Appendix A: Search Strategy

Search Strategy

The search strategy consists of four 'sets' of search terms. Each set is connected with the other sets via AND, except set 4 which is AND NOT. The individual search terms within a set are connected with OR. All sets search in the title, abstract and keywords of papers.

Set 1 contains terms for trade

Set 2 contains terms for health outcomes

Set 3 contains terms conducive of a relationship

Set 4 connected to the others via AND NOT

The resulting search is as follows:

(SET 1) AND (SET 2) AND (SET 3) AND NOT (SET 4)

These results will then be limited by English language, and to either articles or reviews.

Title, abstract or keywords

SET 1

1. trade polic*
2. trade agreement*
3. free trade agreement*
4. trade liberali*
5. trade quantit*
6. trade amount*
7. volume* of trad*
8. trade volum*
9. imports
10. importing
11. export*
12. globali*ation
13. cross border trad*
14. international trad*
15. foreign direct investment*
16. cross border investment*
17. foreign own*
18. horizontal investment*
19. Vertical investment*
20. farm subsid*
21. agricultural subsid*

SET 2

22. Tuberculosis

23. HIV
24. AIDS
25. disease*
26. typhoid
27. Paratyphoid fever*
28. lower respiratory infection*
29. upper respiratory infection
30. otitis media
31. meningitis
32. encephalitis
33. diphtheria
34. whooping cough
35. tetanus
36. measles
37. varicella
38. malaria
39. echinococcosis
40. dengue
41. Rabies
42. food-borne trematodiases
43. maternal complication*
44. pregnancy complica*
45. hypertensive disorder* of pregnan*
46. obstructed labour
47. abortion
48. maternal problem*
49. birth complication*
50. neonatal encephalopathy
51. birth asphyxia
52. birth trauma
53. birth sepsis
54. disorder* of the newborn baby
55. neonatal disorder*
56. hepatitis
57. leprosy
58. cancer*
59. melanoma
60. non-Hodgkin lymphoma
61. leuk*mia
62. neoplasm*
63. cardiomyopathy
64. myocarditis
65. atrial fibrillation
66. atrial flutter*
67. aortic aneurysm
68. endocarditis
69. COPD
70. pneumoconiosis
71. asthma

72. pulmonary sarcoidosis
73. cirrhosis
74. peptic ulcer*
75. gastritis
76. duodenitis
77. appendicitis
78. paralytic ileus
79. intestinal obstruction*
80. hernia*
81. vascular disorder*
82. pancreatitis
83. Alzheimer's
84. dementia
85. Parkinson's
86. epilepsy
87. multiple sclerosis
88. migraine*
89. tension?type headache*
90. neurological disorder*
91. schizophrenia
92. unipolar depressive disorder*
93. Bipolar affective disorder*
94. anxiety disorder*
95. development disorders*
96. behavioural disorder*
97. intellectual disability*
98. mental disorder*
99. behavioural disorder*
100. diabet*
101. glomerulonephritis
102. urinary
103. infertility
104. h*moglobinopath*
105. haemolytic an*mia*
106. endocrine disorder*
107. blood disorder*
108. immune disorder*
109. rheumatoid arthritis
110. osteoarthritis
111. low* back pain
112. neck pain
113. gout
114. musculoskeletal disorder*
115. congenital anomal*
116. neural tube defect*
117. congenital heart
118. oral disorder*
119. sudden infant death
120. road injury

121. transport injury
122. drowning
123. poisoning*
124. exposure to mechanical forces
125. adverse effect* of medical treatment
126. animal contact
127. unintentional injur*
128. Self?harm
129. interpersonal violence
130. health outcome*
131. health stat*
132. mortalit*
133. morbidit*
134. chronic disease*
135. life expectanc*
136. work* stress
137. work related stress
138. hypertension
139. stroke*
140. disability?adjusted life year*
141. quality?adjusted life year*
142. daly*
143. qaly*
144. industrial *cident*
145. industrial injur*

SET 3

146. externalit*
147. spillover* impact*
148. relation*
149. causal*
150. data analys*
151. statistical analy*
152. correlation*
153. data source*
154. trade statistic*
155. databas*
156. link*
157. trickle?down
158. secondary effect*
159. regression*
160. fixed effects
161. random effects
162. OLS

SET 4

163. export protein*
164. export of protein*

165. nuclear import*
166. import protein*
167. animal health
168. export* *bolite*
169. cancer cell*
170. HIV-1
171. RNA*
172. malaria protein*
173. import receptor*
174. immuni*ation
175. vaccine
176. import of nuclear
177. stress model
178. botany
179. engineering
180. stress-impared
181. biomass
182. iron export
183. exporting signal*
184. export of beta*
185. data export*
186. parasite exports
187. biomedical
188. import of infected individuals
189. import* passengers
190. mitochondrial import

Scopus search query

TITLE-ABS-KEY("trade polic*" OR "trade agreement*" OR "free trade agreement*" OR "trade liberali*" OR "trade quantit*" OR "trade amount*" OR "volume* of trad*" OR "trade volum*" OR "imports" OR "importing" OR "export*" OR "globali*ation" OR "cross border trad*" OR "international trad*" OR "foreign direct investment*" OR "cross border investment*" OR "foreign own*" OR "horizontal investment*" OR "Vertical investment*" OR "farm subsid*" OR "agricultural subsid*")

