



Appendix 1 Search strategies

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Cochrane Library via Wiley 8 August 2024 (CENTRAL)

Title: Chronic Obstructive Pulmonary Disease – Occupational exposure

Search terms		Items found
Outcome: Chronic Obstructive Pulmonary Disease		
1.	MeSH descriptor: [Pulmonary Disease, Chronic Obstructive] explode all trees	8311
2.	MeSH descriptor: [Lung Diseases, Obstructive] this term only	3476
3.	(COPD OR COAD):ti,ab,kw	20002
4.	(((chronic*) NEAR/3 (lung* OR pulmonar* OR airway* OR airflow*) NEAR/3 (disease* OR limitat* OR obstruct*)):ti,ab,kw	22198
5.	MeSH descriptor: [Airway Obstruction] this term only	729
6.	(((lung* OR respirator* OR pulmonar*) NEXT/1 (function*)) NEAR/3 (decline OR deficit*)):ti,ab,kw OR (((respiratory OR airway OR airflow) NEAR/1 (obstruct*)):ti,ab,kw	5194
7.	5 OR 6	5194
8.	MeSH descriptor: [Respiratory Function Tests] explode all trees	30232
9.	(((lung* OR pulmonar* OR respirator*) NEXT/1 (function*)) NEAR/1 (measur* OR test*)):ti,ab,kw OR (FEV* OR FVC OR "forced expiratory volume" OR "forced vital capacity" OR spiometr*):ti,ab,kw	59814
10.	8 OR 9	76426
11.	7 AND 10	2769
12.	1 OR 2 OR 3 OR 4 OR 11	29672
Exposure: Occupational exposure		
13.	MeSH descriptor: [Occupational Diseases] explode all trees	2508
14.	MeSH descriptor: [Agriculture] explode all trees	667
15.	MeSH descriptor: [Air Pollutants, Occupational] explode all trees	113
16.	MeSH descriptor: [Employment] explode all trees	2852
17.	MeSH descriptor: [Occupational Exposure] explode all trees	820
18.	MeSH descriptor: [Occupational Groups] explode all trees	18488
19.	MeSH descriptor: [Occupational Health] explode all trees	942
20.	MeSH descriptor: [Work] this term only	280
21.	MeSH descriptor: [Workforce] explode all trees	554
22.	MeSH descriptor: [Workload] explode all trees	568
23.	MeSH descriptor: [Women, Working] this term only	63
24.	MeSH descriptor: [Transportation] explode all trees	1052
25.	MeSH descriptor: [Manufactured Materials] explode all trees	35183
26.	(employee OR employees OR employment OR worker* OR workplace* OR worktask* OR worksite* OR workload):ti,ab,kw OR (((work) NEXT/1 (related OR place OR load)):ti,ab,kw OR (((work*) NEAR/1 (environment* OR condition*)):ti,ab,kw	58055
27.	(((work* OR job OR jobs OR occupation*) NEAR/3 (COPD OR COAD OR "chronic obstructive" OR context* OR exposure* OR exposed OR factor* OR place* OR pollut* OR related OR site* OR task)):ti,ab,kw (Word variations have been searched)	9267
28.	13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27	113617
Final result		
29.	12 AND 28	1310 CDSR/16 Cochrane Protocols/0 CENTRAL/ 1294

The final search result, usually found at the end of the documentation, forms the list of abstracts.

:au = Author; **MeSH** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **this term only** = Does not include terms found below this term in the MeSH hierarchy; **:ti** = Title; **:ab** = Abstract; **:kw** = Keyword; * = Truncation; " " = Citation Marks; searches for an exact phrase; **CDSR** = Cochrane Database of Systematic Review; **Cochrane Protocols** = Protocols of systematic reviews registered in Cochrane Library; **CENTRAL** = Cochrane Central Register of Controlled Trials, "trials"; ? = replaces one letter; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified

