



Clinical Pharmacology & Toxicology Pearl of the Week

~ “Do Not Use” Abbreviations ~

Case:

A nine-month-old girl had “Morphine .5mg IV” prescribed for post-op pain. It was transcribed by hand to the medication administration record as “5 mg” IV. The nurse gave 2 doses, 2 hours apart. Four hours after the last dose, the baby suffered cardiac arrest and died.

Background:

- ✓ Medication errors are one of the largest recognized sources of preventable hospital medical error, and approximately 5% of those errors are due to abbreviation use.
- ✓ Misinterpreted abbreviations can result in omission errors, extra or improper doses, administering the wrong drug, or giving a drug in the wrong manner. In return this can lead to an increase in the length of stay, more diagnostic tests, and changes in drug treatment.
- ✓ Abbreviations, as well as symbols and dose designations, are only helpful when their intended meaning is fully understood by all persons who will be deciphering the information and when there is no potential for misinterpretation.
- ✓ Certain abbreviations appear to be more error-prone, and the resultant errors may lead to serious or even fatal outcomes.
- ✓ Even though the writer may have clear and legible handwriting, the reader may be unfamiliar with the meaning of the abbreviation, symbol, or dose designation. The abbreviation may also have more than one meaning.

Humalog 4u/2u/6u
Lantus 14u @ HS

ACCUR QID
HUMALOG 44 u / 24/64. 7.5q
LANTUS 14 u QHS. 5q

Heparin 50000 Sq Q8H

60 Regular INSULIN NOW

“Do Not Use” Abbreviations List

- ✓ There is a Do Not Use List of Abbreviations, Symbols, and Dose Designations developed by Institute of Safe Medication Practices (ISMP) Canada. This list was revised in 2025. The brief and comprehensive versions are displayed below
- ✓ The elimination of the use of dangerous abbreviations, symbols, and dose designations applies to all medication-related documentation. This includes when handwritten or entered as text into a computer, or on any pre-printed forms or labels related to medication use.

DO NOT USE

Dangerous Abbreviations, Symbols, and Dose Designations

Institute for Safe Medication Practices Canada

For a more detailed version, see: ismpcanada.ca/do-not-use-list

| DO NOT USE | ALWAYS USE |
|---|--|
| Abbreviated medication name (e.g., MSO4, MTX) | Use full name of medication |
| U | Use units |
| IU | Use International units |
| ug, µg | Use microgram or mcg |
| cc | Use millilitre or mL |
| OD, QD | Use daily |
| QOD, EOD | Use every other day |
| D, d | Use days or doses |
| x/7, y/52 | Use x days, y weeks |
| AS, AD, AU | Use left ear, right ear, both ears |
| OS, OD, OU | Use left eye, right eye, both eyes |
| < > | Use less than, lower than or more than, greater than |
| @ | Use at |
| D/C medication A, medication B | Use discharge when referring to a discharge with medications from a care area. <i>Where discontinue is intended, stop or discontinue may be safer alternatives.</i> |
| I, II, III, IV, ... ī, īī, īīī, ... | Use the intended Arabic numerals , or spell out the numeral . |
| X.0 (trailing zero) | Use X <i>Never use zeroes after a decimal point.</i> |
| .X (lack of leading zero) | Use 0.X <i>Always use a zero before a decimal point.</i> |

DO NOT USE

Dangerous Abbreviations, Symbols, and Dose Designations

Institute for Safe Medication Practices Canada
For a more concise version, see: ismpcanada.ca/do-not-use-list

| DO NOT USE | INTENDED MEANING | COMMON ERRORS | ALWAYS USE |
|---|--|---|---|
| Abbreviations of medication names | | | |
| Abbreviated medication name (e.g., MSO4, MTX) | Medication name | Mistaken for a different medication | Use full name of medication |
| Abbreviations for units of measurement | | | |
| U | units | Mistaken for O, or numeral 0 (zero) | Use units |
| IU | International units | Mistaken for numeral 10, or IV | Use International units |
| ug, µg | micrograms | Mistaken for mg (milligrams) | Use microgram or mcg |
| cc | cubic centimetre | Mistaken for numeral 00, or 'u' | Use millilitre or mL |
| Abbreviations of frequency or duration | | | |
| OD, QD | Every day | OD mistaken for numeral 00, or right eye QD mistaken for four times per day, or numeral 00 | Use daily |
| QOD, EOD | Every other day | QOD mistaken for four times per day, or once daily EOD mistaken for once daily | Use every other day |
| D, d | Days or doses | Mistaken for each other (e.g., 5D intended as 5 days was mistaken for 5 doses; bid x 2d intended as 2 doses was mistaken for 2 days) Mistaken for numeral 0 (zero) | Use days or doses |
| x/7, y/52 | Number of days, number of weeks | Mistaken as number of weeks Mistaken as number of years, or days | Use x days, y weeks |
| Latin abbreviations for route | | | |
| AS, AD, AU | Left ear, right ear, both ears | Mistaken for left eye, right eye, both eyes Mistaken for one another | Use left ear, right ear, both ears |
| OS, OD, OU | Left eye, right eye, both eyes | Mistaken for left ear, right ear, both ears OD mistaken for once daily Mistaken for one another | Use left eye, right eye, both eyes |
| Symbols and other abbreviations | | | |
| < > | Less than or greater than | Mistaken for opposite than intended, or for numerals | Use less than, lower than or more than, greater than |
| @ | at | Mistaken for numerals 0 (zero) or 2 | Use at |
| D/C medication A, medication B | Discharge with list of medications that follow | Mistaken as discontinue list of medications that follow | Use discharge when referring to a discharge with medications from a care area. <i>Where discontinue is intended, stop or discontinue may be safer alternatives.</i> |
| Numeric representations or dose designations | | | |
| i, ii, iii, iv, ... I, II, III, IV, ... ī, īī, īīī, ... | Roman numerals | Mistaken for numerals (e.g., ii and īī mistaken for 11), or mistaken for route (e.g., IV), or unrecognized | Use the intended Arabic numerals, or spell out the numeral. |
| X.0 (trailing zero) | X | Mistaken for 10 times greater than intended due to decimal point not recognized | Use X <i>Never use zeroes after a decimal point.</i> |
| .X (lack of leading zero) | 0.X | Mistaken for 10 times greater than intended due to decimal point not recognized | Use 0.X <i>Always use a zero before a decimal point.</i> |

References:

1. ISMP Canada Safety Bulletin – June 2025.
2. Alberta Health Services (AHS) Do Not Use List of Abbreviations, Symbols, and Dose Designations for Medication-Related Documentation policy.

The Clinical Pharmacology (CP) physician consultation service is available Mon-Fri, 8am-5pm. The on-call physician is listed in ROCA on the AHS Insite page. CP consultations are also available through Netcare e-referral and Specialist Link. You can also find us in the [Alberta Referral Directory](#) (ARD) by searching “Pharmacology” from the ARD home page. Click [HERE](#) for more details about the service.

The Poison and Drug Information Service (PADIS) is available 24/7 for questions related to poisonings. Please call 1-800-332-1414 (AB and NWT) or 1-866-454-1212 (SK). Information about our outpatient Medical Toxicology Clinic can be found in [Alberta Referral Directory](#) (ARD) by searching “Toxicology” from the ARD home page.

More CPT Pearls of the Week can be found [HERE](#).

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