AND

TITLE-ABS-KEY("Tuberculosis" OR "HIV" OR "AIDS" OR "disease*" OR "typhoid" OR "Paratyphoid fever*" OR "lower respiratory infection*" OR "upper respiratory infection" OR "otitis media" OR "meningitis" OR "encephalitis" OR "diphtheria" OR "whooping cough" OR "tetanus" OR "measles" OR "varicella" OR "malaria" OR "echinococcosis" OR "dengue" OR "Rabies" OR "food-borne trematodiases" OR "maternal complication*" OR "pregnancy complica*" OR "hypertensive disorder* of pregnan*" OR "obstructed labour" OR "abortion" OR "maternal problem*" OR "birth complication*" OR "neonatal encephalopathy" OR "birth asphyxia" OR "birth trauma" OR "birth sepsis" OR "disorder* of the newborn baby" OR "neonatal disorder*" OR "hepatitis" OR "leprosy" OR "cancer*" OR "melanoma" OR "non-Hodgkin lymphoma" OR "leuk*mia" OR "neoplasm*" OR "cardiomyopathy" OR "myocarditis" OR "atrial fibrillation" OR "atrial flutter*" OR "aortic aneurysm" OR "endocarditis" OR "COPD" OR "pneumoconiosis" OR "asthma" OR "pulmonary sarcoidosis" OR "cirrhosis" OR "peptic ulcer*" OR "gastritis" OR "duodenitis" OR "appendicitis" OR "paralytic ileus" OR "intestinal obstruction*" OR "hernia*" OR "vascular disorder*" OR "pancreatitis" OR "Alzheimer's" OR "dementia" OR "Parkinson's" OR "epilepsy" OR "multiple sclerosis" OR "migraine*" OR "tension?type headache*" OR "neurological disorder*" OR "schizophrenia" OR "unipolar depressive disorder*" OR "Bipolar affective disorder*" OR "anxiety disorder*" OR "development disorders*" OR "behavioural disorder*" OR "intellectual disability*" OR "mental disorder*" OR "behavioural disorder*" OR "diabet*" OR "glomerulonephritis" OR "urinary" OR "infertility" OR "h*moglobinopath*" OR "haemolytic an*mia*" OR "endocrine disorder*" OR "blood disorder*" OR "immune disorder*" OR "rheumatoid arthritis" OR "osteoarthritis" OR "low* back pain" OR "neck pain" OR "gout" OR "musculoskeletal disorder*" OR "congenital anomal*" OR "neural tube defect*" OR "congenital heart" OR "oral disorder*" OR "sudden infant death" OR "road injury" OR "transport injury" OR "drowning" OR "poisoning*" OR "exposure to mechanical forces" OR "adverse effect* of medical treatment" OR "animal contact" OR "unintentional injur*" OR "Self?harm" OR "interpersonal violence" OR "health outcome*" OR "health stat*" OR "mortalit*" OR "morbidit*" OR "chronic disease*" OR "life expectanc*" OR "work* stress"

OR "work related stress" OR "hypertension" OR "stroke*" OR "disability?adjusted life year*" OR "quality?adjusted life year*" OR "daly*" OR "qaly*" OR "industrial *cident*" OR "industrial injur*")

AND

TITLE-ABS-KEY("externalit*" or "spillover*" or "impact*" or "relation*" or "causal*" or "data analys*" or "statistical analy*" or "correlation*" or "data source*" or "trade statistic*" or "databas*" or "link*" or "trickle?down" or "secondary effect*" or "regression*" or "fixed effects" or "random effects" or "OLS")

AND NOT

TITLE-ABS-KEY("export protein*" OR "export of protein*" OR "nuclear import*" OR "import protein*" OR "animal health" OR "export* *bolite*" OR "cancer cell*" OR "HIV-1" OR "RNA*" OR "malaria protein*" OR "import receptor*" OR "immuni*ation" OR "vaccine" OR "import of nuclear" OR "stress model" OR "botany" OR "engineering" OR "stress-impared" OR "biomass" OR "iron export" OR "exporting signal*" OR "export of beta*" OR "data export*" OR "parasite exports" OR "biomedical" OR "import of infected individuals" OR "import* passengers" OR "mitochondrial import")

Screening process

As this is a broad review in which the search terms are relevant to papers from many subjects, the sensitivity of searches is likely to be high. Therefore, even with an extensive search query, thousands of papers are identified. The screening process will therefore be broken down into stages to maximise the efficiency of the process.

The screening will identify 3 tiers of papers using paper title screening as the first stage. The top tier will be composed of papers that appear relevant from the title. The second tier will include papers with titles that are not clear with respect to relevance to the review and require more thorough screening in order for a decision to be made. The final tier will be of papers relatively unlikely to be relevant judging from the title, but are perhaps relevant judging from other factors such as the source journal. The top 2 tiers will enter into the second stage of the review, and the 3rd tier will be title screened a second time.

Inclusion criteria

In the second stage, more detailed screening of each paper will be performed using the abstract, and if necessary the full text. To qualify for inclusion, articles must discuss quantity, change or type of trade in relation to human public health outcome measures including disease prevalence, reported HRQoL, mortality, recorded health related events such as hospitalisations, and life expectancy. Articles identified as theoretical frameworks, descriptive study designs not utilising data analysis to test the hypotheses made will be rejected. Papers discussing trade in relation to determinants of human health outcomes such as smoking, obesity or nutritional intake will also be rejected.