Embase via Elsevier 7 August 2024

Title: Chronic Obstructive Pulmonary Disease – Occupational exposure

Search terms	Items found
Outcome: Chronic Obstructive Pulmonary Disease	
1. 'chronic obstructive lung disease'/exp	189,758
2. 'obstructive lung disease'/de	1,197
3. asthma-chronic obstructive pulmonary disease overlap syndrome'/exp OR 'asthma chronic obstructive pulmonary disease overlap'/exp OR 'asthma chronic obstructive lung disease overlap'/exp OR 'asthma chronic obstructive lung disease overlap syndrome'/exp	430
4. copd:ti,ab,kw OR coad:ti,ab,kw OR ((chronic* NEAR/3 (lung* OR pulmonar* OR airway* OR airflow*) NEAR/3 (disease* OR limitat* OR obstruct*)):ti,ab,kw)	186,613
5. 'airway obstruction'/de	42,133
6. (((('lung function*' OR 'respiratory function*') NEAR/3 (decline OR deficit*)):ti,ab,kw) OR (((respiratory OR airway OR airflow) NEAR/1 obstruct*)):ti,ab,kw)	48,679
7. 5 OR 6	71,076
8. 'lung function test'/exp	253,421
9. (((('lung function*' OR 'pulmonary function*' OR respirator*) NEAR/1 (measur* OR test*)):ti,ab,kw	44,762
10. fev*:ti,ab,kw OR fvc:ti,ab,kw OR 'forced expiratory volume':ti,ab,kw OR 'forced vital capacity':ti,ab,kw OR spiometr*:ti,ab,kw	444,849
11. 8 OR 9 OR 10	646,247
12. 7 and 11	20,788
13. 1 OR 2 OR 3 OR 4 OR 12	248,245
Exposure: Occupational exposure	
14. 'occupation and occupation related phenomena'/de OR 'occupation'/de OR 'occupational health'/de OR 'occupational exposure'/exp OR 'occupational hazard'/exp OR 'work'/de OR 'workforce'/de OR 'employment'/de OR 'industry'/exp OR 'industry and industrial phenomena'/de OR 'industrial hygiene'/exp OR 'occupational disease'/de OR 'work environment'/exp OR 'occupational lung disease'/exp OR 'occupational safety'/exp OR 'workroom air'/exp OR 'employment of women'/exp OR 'workplace'/exp	870,360
15. employee:ti,ab,kw OR employees:ti,ab,kw OR employment:ti,ab,kw OR worker*:ti,ab,kw OR workplace*:ti,ab,kw OR 'work place':ti,ab,kw OR 'work related':ti,ab,kw OR worktask*:ti,ab,kw OR worksite*:ti,ab,kw OR workload:ti,ab,kw OR 'work load*':ti,ab,kw OR ((work* NEAR/1 (environment* OR condition*)):ti,ab,kw)	577,145
16. ((work* OR job OR jobs OR occupation*) NEAR/3 (copd OR coad OR 'chronic obstructive' OR context* OR exposure* OR factor* OR place* OR pollut* OR related OR site* OR task)):ti,ab,kw	173,847
17. 14 OR 15 OR 16	1,286,281
Combined sets	
18. 13 AND 17	10,213
Final result	
19. 18 AND ([article]/lim OR [article in press]/lim OR [erratum]/lim OR [letter]/lim OR [note]/lim OR [review]/lim) AND ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim) AND [2000-2024]/py	5,125

The final search result, usually found at the end of the documentation, forms the list of abstracts.

/de = Term from the Emtree controlled vocabulary; **/exp** = Includes terms found below this term in the Emtree hierarchy; **/mj** = Major Topic; **:ab** = Abstract; **:au** = Author; **:kw** = Author keyword; **:ti** = Article Title; **:ti,ab** = Title OR abstract; ***** = Truncation; **' '** = Citation Marks; searches for an exact phrase; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified; **\$** = replaces one OR no letters; **?** = replaces one letter

