

Appendix 1. Review of recent studies on COPD prevalence by WHO region

AFRO D																					
Region	Year	Country	Definition	Source	sex	unit	Total	A252 9	A303 4	A353 9	A404 4	A454 9	A505 4	A555 9	A606 4	A656 9	A707 4	A757 9	A808 4	A850 0	Notes
AFRO D	1976	Zimbabwe	Symptom-based (MRC Questionnaire, 4494 subjects aged 20 and over)	Cookson and Mataka, 1978	M	%	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
AFRO D	1976	Zimbabwe	Symptom-based (MRC Questionnaire, 4494 subjects aged 20 and over)	Cookson and Mataka, 1978	F	%	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
AFRO D	1991	Nigeria	Symptom-based (MRC Questionnaire, random sample of 804 male soldiers aged 15-60)	Harris-Eze, 1993	M	%	2.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	% smokers was 34%
Limited population groups (mostly occupational exposures)																					
AFRO D	198?	Morocco	Questionnaire for 1829 industrial workers (aged 20-60)	El Meziane 1984 (in Chaulet 1989)	both	%	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
AFRO D	198?	South Africa	Questionnaire among 582 exposed and 153 non-exposed workers.	Yach et al., 1985	both	%	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	exposed group
AFRO D	198?	South Africa	Questionnaire among 582 exposed and 153 non-exposed workers.	Yach et al., 1985	both	%	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	unexposed group
Summary crude prevalence by definition: Spirometry = NA, Physician-diagnosis = NA, Symptom-based = 1-3%																					

AMRO A																						
Region	Year	Country	Definition	Source	sex	Unit	Total	A202 4	A252 9	A303 4	A353 9	A404 4	A454 9	A505 4	A555 9	A606 4	A656 9	A707 4	A757 9	A808 4	A850 0	Notes
AMRO A	1994-95	Canada	Symptom-based (questionnaire of 7210 subjects aged 35-64)	Chen et al., 2000	M	%					1.8	1.8	1.5	1.5	5	5						
AMRO A	1994-95	Canada	Symptom-based (questionnaire of 7210 subjects aged 35-64)	Chen et al., 2000	F	%					3.5	3.5	3.6	3.6	4.5	4.5						
AMRO A	1994-95	Canada	Physician-diagnosis (national survey)	Lacasse et al., 1999	M	%	6.3								5	5	6.6	6.6	9.1	9.1	9.1	
AMRO A	1994-95	Canada	Physician-diagnosis (national survey)	Lacasse et al., 1999	F	%	5.2								4.5	4.5	4.4	4.4	7.8	7.8	7.8	

AMRO A	1985-87	USA	Physician-diagnosis (HMO data) of those aged 65 and over	Osborne et al., 1998	M	%	9.9															Only older age groups (over 65)
AMRO A	1985-87	USA	Physician-diagnosis (HMO data) of those aged 65 and over	Osborne et al., 1998	F	%	4.2															Only older age groups (over 65)
AMRO A	1988-94	USA	Physician-diagnosis excl. asthma (20050 subjects in NHANES III)	Mannino for US BOD; Mannino et al., 2000; Petty 2000	M	per 1000	28.5	3.1	13.4	13.4	24.0	24.0	39.7	39.7	75.1	75.1	106.8	106.8	87.6	87.6	87.6	
AMRO A	1988-94	USA	Physician-diagnosis excl. asthma (20050 subjects in NHANES III)	Mannino for US BOD; Mannino et al., 2000; Petty 2000	F	per 1000	33.9	8.7	22.2	22.2	24.0	32.3	44.6	44.6	63.9	63.9	77.2	77.2	82.5	82.5	82.5	
AMRO A	1988-94	USA	Spirometry (20050 subjects in NHANES III)	Mannino for US BOD; Mannino et al., 2000	M	per 1000	23.7	0.4	10.2	10.2	10.2	10.2	42.7	42.7	42.7	42.7	92.7	92.7	109.8	109.8	109.8	
AMRO A	1988-94	USA	Spirometry (20050 subjects in NHANES III)	Mannino for US BOD; Mannino et al., 2000	F	per 1000	22.3	0.4	9.4	9.4	9.4	9.4	42.0	42.0	42.0	42.0	67.3	67.3	68.3	68.3	68.3	
Summary crude prevalence by definition: Spirometry = 2-5%, Physician-diagnosis = 1-3%, Symptom-based = 5-15%																						

