

## 5 Searching for Drug-Related Adverse Events in PubMed/MEDLINE Using the MeSH Term "Drug Toxicity"

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**Introduction:** Setting up alerts for identifying case reports with adverse events (AE) associated to drug therapy is a traditional practice in Pharmacovigilance departments. A common search strategy in PubMed/MEDLINE consists in combining specific drug names with the MeSH subheading "adverse effects".<sup>[1-3]</sup> However, there are other controlled terms available in the thesaurus that might prove useful for this purpose, such as the descriptor "drug toxicity" defined as "manifestations of the adverse effects of drugs administered therapeutically or in the course of diagnostic techniques. It does not include accidental or intentional poisoning for which specific headings are available".<sup>[4]</sup>

**Aim:** To find out whether the addition of the MeSH descriptor "drug toxicity" to a search strategy containing the MeSH subheading "adverse effects" would increase the number of relevant records retrieved.

**Methods:** We searched PubMed/MEDLINE in order to identify several subsets of records (see table). No drug or substance term was used in the search strategy. The search included complete MEDLINE records of case reports published during the last year (May 16 2007 to May 14 2008) in English language. Results from step #4 were manually analyzed to find AE cases with identifiable drug, patient, reporter and adverse event, without assessing causality. Searches were performed on the 14<sup>th</sup> May 2008 accessing MEDLINE via Entrez PubMed.

Search strategies and results

Sets	Concept	Search strategy	Retrieved records
#1	Complete Medline records + English language + humans + case reports + published in the precedent year-period 2007/05/16 to 2008/05/14	"2007/05/16"[PDat] : "2008/05/14"[PDat] AND "humans"[MeSH] AND English[lang] AND Medline[sb] AND Case Reports[ptyp]	31094
#2	#1 + "adverse effects" as floating subheading	"adverse effects" [subheading] AND #1	6212
#3	#1 + "drug toxicity" as MeSH descriptor	"drug toxicity"[MeSH] AND #1	205
#4	#3 not containing "adverse effects" as floating subheading	#3 NOT #2	34

**Results:** The "drug toxicity" descriptor retrieved 34 additional records (0.5%), 12 (0.2%) of which contained AE cases as defined before.

**Conclusions:** The MeSH descriptor "drug toxicity" very slightly increased the number of relevant records retrieved in our search. Additional work is needed to confirm this observation.

**Conflicts of interest:** M.O. Garcia is employed by Novartis Pharma AG, Basel, Switzerland

### References

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