

Additional file 1: Complete overview of search terms used in PubMed, Web of Science and CAB Abstracts.

Database	Search terms	Hits*
PubMed	((("avian influenza"[Title/Abstract] OR "bird flu"[Title/Abstract]) AND (model*[Title/Abstract] OR simulat*[Title/Abstract] OR quantitative[Title/Abstract])) AND (dynamic*[Title/Abstract] OR determinist*[Title/Abstract] OR stochas*[Title/Abstract] OR compartmen*[Title/Abstract] OR transmission[Title/Abstract] OR mechanist*[Title/Abstract] OR quantitative[Title/Abstract] OR metapopulation[Title/Abstract]))	875
Web of Science	TS=(“avian influenza” OR “bird flu”) AND TS=(model* OR simulat* OR quantitative) AND TS=(dynamic* OR determinist* OR stochas* OR compartmen* OR transmission OR mechanist* OR quantitative OR metapopulation) Refined by: DOCUMENT TYPES: (ARTICLE)	937
CAB Abstracts	(title:(“avian influenza” OR “bird flu”) OR ab:(“avian influenza” OR “bird flu”) OR subject:(“avian influenza” OR “bird flu”)) AND (title:(model* OR simulat*) OR ab:(model* OR simulat*) OR subject:(model* OR simulat*)) AND (title:(dynamic* OR determinist* OR stochas* OR compartmen* OR transmi* OR mechanistic* OR quantit* OR metapop*) OR ab:(dynamic* OR determinist* OR stochas* OR compartmen* OR transmi* OR mechanistic* OR quantit* OR metapop*) OR subject:(dynamic* OR determinist* OR stochas* OR compartmen* OR transmi* OR mechanistic* OR quantit* OR metapop*))	857

* Number of hits before deduplication.