AMRO B																						
Region	Year	Country	Definition	Source	sex	Unit	Total	A2024	A2529	A3034	A3539	A4044	A4549	A5054	A5559	A6064	A6569	A7074	A7579	A8084	A8500	Notes
Only indoor air pollution studies in rural areas																						
AMRO B	199?	rural Bolivia	Symptom-based (MRC Questionnaire. Population-based cross-sectional study of 102 indoor and 139 outdoor cooking women.)	Albalak et al., 1999	F	%		10	10	10	10	33	33	33	33	33	33	33				High chronic bronchitis prevalence among indoor cooking women, 10% in age 20-40 and 33% in age over 40
AMRO B	1990	Petros, Brazil	Symptom-based (ATS Questionnaire. Population-based cross-sectional study of 1053 individuals aged 40-75)	Menezes et al., 1994	both	%	12.7															Lack of significance of some COPD risk factors may be due to high degree of multicollinearity.
Summary crude prevalence by definition: Spirometry = NA, Physician-diagnosis = NA, Symptom-based = 5-13% among high risk groups only																						

EURO A																						
Region	Year	Country	Definition	Source	sex	Unit	Total	A2024	A2529	A3034	A3539	A4044	A4549	A5054	A5559	A6064	A6569	A7074	A7579	A8084	A8500	Notes
EURO A	1988-91	Italy	Symptom-based (ERS Questionnaire, 2841 subjects aged 8-73)	Viegi et al., 2000	M	%	10.8		10.8	10.8	10.8	10.8	14.5	14.5	14.5	14.5	14.5	14.5				Comparison of 3 different measures of COPD
EURO A	1988-91	Italy	Spirometry (2841 subjects aged 8-73)	Viegi et al., 2000	M	%	13.3		13.3	13.3	13.3	13.3	33.1	33.1	33.1	33.1	33.1	33.1				ERS has higher specificity and predictive value positive than ATS criterion.
EURO A	1988-91	Italy	Symptom-based (ATS Questionnaire, 2841 subjects aged 8-73)	Viegi et al., 2000	M	%	32		32	32	32	32	60.7	60.7	60.7	60.7	60.7	60.7				
EURO A	1988-91	Italy	Symptom-based (ERS Questionnaire, 2841 subjects aged 8-73)	Viegi et al., 2000	F	%	11.7		11.7	11.7	11.7	11.7	12	12	12	12	12	12				
EURO A	1988-91	Italy	Spirometry (2841 subjects aged 8-73)	Viegi et al., 2000	F	%	6.5		6.5	6.5	6.5	6.5	22.2	22.2	22.2	22.2	22.2	22.2				
EURO A	1988-91	Italy	Symptom-based (ATS Questionnaire, 2841 subjects aged 8-73)	Viegi et al., 2000	F	%	22.2		22.2	22.2	22.2	22.2	53.4	53.4	53.4	53.4	53.4	53.4				
EURO A	1993	Iceland	Symptom-based (MRC Questionnaire, 1175 individuals aged 50 years and	Magnusson and Gislason, 1999	both	%								7.1	7.1	7.1	7.1	7.1	7.1	16.7	16.7	Chronic bronchitis only and thus underestimated.

