

Search protocol and strategies

Interventions to prevent unintentional injury to children during outdoor play and leisure

This protocol relates to the search strategies for all reviews covered under the named intervention above

Searches will be performed to find relevant primary research using a comparative design, qualitative studies, and cost-effectiveness studies. The reference lists of systematic reviews of found studies will also be utilised. Searches will be conducted in medical and social science databases along with a search for grey literature. All searches will be limited to those in English published since 1990, where possible.

PART 1: Bibliographic Databases

Selection of databases was informed by the “core and topic specific” recommendations in the *Methods for the development of NICE public health guidance 2009*. The following databases will be searched.

From the “core databases”:

- MEDLINE
- EMBASE
- PsycINFO
- Social Science Citation Index

- AMED
- NHS CRD databases: Database of Abstracts of Reviews of Effectiveness (DARE); NHS EED; HTA

- EconLit

From the “topic-specific databases”:

- EPPI Centre databases
 - (a) Bibliomap
 - (b) DoPHER
 - (c) TRoPHI
- SPORTDiscus

Supplementary file 2 – Search strategy

- ERIC
- Campbell Collaboration Database

Search Strategy

Search Strategies for the bibliographic databases will be based on text words and thesaurus headings applicable to the individual database. Search results will be downloaded into RefMan and de-duplicated before screening.

The Medline search strategy example below will be “translated” according to the appropriate thesaurus terms for each individual database. Where a database does not have a thesaurus or does not have a search facility to incorporate thesaurus searching, text words only will be used. All searches where possible will be limited to English language and with a publication or database entry date from 1990-current. Search strategies for EMBASE and Medline will include a “child filter”, strategies for all other databases will not include a child filter.

Example Database Search Strategy using: Ovid MEDLINE(R) 1950-current (online version)

1. exp Leisure Activities/
2. leisure\$.tw.
3. sport\$.tw.
4. game\$.tw.
5. recreation\$.tw.
6. holiday\$.tw.
7. countryside\$.tw.
8. ((open or outdoor) adj space\$1).tw.
9. adventure\$.tw.
10. amusement\$.tw.
11. (water\$ adj2 sport\$).tw.
12. (swim\$ or div\$).tw.
13. park\$2.tw.
14. outing\$.tw.
15. (beach\$ or coast\$ or cliff\$ or seaside or (sea adj side)).tw.
16. farm\$.tw.
17. zoo\$.tw.
18. (quarry or quarries or pylon\$ or sub-station\$ or (sub\$ adj station\$)).tw.
19. (firework\$ or fair\$ or fete\$ or outdoor\$).tw.
20. ((physical or external) adj (environment or activit\$)).tw.
21. or/1-20
22. (playground\$ or (play adj area) or (play adj ground\$)).tw.
23. (skatepark\$ or (skate adj park\$)).tw.
24. (bike\$ or bicycle).tw.
25. ((play\$ or recreation) adj2 (field\$ or area\$ or pitch\$)).tw.

Supplementary file 2 – Search strategy

26. (play\$ adj3 (building or rail\$ or construct\$)).tw.
27. (play\$ adj3 water).tw.
28. ((informal or unstructured or free) adj2 (play or play?time)).tw.
29. (game\$ adj area\$).tw.
30. (swing\$ or trampoline\$).tw.
31. (roundabout\$ or seesaw\$ or sandpit\$ or slide\$ or (climbing adj frame\$)).tw.
32. ((activity or climbing) adj (wall\$ or center\$ or centre\$ or frame\$ or net\$)).tw.
33. (skateboard\$ or roller skat\$ or roller blade\$ or in-line skat\$).ti,ab.
34. (scooter\$ or heely or heelies or (street adj glider\$1) or go?cart or (go adj cart) or goped\$).tw.
35. ((adventure or fitness or trim or leisure) adj2 trail\$).ti,ab.
36. ((cycle or bmx) adj (trail\$ or track\$)).ti,ab.
37. ((paddl\$ or swim\$ or dive or diving or dived) adj3 (lido\$ or pool\$)).tw.
38. ((paddl\$ or swim\$ or dive or diving or dived) adj3 (river\$ or pond\$ or lagoon\$ or sea or canal\$ or ocean\$ or (open adj water\$1))).tw.
39. ((dive or diving or dived) adj3 (lido\$ or pool\$)).tw.
40. (water ski\$ or wakeboard\$ or raft\$ or windsurf\$ or yacht\$ or sail or sailing or lilo\$ or canoe\$ or dingh\$ or kayak\$ or raft\$ or surf\$).ti,ab.
41. (kite adj3 fly\$3).tw.
42. (fishing or angl\$3 or climbing).tw.
43. (inflatabl\$2 or dingh\$3 or (bouncy adj castle\$1)).tw.
44. or/22-43
45. 21 or 44
46. inform*.tw.
47. teach*.tw.
48. learn*.tw.
49. (lesson\$ or tuition or coach or supervis\$).tw.
50. aware*.tw.
51. (advice or advise).tw.
52. educat*.tw.
53. train*.tw.
54. campaign\$.tw.
55. (program\$1 or programme\$1 or intervention\$).tw.
56. promot*.tw.
57. skills.tw.
58. Patient Education as Topic/
59. exp Health Promotion/
60. knowledge.tw.
61. health education/

