Online supplement 1 – Electronic search strategies

MEDLINE and Embase

Note: Note: Searches were conducted using an Ovid multi-database search and duplicate records were removed online giving preference to MEDLINE, then Embase, with no field preference. Lines 1-7 are optimized for MEDLINE and the main question constructs are broken out in separate lines for clarity. Lines 5-10 are optimized for Embase. The next lines isolate the records to the database the search was designed for, combine those sets and then remove duplicate records and final isolate the records from each database again so each can be downloaded and imported into the citation manager using a database-specific import filter.

1. exp Brain Concussion/ or Post-Concussion Syndrome/ or (concuss$ or postconcuss$).tw. or (commotio cerebri or post traumatic encephalopathy).ti,ab,kf. or ((post commotion or post contusion or post head injury) adj2 syndrome*).ti,ab,kf. or ((mild or minor or minimal) adj (traumatic brain or tbi)).ti,ab,kf. or mtbi.ti,ab,kf. or (exp Brain Injuries/ and ((post or persistent or unresolved or delayed) adj4 (brain or skull or head or injury)).ti,ab,kf.)
2. (((subsequent* or second or twice or repeat* or previous* or prior or history or recur* or initial* or multiple) adj2 (injur* or concuss*)) or reinjur* or re-injur* or re-concuss* or reconcuss* or Second Impact Syndrome).mp. or Recurrence/
3. 1 and 2 and (child* or adolesc* or pediatr* or paediatr*).mp.
4. limit 3 to journal article
5. Brain Concussion/ or Concussion/ or Post-Concussion Syndrome/ or (concuss$ or postconcuss$).ti,ab,kw. or (commotio cerebri or post traumatic encephalopathy).ti,ab,kw. or ((Post commotion or post contusion or post head injury) adj2 syndrome$).ti,ab,kw. or ((mild or minor or minimal) adj (traumatic brain or tbi)).ti,ab,kw. or mtbi.ti,ab,kw.
6. (((subsequent* or second or twice or repeat* or previous* or prior or history or recur* or multiple) adj2 (injur* or concuss*)) or reinjur* or re-injur* or re-concuss* or reconcuss* or Second Impact Syndrome).mp. or Recurrent Disease/
7. (baby$ or babies$ or newborn$ or infan$ or neonat$ or preschool$ or pre-school$ or child$ or pediatr$ or paediatr$ or teen$ or adolescen$).mp.
8. 5 and 6 and 7
9. limit 8 to conference abstract
10. 8 not 9
11. limit 10 to Embase
12. 4 use MEDALL
13. 11 use EMCZD
14. remove duplicates from 13
15. 14 Use MEDLINE
16. 14 use EMCZD

CINAHL
((((subsequent* or second or twice or repeat* or previous* or prior or history or recur* or multiple) N2 (injur* or concuss*)) or reinjur* or re-injur* or re-concuss* or reconcuss* or Second Impact Syndrome) or MH "Recurrence") AND ((MH "Brain Concussion+" OR TX concuss* or postconcuss* OR TX commotio

cerebri OR TX post traumatic encephalopathy OR post head injury N3 syndrome* or post contusion N3 syndrome* or post commotion N3 syndrome* OR TX Mild traumatic brain or TX minor traumatic brain or TX minimal traumatic brain or TX mild tbi or TX minor tbi or TX minimal tbi OR TX mtbi) AND (child* or adolescent or infan*))
Limiters - Exclude MEDLINE records

SportDISCUS
((DE "BRAIN -- Concussion" OR DE "POSTCONCUSSION syndrome")) AND (((subsequent* or second or twice or repeat* or previous* or prior or history or recur* or multiple) N2 (injur* or concuss*)) or reinjur* or re-injur* or re-concuss* or reconcuss* or Second Impact Syndrome) AND ((baby* or babies* or newborn* or infan* or neonat* or preschool* or pre-school* or child* or pediatr* or paediatr* or teen* or adolescen*))