			over)																							
EURO A	1988	South-West France	Symptom-based (Questionnaire, 3777 subjects over 65 years)	Nejjari et al., 1996	M	%	20	65 years and over only										8	17	19	29	21	Chronic bronchitis only. Only aged 65 years and over.			
EURO A	1988	South-West France	Symptom-based (Questionnaire, 3777 subjects over 65 years)	Nejjari et al., 1996	F	%	8	65 years and over only										6	8	10	10	7	Chronic bronchitis only. Only aged 65 years and over.			
EURO A	1997	UK	Physician-diagnosis	Soriano et al., 2000	M	%	1.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Only registered COPD patients and thus underestimated.				
EURO A	1997	UK	Physician-diagnosis	Soriano et al., 2000	F	%	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Only registered COPD patients and thus underestimated.				
EURO A	1995	Sweden	Symptom-based (Questionnaire of 7104 individuals aged 20-69)	Lindstrom et al., 2001	both	%	11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
EURO A	1995	Sweden	Physician-diagnosis (Questionnaire of 7104 individuals aged 20-69)	Lindstrom et al., 2001	both	%	3.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
EURO A	1995	Finland	Symptom-based (Questionnaire of 6633 individuals aged 20-69)	Lindstrom et al., 2001	both	%	7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
EURO A	1995	Finland	Physician-diagnosis (Questionnaire of 6633 individuals aged 20-69)	Lindstrom et al., 2001	both	%	3.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
EURO A	198?	UK	Symptom-based (Questionnaire, 1803 subjects aged 65 and over)	Horsely et al., 1991	both	%			NA	NA	NA	NA	NA	NA	NA	NA	16.4	16.4	16.4	16.4	16.4	Only for older age groups (65 and over)				
EURO A	198?	UK	Spirometry (selected 296 patients)	Dow et al., 1992	both	%	15.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Selected patients and not representative sample				
EURO A	1992	Sweden	Symptom-based (MRC Questionnaire of 12071 subjects aged 20-59 years)	Montnemery et al., 1996	both	%	4.6			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Only younger age groups (20-59)				
EURO A	1990-91	Finland	Spirometry (Questionnaire and spirometry for confirmation, 488 males and 708 females aged over 65)	Isoaho et al., 1994	M	%	12.5	65 years and over										NA	NA	NA	NA	NA	NA	NA	NA	Older age groups only

			(Questionnaire, 6610 adults aged 35-66)	al., 1993																	
EURO A	198?	Sweden	Symptoms and spirometry (Questionnaire, 6610 adults aged 35-66 were interviewed and 1243 took spirometry.)	Lundback et al., 1993	M	%	7.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	FEV1 < 80% predicted was used to define airway obstruction. No data on FEV1/FVC and thus includes asthma.
EURO A	198?	Sweden	Symptoms and spirometry (Questionnaire, 6610 adults aged 35-66 were interviewed and 1243 took spirometry.)	Lundback et al., 1993	F	%	4.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	FEV1 < 80% predicted was used to define airway obstruction. No data on FEV1/FVC and thus includes asthma.
EURO A	198?	Northern Italy	Symptom-based (Questionnaire, 2382 subjects aged 20-64)	Viegi et al., 1994	M	%	23		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Includes asthma and thus overestimated prevalence
EURO A	198?	Northern Italy	Symptom-based (Questionnaire, 2382 subjects aged 20-64)	Viegi et al., 1994	F	%	8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Includes asthma and thus overestimated prevalence
EURO A	198?	Northern Italy	Spirometry (Questionnaire, 2382 subjects aged 20-64)	Viegi et al., 1994	M	%	38		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Definition is different, includes asthma, and thus overestimated prevalence
EURO A	198?	Northern Italy	Spirometry (Questionnaire, 2382 subjects aged 20-64)	Viegi et al., 1994	F	%	20		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Definition is different, includes asthma, and thus overestimated prevalence
EURO A	1990-92	Northern Italy	Symptom-based (1497 subjects aged 40-59 who participated in interview and spirometry at a university hospital)	Donato et al., 2000	M	%	16.1					10.6	10.6	20.2	20.5	NA	NA	NA	NA	NA	Primarily symptom-based and no information on FEV1/FVC with spirometry.
EURO A	1990-92	Northern Italy	Symptom-based (1497 subjects aged 40-59 who participated in interview and spirometry at a university hospital)	Donato et al., 2000	F	%	4.4					4.5	5.3	2.6	4.7	NA	NA	NA	NA	NA	Primarily symptom-based and no information on FEV1/FVC with spirometry.
EURO A	overview	Europe	Overview of past prevalence studies in Europe during 1960s-1990s	Gulsvik, 1999	both	%	4-6														two-thirds had mild lung function decline only
EURO A	1975	Netherlands	Symptom-based (MRC questionnaire followed by	Van der Lende et al., 1986	both	%	NA	8.5	8.5	8.5	8.5	14.9	14.9	14.9	14.9	14.9	NA	NA	NA	NA	Definition of airway obstruction with

