

ASTHMA

INDICATORS AVAILABILITY

Guidelines to complete the first column of the priority questionnaire on the availability of indicators at national level.

For each indicator there are four columns which should be **completed by each IMCA participant** and each column which reflect an independent way of classifying the indicators. The methods to fill-up each column of the questionnaire are described in the following sections for each column.

The first column.

In this column, each participant will indicate the availability of each indicator taking into account the specifications of the indicators provided by the "*Annotated list of indicators for COPD and asthma*" and the availability of the information in their own country.

Information can be published in specific national or regional reports, in scientific publications with a clear Medline reference or in many occasions reports are produced but without making it available to the public (internal reports). In classifying indicators, **availability should be understood as the data is available independently if it has been published or not. The data available should be representative at national level.**

In cases for which data is available and perhaps representative but only for sub-national geographical areas, the details should be reported for each indicator in the report on the national consistency.

In order to classify the indicators according their availability at national level we have taken into account the availability and the sources of data available at present (mainly routine data, general HIS/HES surveys and specific surveys) and the ones that may be needed to develop in the future at national level.

Based on these criteria, we suggest to classify the availability of each indicator at national level by using the following six groups:

- A. Available from routine data and no modifications are required.
- B. Available from routine data but methodological changes are required.
- C. Available from national HIS/HES surveys (less than 10 years).
- D. Available from national HIS/HES surveys (more than 10 years).
- E. Available from specific research surveys (less than 10 years).
- F. Available from specific research surveys (more than 10 years).
- G. Not available and in the future data should be developed from routine data.
- H. Not available and in the future data should be developed from HIS/HES surveys.
- I. Not available and in the future data should be developed from specific national/international surveys.

Class 1: Demography and socioeconomic situation

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Population composition by age.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
• Population composition by gender.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
• Population composition by geographical area.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Level of education	B	C	B	A	A	C	B	A	A	F	B	C	A	C	B	C
• Social class	B	C	B	A	A	C	B	A	A	A	A	C	A	C	B	C
• Ethnicity	B	A	B	A	I	C	B	F	A	H	A	C	A	G	B	F
• GDP	B	A	B	A	A	C	B	A	A	A	A	C	A	A	A	F
• Poverty	B	C	B	A	A	C	B	C	A	F	A	G	A	C	-	F

Class 2: Health Status

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Total number of death	A	A	A	A	A	A	B	A	A	B	A	A	A	A	A	A
• Crude death rates	A	A	A	A	A	A	B	A	A	B	A	A	A	B	A	A
• Standardized death rates (SDR)	A	A	B	B	B	A	B	A	A	B	A	A	A	B	A	A
• Age-specific death rate	A	A	A	B	A	A	B	A	A	B	A		A	B	A	A
• Age-specific death rate having asthma as a contributing cause of death	G	A	B	B	A	A	B	B	G	G	A	B	A	B	B	A
• Potential years of life lost (PYLL)	B	A	B	B	B	C	I	G	B	G	B	A	B	B	B	B

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Prevalence of wheeze	F	F	F	C	C	C	F	F	F	C	F	F	F	F	H	G
• Prevalence of shortness of breath	F	F	F	C	C	C	F	F	F	C	F	F	C	F	H	G
• Prevalence of cough	C	F	F	C	C	C	F	F	F	C	F	F	C	F	H	G
• Prevalence of nasal allergies	C	F	F	C	C	C	F	F	F	C	F	F	C	F	H	G
• Prevalence of asthma attacks	F	F	F	C	C	C	F	F	F	C	F	F	F	F	H	G
• Prevalence of asthma diagnosis	A	F	F	C	C	C	F	I	C	C	F	F	F	F	H	C
• Prevalence of BHR	F	F	F	F	C	C	F	I	F	C	F	I	F	F	H	I
• Prevalence of asthma treatment	B	F	F	B	C	C	F	F	F	C	F	F	F	F	H	C

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Asthma severity	I	G	E	E	C	C	E	I	E	H	E	E	E	E	H	G
• Mild intermittent	I	G	E	E	C	C	E	I	E	H	E	E	E	E	H	G
• Mild persistent	I	G	E	E	C	C	E	I	E	H	E	E	E	E	H	G
• Moderate persistent	I	G	E	E	C	C	E	I	E	H	E	E	E	E	H	G
• Severe persistent	I	G	E	E	C	C	E	I	E	H	E	E	E	E	H	G
• Self assessed asthma severity	C	G	I	I	H	C	E	I	I	H	E	E	E	E	H	G