Medline via OvidSP 5 August 2024

Title: Chronic Obstructive Pulmonary Disease – Occupational exposure

Search terms	Items found
Outcome: Chronic Obstructive Pulmonary Disease	
1. exp pulmonary disease, chronic obstructive/	70043
2. lung diseases, obstructive/	18299
3. (COPD OR COAD OR (chronic* adj3 (lung* OR pulmonar* OR airway* OR airflow*) adj3 (disease* OR limitat* OR obstruct*))).ab,kf,ti.	108732
4. 1 OR 2 OR 3	137752
5. Airway Obstruction/	20391
6. (((("lung function*" OR "respiratory function*" OR "pulmonary function") adj3 (decline OR deficit*)) OR ((respiratory OR airway OR airflow) adj obstruct*))).ab,kf,ti.	29670
7. 5 OR 6	42329
8. exp Respiratory Function Tests/	253622
9. (((("lung function*" OR respirator*) adj (measur* OR test*)) OR FEV* OR FVC OR "forced expiratory volume" OR "forced vital capacity" OR spiometr*).ab,kf,ti.	298732
10. 8 OR 9	506862
11. 7 AND 10	13223
12. 4 OR 11	146068
Exposure: Working environment	
13. exp Agriculture/	131847
14. Air Pollutants, Occupational/	15976
15. Employment/	51709
16. exp Industry/	362401
17. exp Occupational Diseases/	145761
18. Occupational Exposure/	61872
19. exp Occupational Groups/	750998
20. Occupational Health/	37164
21. Occupations/	25090
22. exp Transportation/	80038
23. Work/	20255
24. exp Workforce/	82033
25. Workload/	24529
26. exp Workplace/	31070
27. Women, Working/	5631
28. (employee* OR employment OR worker* OR "work-related" OR workplace* OR "work place" OR worktask* OR worksite* OR workload OR "work-load*" OR (work* adj (environment* OR condition*))).ab,kf,ti.	455700
29. ((work* OR job OR jobs OR occupation*) adj3 (COPD OR COAD OR "chronic obstructive" OR context* OR exposure* OR exposed OR factor* OR place* OR pollut* OR related OR site* OR task)).ab,kf,ti.	151121
30. 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29	2996756
Combined sets	
31. 12 AND 30	9195
Final result	
32. 31 Limit to (yr="2000 -Current" and (danish OR english OR norwegian OR swedish))	5832

The final search result, usually found at the end of the documentation, forms the list of abstracts.

.ab. = Abstract; **.ab,ti.** = Abstract OR title; **.af.** = All fields; **.bt.** = Book title; **exp** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **.fs.** = Floating sub-heading, does not include

terms found below this term in the MeSH hierarchy; **.kf.** = Author keyword; **.sh.** = Term from the Medline controlled vocabulary; **.ti.** = Title; **.xs.** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **/** = Term from the Medline controlled vocabulary, but does not include terms found below this term in the MeSH hierarchy; ***** = Focus (if found in front of a MeSH-term); *** OR \$** = Truncation (if found at the end of a free text term); **.mp.** = Text, heading word, subject area node, title; **" "** = Citation Marks; searches for an exact phrase; **adjn** = Positional operator that lets you retrieve records that contain your terms (in any order) within a specified number (n) of words of each other; **?** = replaces one OR no letters; **#** = replaces one letter

Embase via Elsevier 28 September 2022

Title: Occupational diseases –Asthma/Chronic Obstructive Pulmonary Disease, COPD (Systematic reviews)

Search terms	Items found
Population: Asthma, COPD	
1. 'asthma'/exp OR 'obstructive airway disease'/de OR 'chronic obstructive lung disease'/exp	438,665
2. copd:ab,ti OR coad:ab,ti	104,241
3. (chronic* NEAR/3 (lung* OR pulmonar* OR airway* OR airflow*) NEAR/3 obstruct*):ab,ti	92,525
4. asthma*.ab,ti.	259,758
5. #1 OR #2 OR #3 OR #4	494,905
Setting: Work place	
6. ('employment'/exp/mj OR 'work'/exp/mj OR 'occupation'/exp/mj OR 'occupational health'/exp/mj OR 'occupational exposure'/exp/mj OR 'work environment'/exp/mj)	328,266
Study types: systematic reviews and meta-analyses	
7. 'systematic review'/de OR 'meta analysis'/de OR [cochrane review]/lim OR ((systematic NEAR/4 review):ti,ab) OR 'meta analys*':ti,ab OR metaanalys*':ti,ab	612,439
Final result	
8. #5 AND #6 AND #7 AND ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim)	104

The final search result, usually found at the end of the documentation, forms the list of abstracts. **/de** = Term from the Emtree controlled vocabulary; **/exp** = Includes terms found below this term in the Emtree hierarchy;

/mj = Major Topic; **:ab** = Abstract; **:au** = Author; **:kw** = Author keyword ; **:ti** = Article Title; **:ti,ab** = Title OR abstract; ***** = Truncation; **' '** = Citation Marks; searches for an exact phrase; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified; **\$** = replaces one OR no letters; **?** = replaces one letter

Epistemonikos via Epistemonikos 29 September 2022

Title: Occupational diseases –Asthma/Chronic Obstructive Pulmonary Disease, COPD (Systematic reviews)

Search terms	Items found
Population: Asthma, COPD	
9. title:(COPD OR COAD OR "chronic obstructive lung" OR "chronic obstructive pulmonary" OR "chronic obstructive airway" OR "chronic obstructive airflow" OR asthma*)	4,645
Setting: Work place	
10. title:(employ* OR job* OR occupation* OR "work-related" OR "work-load*" OR workload* OR workplace* OR "work place*" OR "work environment*" OR "working environment" OR "working condition*")	3,090
Study types: systematic reviews and meta analysis¹	
11. Publication Type: Systematic Review	
Final result	
12. 1 AND 2 AND 3	42

The final search result, usually found at the end of the documentation, forms the list of abstracts.

