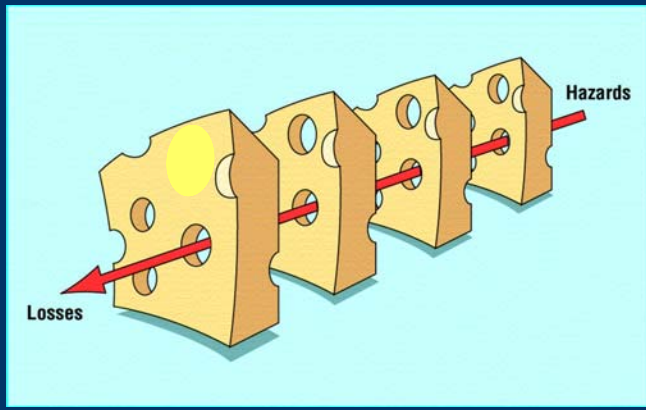
Medication Safety Today



Issue 11 **The Northern Ireland Medicines Governance Team Newsletter** **May 2005**

TAKE THAT

Medication incidents continue to be reported where medicines have been missed from a patient's medication history on admission to hospital. There can be many reasons for this but sometimes it can be as simple as a single word.

How many times have you asked a patient "What medicines do you **take**?"

In answering this question, patients often only tell us about medicines that they take orally.

It is not surprising then that the most frequently missed items from a medication history are inhalers, eye drops, sprays, injections and transdermal patches.

When asking a patient about their medication history, remember to check if they have told you about all their usual medicines, not just the ones they 'take'.

A balancing act

Medication incidents have occurred where patients have received the incorrect dose of medicine because the dose was calculated based on an incorrect body weight.

Whenever the dose of a medicine is based on a patient's weight, for example:

- paediatrics,
- low molecular weight heparins,
- aminoglycosides such as gentamicin and tobramycin,

…take care to ensure the weight is correct.

Safety tips:

- ✔ Scales should measure in kilograms.
- ✔ Scales should be properly maintained and calibrated.
- ✔ Always convert weights to kilograms and get your conversion calculation double checked.
- ✔ Consider reweighing patients regularly.

Nuts about medicines

A number of medicines may contain peanut (arachis) oil. This is often added to preparations as a "carrier" for other drugs or to aid absorption of some emollients.

Pharmaceutical grade peanut oil is refined to remove peanut protein (the cause of allergic reactions) during the manufacturing process, however small amounts of peanut protein may remain in the refined peanut oil.

A number of medicines contain peanut (arachis) oil. Some examples include:

- Cerumol® Ear Drops
- Abidec® Drops
- Calogen®

The risk of an allergic reaction is low but as a precaution the Committee on Safety of Medicines (CSM) has advised that:

- All medicinal products containing peanut oil are required to include an appropriate warning on the labelling.
- Patients known to be allergic to peanuts should not use medicines containing peanut oil.
- As there is a possible relationship between peanut allergy and soya allergy, patients allergic to soya should also avoid medicinal products containing peanut oil.

The BNF indicates where a medicine is known to contain peanut (arachis) oil. For all other products check the most up to date Summary of Product Characteristics or contact the Pharmacy Department.

If you have any comments on this newsletter, please contact Tracey Boyce, the Medicines Governance pharmacist on ext 5724 at the Royal Hospitals or by e-mail at Tracey.boyce@royalhospitals.n-i.nhs.uk.

The Medicines Governance Team website can be viewed at www.dhsspsni.gov.uk/pgroups/pharmaceutical

Something's missing

Many medicines are available as ready prepared solutions and infusions. Other medicines require further mixing or dilution to prepare the final product.

In some cases, a diluent is supplied in a separate ampoule, vial, bottle or syringe and this has been mistaken for the final product. Patients have received the diluent rather than the medicine, resulting in treatment failure. Examples of products highlighted in medication incident reports are illustrated in the box below.

Ciprofloxacin suspension – for the prevention and treatment of infection

This package contains a bottle of ciprofloxacin granules and a bottle of non-aqueous opaque liquid. The granules must be added to the diluent bottle before use.

Reteplase injection – for the treatment of acute myocardial infarction

Reteplase is supplied as a freeze-dried substance in vials. It is reconstituted with the contents of an accompanying syringe (containing water for injections) to form a clear, colourless solution.

Glucagon injection – for the treatment of severe hypoglycaemia

Glucagon is supplied as a freeze-dried substance in vials. It is reconstituted with the contents of an accompanying syringe (containing water for injections) to form a clear solution.

Vaccines – for immunisation against infection

A number of childhood and adult vaccines are presented as a powder for reconstitution with an accompanying ampoule, vial or prefilled syringe of appropriate diluent.

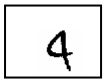
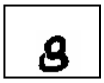
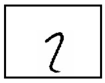
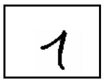
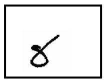
Safety tips:

- Store all package contents together until use.
- Read the printed instructions for use on either the packaging or product information leaflet.
- Before preparation, empty the contents of external packaging fully.
- Once oral liquids are prepared, label the product to highlight that reconstitution has occurred and include a date to indicate the expiry.

Your number's up!

Previous editions have highlighted where an illegible prescription could lead to a patient receiving the wrong medicine. An increasing number of medication incidents have been reported involving incorrect doses being prescribed, administered or dispensed because the handwritten number looked very similar to another number.

What do you think each of the following numbers are?

	6 or 0?		4 or 9?
	3 or 8?		2 or 7?
	7 or 1?		5 or 8?

While it may be OK to guess the numbers shown here, it's not OK for numbers on a prescription.

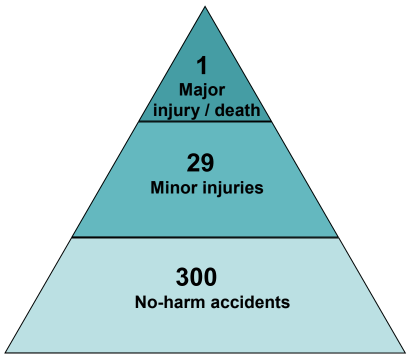
Safety tips:

- Take care to write medicine doses clearly.
- How do you write numbers? Could anyone misread them?
- If the dose is illegible or you are unsure what was intended, don't guess. Clarify with the prescriber and ask for the dose to be rewritten.
- Report any medication incidents where doses have or could have been misread.

Heinrich's Pyramid

How often have you thought 'That's an accident waiting to happen'?

Back in the 1940's the engineer Heinrich studied industrial accidents. He estimated that for every accident that caused major harm, there were 29 related minor injuries and 300 no-harm accidents as shown below. An analysis of medication incident data in Northern Ireland has shown a very similar ratio to that of Heinrich's pyramid.



Medication incidents where no harm has occurred are an invaluable source of information. They can be used to identify areas for reducing risk in the prescribing, administration and dispensing of medicines before a patient is harmed.

Continue to report all medication incidents, not just those that have caused harm.