Class 3: Determinants of health

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Bronchial hyperresponsiveness (BHR)	E	F	E	E	C		E	I	F	C	E	I	E	E	H	I
• Sensitization to outdoor allergens	E	F	E	E	C		E	I	E	C	E	I	E	E	H	I
• Sensitization to Dermatophagoides pteronyssimus	E	F	E	E	C		E	I	E	C	E	I	E	E	H	I
• Sensitization to timothy grass	I	F	E	E	C		E	I	I	C	E	I	E	E	H	I
• Sensitization to cat	E	F	E	E	C		E	I	E	C	E	I	E	E	H	I
• Sensitization to dog	E	F	E	E	C		E	I	I	H	E	I	E	E	H	I
• Sensitization to mold	I	F	E	E	H		E	I	I	C	E	I	E	E	H	I
• Total IgE	E	C	E	E	C	E	E	I	I	C	E	I	E	E	H	I
• Birth weight	I	D	E	E	C	E	E	I	A	I	E	B	A	E	G	A
• Body Mass Index (BMI)	C	D	E	C	C	E	E	I	C	C	E	E	C	E	H	C
• Family history	I	F	E	E	C	E	E	I	E	C	E	E	E	E	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
Adults																
• Current smokers	C	D	A	C	A	B	E	B	C	C	C	C	C	B	H	A
• Past smokers	C	D	A	C	A	B	E	B	C	C	C	H	E	B	H	A
• ETS exposure at home	H	E	E	C	C	B	E	G	C	C	D	H	E	B	H	A
• ETS exposure at work	H	E	E	C	C	B	E	G	C	C	D	H	E	B	H	A
• Smoking exposure during mother pregnancy	E	F	E	E	C	B	E	G	C	C	D	H	E	B	H	A
Asthma patients																
• Non smokers with ETS exposure	I	F	I	E	C	B	E	G	E	C	E	E	E	B	H	C
• Non smokers without ETS exposure	I	F	I	E	C	B	E	G	E	C	E	E	E	B	H	C
• Past smokers with ETS exposure	I	F	I	E	C	B	E	G	E	C	E	E	E	B	H	C
• Past smokers without ETS exposure	I	F	I	E	C	B	E	G	E	C	E	E	E	B	H	C
• Current smokers (<15 pack years)	I	F	E	E	C	B	E	G	E	C	E	E	E	B	H	C
• Past smokers (≥15 pack years)	I	F	E	E	C	B	E	G	E	C	E	E	E	B	H	C
• Smoking exposure during mother pregnancy	I	F	I	E	C	B	E	G	E	C	E	E	E	B	A	C
Children ETS exposure																
• Smoking exposure during mother pregnancy	E	F	B	I	C	E	E	G	E	H	E	E	E	E	H	I
• ETS exposure during his/her first year of life	I	F	B	I	C	E	E	G	E	H	E	E	E	E	H	I
• Current ETS exposure at present	E	F	B	E	C	E	E	G	E	H	E	E	E	E	H	I
Nutrition																
• Anti-oxidants exposure	E	F	I	C	C	E	E	G	E	I	E	E	E	E	H	C

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
Annual average																
• NO2	A	A	I	A	A	B	A	B	A	A	E	A	A	B	B	A
• SO2	A	A	I	A	A	B	A	B	A	A	E	A	A	B	B	A
• O3	A	A	I	A	A	B	A	B	A	A	E	A	A	B	B	A
• PM10	A	A	I	A	A	B	A	B	A	A	E	A	A	B	B	A
• PM2.5	E	G	I	A	G	B	E	B	G	G	E	A	A	B	B	A
Population weighted																
• NO2	B	I	I	B	A	E	E	G	G	G	E	B	E	B	B	B
• SO2	B	I	I	B	B	E	E	G	G	G	E	B	E	B	B	B
• O3	B	I	I	B	B	E	E	G	G	G	E	B	E	B	B	B
• PM10	B	I	I	B	B	E	E	G	G	G	E	B	E	B	B	B
• PM2.5	E	I	I	B	B	E	E	G	G	G	E	B	E	B	B	B
Working conditions																
• Occupational asthma risk in general population	E	F	E	I	H	E	E	G	I	A	E	I	E	E	H	H
• Occupational exposures in asthmatics	E	F	E	I	H	E	G	G	I	A	E	I	E	E	H	H