Supplementary file 2 – Search strategy

62. School Health Services/
63. or/46-62
64. exp Mass Media/
65. mass media.tw.
66. ((public\$ or mass or digital or mobile) adj3 (campaign\$ or advert\$ or commercial or market\$)).tw.
67. social marketing.tw.
68. mass campaign\$.tw.
69. media.tw.
70. (dvd or dvds or video\$ or motion picture\$ or film or films or broadcast\$ or radio or televised or televised or movie\$).tw.
71. ((advert\$ or campaign\$ or program\$ or commercial\$) adj3 (tv or television or cable or satellite or cinema or cinemas or theatre or theatres or theater or theaters or movies or media or newspaper\$ or journal\$ or magazine\$)).tw.
72. (viral video or internet buzz or buzz device or advergam\$3 or adver?gam\$3).tw.
73. (newspaper\$ or press).mp. or magazine\$.tw.
74. (internet or website).tw.
75. (e-mail\$ or email\$ or electronic mail\$ or mailing list\$).tw.
76. (pod cast\$ or podcast\$ or blog or blogs or blogging or blogosphere).tw.
77. (open space technolog\$ or social networking or bebo or facebook or myspace or netlog or profileheaven or xanga or yahoo\$ or twitter\$ or tweet\$ or youtube or pageflakes or netvibes or habbo).tw.
78. (text messag\$ or texting or sms or short messag\$ service\$ or instant messag\$ or videomessag\$ or video messag\$ or multimedia messag\$).tw.
79. (digital adj3 (media or device\$ or platform\$ or technolog\$)).tw.
80. (wireless adj3 (media or device\$ or platform\$ or technolog\$)).tw.
81. ((digital or interactive or mobile or online or viral or buzz) adj3 (market\$ or campaign\$ or advert\$ or commercial\$)).tw.
82. (online or web or www).tw.
83. Computer-Assisted Instruction/
84. cell\$ phone\$.tw.
85. Cellular Phone/
86. (mobile adj phone\$).tw.
87. (pamphlet\$ or book\$ or literature).tw.
88. leaflet\$.tw.
89. Pamphlets/
90. Publications/
91. advert\$.tw.
92. campaign\$.tw.

Supplementary file 2 – Search strategy

93. or/64-92
94. 63 or 93
95. Health Behavior/
96. adolescent behavior/ or child behavior/
97. risk factors/
98. Risk Assessment/
99. Risk-Taking/
100. ((safe* or protect*) adj2 (gear or equipment or cloth\$ or device\$)).tw.
101. eye protective devices/
102. protective clothing/
103. head protective devices/
104. equipment safety/
105. protective devices/
106. (helmet\$ or knee pad\$ or wrist guard\$ or elbow pad\$ or shin guard\$ or shin pad\$ or safety harness\$ or gum shield\$ or life jacket\$ or buoyancy aid\$ or arm band\$).tw.
107. (risk adj2 (taking or behav\$ or factor\$ or reduc\$)).tw.
108. (risk adj2 (prevent\$ or limit\$ or protect\$ or control)).tw.
109. risk reduction behavior/
110. accident proneness/
111. ((health or safety) adj2 (behaviour\$ or behavior\$)).tw.
112. harm reduction/
113. or/95-112
114. exp Child/
115. Infant/
116. Adolescent/
117. (child\$ or infan\$ or toddler\$ or pre-school\$ or preschool\$ or pre school\$ or young or youth\$ or adolesc\$ or teen\$ or paediatr\$ or pediater\$ or minor\$ or boy\$ or girl\$ or baby or babies).tw.
118. (kid\$ or minor\$ or under 15 or (under adj fifteen) or juvenile or pupil or student).tw.
119. or/114-118
120. (94 AND 113)
121. (120 and 45) AND 119
122. (animals not humans).sh.
123. 121 not 122
124. limit 123 to (english language and yr="1990 -Current")

Part 2: Organisation web-sites and in-house databases:

Websites of the following relevant organisations will also be searched for published and unpublished research:

- Child Accident Prevention Trust (<http://www.capt.org.uk>)
- Children in Wales
(<http://www.childreninwales.org.uk/areasofwork/childsafety>)
- Injury Observatory for Britain & Ireland
(<http://www.injuryobservatory.net>)
- Public Health Observatory website for the South West (lead on Injuries)
(<http://www.swpho.nhs.uk/>)
- The Royal Society for the Prevention of Accidents
(<http://www.rosipa.org>)
- Fields in Trust (FIT) (<http://www.api-play.org/NPFA-FIT>)
- Play England (<http://www.playengland.org.uk/Page.asp>)
- International Society for Child and Adolescent Injury Prevention
(<http://www.iscaip.net/>)
- Department for Children, Schools and Families
(<http://www.dcsf.gov.uk/>)
- All Wales Injury Surveillance Systems
(<http://www.capic.org.uk/aande.html>)
- CERUK (current educational research in UK) (<http://www.ceruk.ac.uk>)
- Healthy schools (www.healthyschools.gov.uk/)

Supplementary file 2 – Search strategy

- Teachernet (www.teachernet.gov.uk/)
- Maritime and coastguard agency (www.mcga.gov.uk/)

PART 3: Additional Searches

If, (as a result of PART 1 and 2 of the above strategy), it is determined that key programmes exist that could be further investigated, then additional database and/or search engine focused searches may be performed. This decision will be made in collaboration with CPHE following discussion with the relevant lead analyst and associate director, with regard to the feasibility and usefulness of further searches given the time and resources available.

PART 4: Citation and Reference Searching

Where a reference is found pertaining to an includable piece of research with incomplete data or only an interim report has been identified a citation search will be conducted. The reference lists of recent (2004-2009) systematic reviews and/or key reports will be searched for potentially missed studies. Should time and resources allow further systematic review reference lists will be searched.