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **[MeSH:NoExp]** = Does not include terms found below this term in the MeSH hierarchy; **[MAJR]** = MeSH Major Topic; **[SH]** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **[SH:NoExp]** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **[TIAB]** = Title OR abstract; **[TI]** = Title; **[AU]** = Author; **[OT]** = Other term; **[TW]** = Text word; **Systematic[SB]** = Filter for retrieving systematic reviews; " " = Citation Marks; searches for an exact phrase; * = Truncation

KSR Evidence via KSR 29 September 2022

Title: Occupational diseases –Asthma/Chronic Obstructive Pulmonary Disease, COPD (Systematic reviews)

Search terms	Items found
Population: Asthma, COPD	
13. (COPD OR COAD OR (chronic* ADJ3 (lung* OR pulmonar* OR airway* OR airflow*) adj3 obstruct*)) in Title OR Abstract	2080
Setting: Work place	
14. (employ* OR job* OR occupation* OR "work-related" OR "work-load*" OR workload* OR workplace* OR "work place*" OR (work* ADJ1 environment*) OR "working condition*") in Title	1509
Final result	
15. #1 AND #2	15

ADJ= Adjacency: adj OR near to find two OR more terms within a specified number of words of each other (in any order).

¹ Systematic Reviews Subset on PubMed 2017 to 2018. Available from: <https://sites.google.com/a/york.ac.uk/issg-search-filters-resource/home/sr-filter>. With modifications: The MeSH-term "Systematic Review" [Publication Type] added ; The publication type validation studies changed to correct terminology validation study.

Medline via OvidSP 28 September 2022

Title: Occupational diseases –Asthma/Chronic Obstructive Pulmonary Disease, COPD (Systematic reviews)

Search terms	Items found
Population: Asthma, COPD	
16. lung diseases, obstructive/ OR exp asthma/ OR exp pulmonary disease, chronic obstructive/	212573
17. (COPD OR COAD OR (chronic* adj3 (lung* OR pulmonar* OR airway* OR airflow*) adj3 obstruct*)).ab,bt,kf,ti.	81970
18. "asthma*".ab,bt,kf,ti.	176021
19. 1-3 (OR)	290293
Setting: Work place	
20. Work/	20243
21. Workload/	23536
22. Workplace/	28223
23. Occupational Health/	36157
24. exp Occupational Diseases/	140818
25. Occupational Exposure/	59663
26. Accidents, Occupational/	17793
27. 5-11(OR)	274556
28. (employ* OR job* OR occupation* OR work-related OR work-load* OR workload* OR workplace* OR work place* OR work environment* OR working condition*).ti,bt.	144934
29. 12 OR 13	352878
Study types: systematic reviews and meta-analyses	
30. Systematic Review.pt. OR Meta-Analysis.pt. OR Cochrane Database Syst Rev.ja. OR ((systematic adj4 review) OR "meta analys*" OR metaanalys*).ti,ab,bt.	410069
Final result	
31. 4 AND 14 AND 15 limit 15 to (danish OR english OR norwegian OR swedish)	107

The final search result, usually found at the end of the documentation, forms the list of abstracts.

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PubMed via NLM 29 September 2022

Title: Occupational diseases –Asthma/Chronic Obstructive Pulmonary Disease, COPD (Systematic reviews)