			spirometry for those aged 15-64)																			spirometry is somewhat different and may include asthma as well. Overestimated.
EURO A	1996-97	Spain	Symptom-based (Multicenter questionnaire survey of 4035 individuals aged 40-69 followed by spirometry)	Sobradillo et al., 1999	M	%	8.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Chronic bronchitis only
EURO A	1996-97	Spain	Symptom-based (Multicenter questionnaire survey of 4035 individuals aged 40-69 followed by spirometry)	Sobradillo et al., 1999	F	%	1.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Chronic bronchitis only
EURO A	1996-97	Spain	Symptom-based (Multicenter questionnaire survey of 4035 individuals aged 40-69 followed by spirometry)	Sobradillo et al., 1999	both	%	4.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Chronic bronchitis only
EURO A	1996-97	Spain	Spirometry	Sobradillo et al., 1999	M	%	15.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Airway obstruction defined as FEV1/FVC<88% and thus highly overestimated
EURO A	1996-97	Spain	Spirometry	Sobradillo et al., 1999	F	%	5.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Airway obstruction defined as FEV1/FVC<88% and thus highly overestimated
EURO A	1996-97	Spain	Spirometry	Sobradillo et al., 1999	both	%	10.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Airway obstruction defined as FEV1/FVC<88% and thus highly overestimated
EURO A	198?	UK	Symptom-based (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	M	%	16.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Only 1444 responded. 256 underwent spirometry. MRC definition of chronic bronchitis only.
EURO A	198?	UK	Symptom-based (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	F	%	7.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Only 1444 responded. 256 underwent spirometry. MRC definition of chronic bronchitis only.
EURO A	198?	UK	Symptom-based (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	M	%	5.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MRC definition of chronic bronchitis + disability (difficulty walking on the level

																					due to SOB--pretty severe disability). 30-40% were severe.	
EURO A	198?	UK	Symptom-based (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	F	%	2.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MRC definition of chronic bronchitis + disability (difficulty walking on the level due to SOB--pretty severe disability). 30-40% were severe.
EURO A	198?	UK	Physician-diagnosis (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	M	%	3.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Physician- diagnosis
EURO A	198?	UK	Physician-diagnosis (MRC Questionnaire survey 2387 patients aged 40-70 and registered to GPs)	Littlejohns et al., 1989	F	%	2.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Physician- diagnosis
EURO A	1996	Finland	Symptom-based (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	M	%		2.5	2.5	2.5	2.5	2.5	8	8	8	8	8					
EURO A	1996	Finland	Symptom-based (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	F	%		3	3	3	3	3	6.9	6.9	6.9	6.9	6.9					
EURO A	1996	Finland	Symptom-based (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	both	%																
EURO A	1996	Finland	Physician-diagnosis (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	M	%		2.2	2.2	2.2	2.2	2.2	6.7	6.7	6.7	6.7	6.7					
EURO A	1996	Finland	Physician-diagnosis (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	F	%		2	2	2	2	2	5.5	5.5	5.5	5.5	5.5					
EURO A	1996	Finland	Physician-diagnosis (FinEsS Questionnaire, random sample of 6062 individuals aged 20-69)	Pallasaho et al., 1999	both	%		3.7														
EURO A	1992-94	UK	Symptom-based (Questionnaire of 723 individuals registered to GPs aged over 45)	Renwick and Connolly, 1996	both	%	NA							22.9	22.9	22.9	22.9	29.7	29.7	29.7	29.7	247 underwent spirometry, but overestimated since non-representative

