Error-prone abbreviations, symbols and dose designations

NOT TO USE

NATIONAL MEDICATION SAFETY PROGRAMME

HEALTH QUALITY & SAFETY COMMISSION NEW ZEALAND
Kupu Taurangi Hauora o Aotearoa

The following abbreviations, symbols and dose designations have been reported internationally as being frequently misinterpreted and involved in harmful medication errors. *They should NEVER be used when communicating medicine-related information verbally, handwritten, pre-printed or electronically.*

The use of abbreviations and acronyms may save time but can increase the potential for medication errors. Not all health practitioners interpret abbreviations and acronyms uniformly. They may have more than one meaning, the meaning may vary from place to place and/or if poorly handwritten may be mistaken for another abbreviation. This list is not all-inclusive and there may be circumstances where organisations may wish to add other error-prone abbreviations, symbols and dose designations to their own lists.

DO NOT USE	Intended Meaning	Misinterpretation	Preferred Term
Abbreviated chemical names (eg, MgSO4, HCL, KCL)	MgSO4 = magnesium sulphate	Mistaken as morphine sulphate.	Write the **complete chemical name** (eg, magnesium sulphate, hydrochloric acid, potassium chloride). Drop down selection lists should contain the full chemical name.
	HCL = hydrochloric acid	Mistaken as potassium chloride.	
	KCL= potassium chloride	Mistaken as hydrochloric acid.	
Abbreviated medicine names (eg, MTX, HCT, AZT)		Mistaken MTX as methotrexate or mitozantrone.	Write the **complete medicine name**. **Prescribe generically** unless you need to give a patient a specific brand medicine. Sometimes brand names do not adequately identify the medicine being prescribed (eg, Augmentin® or Timentin® may not be identified as containing a penicillin). The funded brand often changes in New Zealand and prescribing generically enables suitable products to be dispensed or administered, saving delay and sometimes expense to the patient.
		Mistaken HCT as hydrocortisone or hydrochlorothiazide.	
		Mistaken AZT as azathioprine, zidovudine or azithromycin.	
µg or mcg	microgram	Mistaken as mg (milligrams).	Write **microgram**.
U or IU	U = unit	Mistaken U as zero, four, and cc.	Write **unit or international unit**.
	IU = international unit	Mistaken IU as IV (intravenous), 10 (ten), or as a trailing 1 (one).	
ng	nanogram	Mistaken as milligram.	Write **nanogram**.
OD, od, or O.D.	once a day, daily or every day	Mistaken as QID (four times a day) or BD (twice daily).	Write **daily** or the intended time of administration (eg, morning, night).
Q.D, q.d, qd, QD	every day (in USA only)	Mistaken as QID or BD.	Write **daily** or the intended time of administration (eg, morning, night).
SC	subcutaneous	Mistaken as SL (sublingual).	Write **subcut** or **subcutaneous**.
SL or S/L	sublingual	Mistaken as SC (subcutaneous).	Write **subling** or **sublingual**.
mEq or milliequivalent		Confusion between milliequivalent and millimole.	Use only standard international units. State required dose in **millimole** or **mmol**.
Zeros: lack of a leading zero (eg, .5mg)	.5mg = 0.5mg	Mistaken .5mg as 5mg if the decimal point is missed leading to a tenfold error.	**Avoid leading zeros** by rewriting the dose as smaller units (eg, 0.5mg = 500 micrograms). If not possible, include a leading zero (eg, 0.125mg).
Zeros: adding a trailing zero (eg, 1.0mg, 100.0g)	1.0mg = 1mg 100.0g = 100g	Mistaken 1.0mg as 10mg and 100.0g for 1000g if the decimal point is missed leading to a tenfold error.	**Never** write a zero after a decimal point. Write 1.0mg as 1mg. Write 100.0g as 100g.
Roman numerals (eg, ii, iv, x)	numbers 1, 2, 3, 4 etc	Latin is no longer the predominant language of medical literature. Not every health care professional has been trained in its use.	Use **words** or Hindu-Arabic **numbers** (ie, 1,2,3 etc).

References

1 Australian Commission on Safety and Quality in Healthcare. Recommendations for terminology, abbreviations and symbols to be used in the prescribing and administering of medicines. January 2012. http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/32060v2.pdf

2 Institute of Safe Medication Practices. ISMP's List of Error Prone Abbreviations, Symbols and Dose Designations. 2011. http://www.ismp.org/tools/errorproneabbreviations.pdf