Search terms	Items found
Population: Asthma, COPD	
32. "Lung Diseases, Obstructive"[Mesh] OR "Asthma, Occupational"[Mesh]	231,591
33. asthma*[Title] OR "chronic obstructive pulmona*" [Title] OR "chronic obstructive lung*" [Title] OR "chronic obstructive air*" [Title]	126,983
34. 1 OR 2	244,721
Setting: Work place	
35. "Work"[Mesh] OR "Workplace"[Mesh] OR "Workload"[Mesh] OR "Occupational Exposure"[Mesh] OR "Occupational Diseases"[Mesh] OR "Air Pollutants, Occupational"[Mesh] OR "Occupational Health"[Mesh] OR "Air Pollutants, Occupational" [Pharmacological Action]	305,006
36. (employ*[Title] OR job[Title] OR occupation*[Title] OR work-related[Title] OR work-load*[Title] OR workload*[Title] OR workplace*[Title] OR work place*[Title] OR work environment*[Title] OR working condition*[Title])	142,315
37. 4 OR 5	380,626
Journals: Occupational health	
38. Search: "Ann Work Expo Health"[Journal] OR "IIESE Trans Occup Ergon Hum Factors"[Journal] OR "Int J Occup Environ Med"[Journal] OR "J Environ Public Health"[Journal] OR "Dermatitis"[Journal] OR "J Occup Environ Hyg"[Journal] OR "Environ Health"[Journal] OR "Arch Prev Riesgos Labor"[Journal] OR "G Ital Med Lav Ergon"[Journal] OR "J Occup Health Psychol"[Journal] OR "J Occup Health"[Journal] OR "Int J Occup Saf Ergon"[Journal] OR "J Agric Saf Health"[Journal] OR "J Occup Environ Med"[Journal] OR "Sangyo Eiseigaku Zasshi"[Journal] OR "Ann Agric Environ Med"[Journal] OR "Int J Occup Med Environ Health"[Journal] OR "J Agromedicine"[Journal] OR "Occup Environ Med"[Journal] OR "Occup Med (Lond)"[Journal] OR "Int J Environ Health Res"[Journal] OR "J Occup Rehabil"[Journal] OR "New Solut"[Journal] OR "Work"[Journal] OR "Med Probl Perform Art"[Journal] OR "Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi"[Journal] OR "J UOEH"[Journal] OR "Wei Sheng Yan Jiu"[Journal] OR "Rocz Panstw Zakl Hig"[Journal] OR "Med Pr"[Journal]	60,892
Journals: Asthma/COPD	
39. Search: "NPJ Prim Care Respir Med"[Journal] OR "Lancet Respir Med"[Journal] OR "Pulm Med"[Journal] OR "J Bronchology Interv Pulmonol"[Journal] OR "J Aerosol Med Pulm Drug Deliv"[Journal] OR "J Cardiopulm Rehabil Prev"[Journal] OR "Int J Chron Obstruct Pulmon Dis"[Journal] OR "COPD"[Journal] OR "BMC Pulm Med"[Journal] OR "Curr Allergy Asthma Rep"[Journal] OR "Heart Lung Circ"[Journal] OR "Iran J Allergy Asthma Immunol"[Journal] OR "Int J Tuberc Lung Dis"[Journal] OR "Pulm Pharmacol Ther"[Journal] OR "Allergy Asthma Proc"[Journal] OR "Ann Allergy Asthma Immunol"[Journal] OR "Curr Opin Pulm Med"[Journal] OR "Monaldi Arch Chest Dis"[Journal] OR "Pneumologie"[Journal] OR "J Asthma"[Journal] OR "Exp Lung Res"[Journal] OR "Lung"[Journal] OR "Heart Lung"[Journal] OR "Tuberk Toraks"[Journal]	62,517
Study types: systematic reviews and meta analysis²	
40. systematic[sb] OR Meta-Analysis [Publication Type] OR metaanaly*[tw] OR meta analy*[tw]	397,141
Limits: language	
41. Filters applied: Danish, English, Norwegian, Swedish.	
Combined sets	
42. 3 AND 7	1,334
43. 6 AND 8	1,356

² Search Strategy Used to Create the PubMed Systematic Reviews Filter. Available from: https://www.nlm.nih.gov/bsd/pubmed_subsets/sysreviews_strategy.html. With modifications: the following terms are added: Meta-Analysis [Publication Type] ; metaanaly*[tw] ; meta analy*[tw]

Final result

44.	9 AND 10 AND 11	27
45.	9 AND 10 AND 12	11

The final search result, usually found at the end of the documentation, forms the list of abstracts.

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy;
[MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy; **[MAJR]** = MeSH Major Topic; **[SH]** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **[SH:NoExp]** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **[TIAB]** = Title OR abstract; **[TI]** = Title; **[AU]** = Author; **[OT]** = Other term; **[TW]** = Text word; **Systematic[SB]** = Filter for retrieving systematic reviews; " " = Citation Marks; searches for an exact phrase; * = Truncation