																					persons were followed.	
EURO B1	1968-81	Poland	Spirometry FEV1<65% predicted (thus included asthma as well), cohort study of 731 males and 1038 females surveyed in 1968	Krzyzanowski et al. 1986	F (Non-smokers)	%	4.8			0.7	0.7	3.8	3.8	3.8	4.5	4.5	5.9	5.9	17.6	17.6	17.6	Highly overestimated COPD prevalence since the figure includes asthma. Only 1864 out of 3047 persons were followed.
EURO B1	199?	Poland	Spirometry of self-selected smokers over 39 years (mean 52 years) (subject to selection bias)	Zielinski et al. 2000	Both (smokers)					8.99	8.99	26.56	26.56	26.56	26.56	26.56	26.56	26.56	26.56	26.56	26.56	FEV1/FVE<85% (too high compared to conventional definition of 70% and thus prevalence figures are highly overestimated)
EURO B1	199?	Poland	8386 smokers and 1768 non-smokers, 60% were males	Zielinski et al. 2000	Both (non-smokers)					6.16	6.16	16.23	16.23	16.23	16.23	16.23	16.23	16.23	16.23	16.23	16.23	Questionable definitions of COPD since 30-50% of subjects show remission of their symptoms (Wojtyniak et al., 1989)
EURO B1	198?	USSR	Symptom-based (Questionnaire on chronic cough, 1768 residents)	Davydova et al., 1991	Both							12.5	10.9	13.7	15.8							
EURO B1	1990?	Poland	Symptom-based (MRC Questionnaire, 917 men exposed to occupational hazard)	Niepsuj et al., 1993	Male smokers	%	27.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Occupational exposure group only
EURO B1	1990?	Poland	Symptom-based (MRC Questionnaire, 917 men exposed to occupational hazard)	Niepsuj et al., 1993	Male non-smokers	%	11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Occupational exposure group only
EURO B1	198?	Latvia	Symptom-based (Questionnaire survey of 10200 individuals aged 20-70)	Compiled by Utkin et al., 1989	both	%	11.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Chronic bronchitis only
EURO B1	198?	Lithuania	Symptom-based (Questionnaire survey of 679 males and 733 females aged 25-59)	Compiled by Utkin et al., 1989	M				4.7			11.3			20.3							Younger age groups only
EURO B1	198?	Lithuania	Symptom-based (Questionnaire survey of 679	Compiled by Utkin et al.,	F				3.8			6.1			12.3							

			males and 733 females aged 25-59)	1989																			
EURO B1	197?	Estonia	Symptom-based (Questionnaire survey of 3141 and 5831 individuals aged 35-54)	Compiled by Utkin et al., 1989	both	%	7.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Younger age groups only
EURO B1	197?	Estonia	Symptom-based (Questionnaire survey of 3141 and 5831 individuals aged 35-54)	Compiled by Utkin et al., 1989	both	%	8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
EURO B1	1996	Turkey	Symptom-based (ERC Questionnaire of 1023 subjects aged 20-83)	Cetinkaya et al., 2000	M	%	17.8		15.3	15.3	15.3	18.4	18.4	18.4	18.4	20.3	20.3	20.3	20.3	20.3		Chronic bronchitis only	
EURO B1	1996	Turkey	Symptom-based (ERC Questionnaire of 1023 subjects aged 20-83)	Cetinkaya et al., 2000	F	%	10		6.7	6.7	6.7	12.2	12.2	12.2	12.2	14.3	14.3	14.3	14.3	14.3		Chronic bronchitis only	
EURO B1	1996	Turkey	Symptom-based (ERC Questionnaire of 1023 subjects aged 20-83)	Cetinkaya et al., 2000	both	%	12.5		10.1	10.1	10.1	14.9	14.9	14.9	14.9	17.8	17.8	17.8	17.8	17.8		Chronic bronchitis only	
EURO B	1976	Poland	Symptom-based (Questionnaire of 1190 subjects living in air polluted area aged 40-64 followed by spirometry)	Plonska, 1984	both	%	43.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	symptoms only, no clear definition of chronic bronchitis nor distinction from asthma	
Summary crude prevalence by definition: Spirometry = NA, Physician-diagnosis = NA, Symptom-based = 10-20%, questionable definitions and samples																							

WPRO A																						
Region	Year	Country	Definition	Source	sex	Unit	Total	A2024	A2529	A3034	A3539	A4044	A4549	A5054	A5559	A6064	A6569	A7074	A7579	A8084	A8500	Notes
WPRO A	1984	New South Wales, Australia	Symptom-based (MRC Questionnaire and spirometry for confirmation, 12357 male mine workers aged 30-60)	Leigh et al., 1986	M	%	13.2	6.4	6.4	9.7	9.7	15.6	15.6	20.3	20.3							Includes asthma, etc. and overestimated.
WPRO A	1984	New South Wales, Australia	Spirometry (MRC Questionnaire and spirometry for confirmation, 12357 male mine workers aged 30-60)	Leigh et al., 1986	M	%	3.5	0.1	0.1	0.9	0.9	3.7	3.7	9.0	9.0							Younger age composition. Workers exposed to occupational dusts only.
WPRO A	1994-95	Busselton, Australia	Spirometry (defined as FEV1/FVC<70%)	Mathers et al. 1999	M	per 1000				7.4	12.5	12.5	21.1	21.1	51.8	51.8	81.8	81.8	98.5	98.5	98.5	

