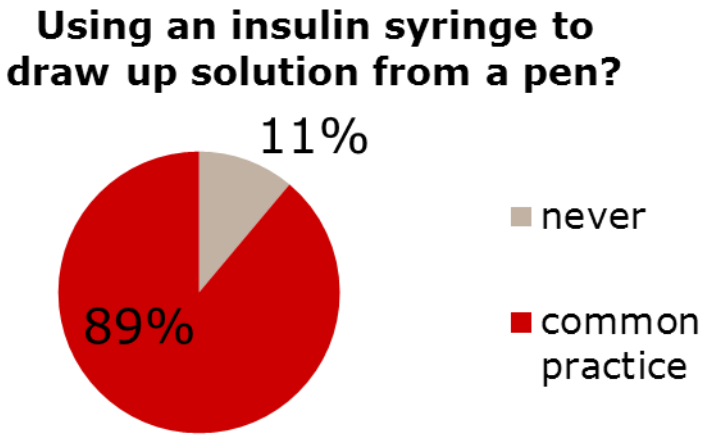
Call for sharing information on dropper risks

Withdrawal from pens or cartridges with syringes: is their use as multidose vials preventable? (1)

- Healthcare professionals having only teriparatide (Movymia°) cartridges without the Movymia Pen°, used a syringe to draw and then administer the entire volume contained in the cartridge, i.e. 28 times the daily dose
- 7 cases reported between mid-2019 and early 2021, resulted in vomiting and mild to significant fatigue
- Causes identified by the company:
  - shortage of Movymia Pen° with only the cartridge being dispensed
  - lack of awareness of the existence of the Movymia Pen°
  - healthcare professionals assuming similarity with other injectable products

Withdrawal from pens or cartridges with syringes: is their use as multidose vials preventable? (2)

- Occasionally, insulin is withdrawn from a pen cartridge or directly from a pre-filled pen with a syringe intended for use with multidose vials.
- This practice sometimes takes place when insulin pen needles are unavailable.
- Bypassing the dose counter is a misuse of pens: sometimes because of a calculation error
- These cases demonstrate that **pens do not prevent their use as multidose vials**



Rotarix° oral vaccine: end of a 15-year battle

- Since it was first marketed in France in 2006, the Rotarix° oral rotavirus vaccine has sometimes been injected instead of being given orally. The design of the oral syringe, resembling a syringe for injection, was a major contributing factor.
- No reported cases of injection by error with Rotateq° vaccine, a ready-to-use oral solution in a small, single-dose tube with a mouthpiece clearly designed for oral administration
- Since mid-2021, Rotarix° has instead been supplied in a **squeezable tube** in France (a format that has been authorized in the European Union since 2008, but was only available in Spain, Portugal and Sweden)

Looking at mutual aid between IMSN members: just browse *Prescrire* and *Prescrire International*

Topics	Prescrire	IMSN source
Remdesivir	Prescrire Rédaction "Remdésivir - Veklury°. Covid-19 : trop d'incertitudes, tant sur l'efficacité que sur les effets indésirables" *Rev Prescrire* 2020 ; **40** (445) : 808-811.	ISMP "Reported medication errors with Veklury (remdesivir) emergency use authorization" *ISMP Medication safety Alert* 2020 ; **25** (18) : 4 pages
5 Questions	Prescrire Rédaction "Graines d'évitables. Sécurité des soins : patient et entourage sont aussi acteurs" *Rev Prescrire* 2021 ; **41** (450) : 316-317. Prescrire Rédaction "Médicaments : cinq questions à l'usage des patients" *Rev Prescrire* 2021 ; **41** (452) : 469.	ISMP Canada "5 questions à poser à propos de vos médicaments" *Bulletin de Médicaments sécuritaires .ca* 2016 ; **7** (7) : 1-2
Confusion between brand names of the drug and of the inhaler	Prescrire Rédaction "Asthme et BPCO : ne pas confondre le nom commercial du médicament avec celui du dispositif inhalateur" *Rev Prescrire* 2021 ; **41** (452) : 419. Prescrire Editorial Staff "Asthma and COPD: risk of confusion between the brand name of the drug and the brand name of the inhaler" *Prescrire International* 2021; **30** (231): 270.	ISMP "Errors with Breo, Anora, and other "Ellipta" inhalers" *ISMP Medication Safety Alert!* 2018; **23** (10): 2 pages.
Desensitization	Prescrire Rédaction "Désensibilisation au venin d'hyménoptère. Une balance bénéfices-risques qui semble favorable pour quelques patients" *Rev Prescrire* 2021 ; **41** (454) : 603-605.	ISMP Canada "Missed doses of allergen extracts contribute to serious reaction" *ISMP Canada Safety Bulletin* 2015 ; **15** (5) : 6 pages.
Teriparatide	Prescrire Rédaction "Tériparatide en stylos ou en cartouches : des présentations multidoses à ne pas prélever avec une seringue" *Rev Prescrire* 2021 ; **41** (455) : 662. Prescrire Editorial Staff "Teriparatide in pen injectors or cartridges: multidose formulations which must not be drawn into a syringe" *Prescrire International* 2021; **30** (232): 297.	ISMP "Pen injectors: technology is not without impending risks" *ISMP Medication Safety Alert!* 2006 ; **11** (24) : 1-3.
Mix-Ups Between the Influenza Vaccine and COVID-19 Vaccines	Prescrire Rédaction "Dans l'actualité. Administrer en même temps un vaccin covid-19 et un vaccin grippe ? quelques repères pour décider" *Rev Prescrire* 2021 ; **41** (457) : 807.	ISMP "Mix-Ups Between the Influenza (Flu) Vaccine and COVID-19 Vaccines" *ISMP Medication Safety Alert! Acute Care edition:* October 7, 2021, Volume 26, Issue 20: National Alert Network (NAN) "Nan Alert - Mix-Ups Between the Influenza (Flu) Vaccine and COVID-19 Vaccines" 15 October 2021
Pneumococcal vaccines	Prescrire Rédaction "Erreurs de vaccin pneumococcique : des nourrissons mal protégés" *Rev Prescrire* 2021 ; **41** (457) : 831-832.	ISMP "2017-2018 Biannual Report. The ISMP National Vaccine Errors Reporting Program (VERP)" 2019 : 38 pages.
Tranexamic acid	Prescrire Rédaction "Confusions entre anesthésique local et acide tranexamique : injections intrarachidiennes mortelles" *Rev Prescrire* 2021 ; **41** (457) : 831-832.	National Alert Network (NAN) "NAN Alert : Dangerous wrong-route errors with tranexamic acid" 9 septembre 2020 : 2 pages.

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Mix-Ups Between the Influenza Vaccine and COVID-19 Vaccines	Prescrire Rédaction "Dans l'actualité. Administrer en même temps un vaccin covid-19 et un vaccin grippe ? quelques repères pour décider" *Rev Prescrire* 2021 ; **41** (457) : 807. October 14, 2021	ISMP "Mix-Ups Between the Influenza (Flu) Vaccine and COVID-19 Vaccines" *ISMP Medication Safety Alert! Acute Care edition:* October 7, 2021, Volu… October 7, 2021 National Alert Network (NA… …Mix-Ups Between the Influenza (Flu) Vaccine and COVID-19 Vaccines" 15 October 2021
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Tranexamic acid	Prescrire Rédaction "Confusions entre anesth… …examique : injections intrarachidiennes mortelles" *Rev Prescrire* 2021 ; **41** (457) : 83… December 2021	National Alert Network… September 9, 2020 …Dangerous wrong-route errors with tranexa… …tembre 2020 : 2 pages.