WPRO A	1994-95	Busselton, Australia	Spirometry (defined as FEV1/FVC<70%)	Mathers et al. 1999	F	per 1000					2.4	7.8	7.8	14.3	14.3	27.2	27.2	43.5	43.5	68.3	68.3	68.3	
Summary crude prevalence by definition: Spirometry = 2-5%, Physician-diagnosis = NA, Symptom-based = 10-15%																							

WPRO B																						
Region	Year	Country	Definition	Source	sex	unit	Total	A202	A252	A303	A353	A404	A454	A505	A555	A606	A656	A707	A757	A808	A850	Notes
WPRO B	1972-79	China	Symptom-based (Questionnaire, sample size varied from 1160 to 1884175)	Compiled by Yan, 1989	both (chronic bronchitis)	%	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Chronic bronchitis only
WPRO B	1972-79	China	Symptom-based (Questionnaire, sample size varied from 1160 to 1884175)	Compiled by Yan, 1989	both (emphysema)	%	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Emphysema only
WPRO B	1991-92	Hong Kong, China	Symptom-based (Questionnaire survey of 999 males and 1033 female HK residents aged 70 years and over)	Lai et al., 1995	both (chronic bronchitis)	%	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7	7	7	7	Chronic bronchitis only. Only for very older groups (70 and over). Asthma prevalence was 5%
WPRO B	1991-92	Hong Kong, China	Symptom-based (Questionnaire survey of 999 males and 1033 female HK residents aged 70 years and over)	Lai et al., 1995	both (emphysema)	%	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	2	2	2	Emphysema only. Only for very older groups (70 and over).
WPRO B	1992	China	Spirometry (Questionnaire followed by spirometry, population-based study of 6536 people aged 15 and over)	Cheng and Zhang 1998	both (overall)	%	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	COPD was defines as FEV1/FVC<70% c/w Gold definition, but probably overestimated
WPRO B	1992	China	Spirometry (Questionnaire followed by spirometry, population-based study of 6536 people aged 15 and over)	Cheng and Zhang 1998	both (smokers)	%	24.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Smoking accounted for approximately 72% of COPD cases
Summary crude prevalence by definition: Spirometry = 1-3%, Physician-diagnosis = NA, Symptom-based = 2-8%																						

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Region	Year	Country	Definition	Source	sex	unit	Total	A202	A252	A303	A353	A404	A454	A505	A555	A606	A656	A707	A757	A808	A850	Notes

EMRO	1990	Saudi Arabia	Spirometry (Case-control study of COPD patients (27 females and 23 males))	Dossing et al, 1994	M	FEV1/FVC=57% (34-69%)		average FEV1 of 0.95 (38% predicted), with a range of 12-69% predicted; 87% are smokers												hospital-based study and not representative
EMRO	1990	Saudi Arabia	Spirometry (Case-control study of COPD patients (27 females and 23 males))	Dossing et al, 1994	F	FEV1/FVC=60% (43-69%)		average FEV1 of 0.6 (32% predicted), with a range of 15-65% predicted; mostly non-smokers (89%)												Strong association between indoor air pollution and COPD among females
EMRO	1998	Iran	Symptom-based (Questionnaire (4636) and spirometry for chronic bronchitis (216) among subjects aged 35 and over)	Golshan et al., 2001	both	%	4.7	Chronic bronchitis												Chronic bronchitis based on questionnaire
EMRO	1998	Iran	Symptom-based (Questionnaire (4636) and spirometry for chronic bronchitis (216) among subjects aged 35 and over)	Golshan et al., 2001	both	%	1.7	Confirmed by spirometry												FEV1/FVC<65% and thus slightly strict criteria
EMRO B	198?	Tunisia	Symptom-based (Questionnaire survey of 5005 subjects aged 20-60)	Maalej et al., 1986	M	%	11.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
EMRO B	198?	Tunisia	Symptom-based (Questionnaire survey of 5005 subjects aged 20-60)	Maalej et al., 1986	F	%	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Summary crude prevalence by definition: Spirometry = 1-2%, Physician-diagnosis = NA, Symptom-based = 2-10%																				

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