Class 4: Health Systems

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
Persistent exposure to allergens of sensitized but non symptomatic individuals																
• House dust mites	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• Grass	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• C at	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• Dog	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
Persistent exposure to allergens of sensitized but non symptomatic individuals																
• House dust mites	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• Grass	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• C at	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I
• Dog	I	I	E	E	C	E	E	I	E	I	F	I	E	E	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Invitation to stop smoking	I	G	I	E	H	E	E	I	H	H	C	I	I	H	H	I
• Asthma patients invited to stop smoking	I	G	I	I	H	E	E	I	H	H	E	I	H	H	H	I
• Asthma patients invited to follow a stops smoking program	I	G	I	I	H	E	E	I	H	H	E	I	H	H	H	I
• Asthma patients that have managed stop smoking	I	G	I	I	H	E	E	I	H	H	E	I	H	H	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Interventions to prevent tobacco exposure	E	B	I	A	A	E	E	E	H	I	E	I	I	E	H	I
• Avoidance of occupational risk	I	F	I	A	A	E	E	E	H	I	E	I	E	H	H	I
• Avoidance of air pollution	I	G	I	B	A	E	E	E	H	I	E	I	I	H	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Primary health care centers	B	A	A	A	-	B	A	A	A	I	C	A	A	A	B	A
• Pediatrician in primary health care centers	B	A	A	B	-	B	A	G	A	I	C	A	A	B	G	A
• Pneumology units - adults	A	B	A	B	A	B	B	B	A	A	C	A	B	G	G	A
• Pneumology units - children	A	B	A	B	A	B	B	B	A	A	C	A	A	G	G	A
• Allergy units - adults	B	G	A	B	B	B	B	I	A	A	C	A	A	G	G	A
• Allergy units - children	B	G	A	B	B	B	B	I	A	A	C	A	A	G	G	A
• Pneumology and allergy units - adults	B	B	A	B	B	B	-	I	A	A	C	A	A	G	G	A
• Pneumology and allergy units - children	B	B	A	B	B	B	-	I	A	A	C	A	A	G	G	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• General practitioners in PHCC	B	B	A	A	-	B	A	A	A	I	C	A	A	B	B	A
• General practitioners in single practices	A	A	A	B	A	B	A	A	A	A	C	A	B	B	B	A
• Specialized asthma education nurses	I	I	A	I	C	B	H	B	G	I	C	B	E	G	G	I
• Pediatricians in PHCC	B	B	A	B	-	B	B	B	A	I	C	A	A	B	G	A
• Pediatricians in single practices	A	A	A	B	A	B	B	B	A	A	C	A	B	B	G	A
• Pneumologists	A	A	A	A	A	B	B	A	A	A	C	A	B	B	G	A
• Allergy specialists	B	B	A	A	A	B	B	A	A	A	C	A	B	B	G	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Management plan in wheezers without asthma diagnosis	-	H	I	I	C	E	E	B	E	H		I	E	E	H	I
• Management plan in wheezers with asthma diagnosis	-	H	I	I	C	E	E	B	E	H		I	E	E	A	I
• PFM at home in wheezers without asthma diagnosis	I	H	I	I	C	E	E	F	E	H	I	I	E	E	H	I
• PFM at home in wheezers with asthma diagnosis	I	H	I	I	C	E	E	F	E	H	I	I	E	E	H	I
• Acces to an allergy test	B	H	B	A	C	E	B	E	E	G	I	E	E	H	H	I
• Acces to lung function measurements	B	H	B	A	C	E	B	A	E	G	I	E	E	H	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Hospital admission rates	A	A	A	A	A	B	B	A	A	C	A	G	A	B	B	A
• Hospital admissions for individuals appropriately treated	I	F	E	I	H	B	I	A	I	C	A	G	I	E	H	I
• Hospital admissions for individuals not appropriately treated	I	F	E	I	H	B	I	A	I	C	-	G	I	E	H	I
• Hospital admissions for individuals possibly under-diagnosed but treated	I	F	E	I	H	B	I	A	I	C	A	G	I	E	H	I
• Hospital admissions for individuals possibly under-diagnosed but not treated	I	F	E	I	H	B	I	A	I	C	A	G	I	E	H	I
• Emergency room visits (wheeze no asthma diagnosis)	I	F	I	I	H	B	I	A	I	C	A	G	I	E	H	I
• Emergency room visits (wheeze and asthma diagnosis)	I	F	I	I	B	B	I	A	I	C	A	G	I	E	H	I
• Average length of stay	I	B	A	A	A	B	B	A	A	A	A	G	A	A	B	A
• % > 2 days of stay	I	B	A	A	A	B	B	B	A	B	A	G	A	B	B	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Primary care visits of possible under-diagnosed individuals in PHCC	I	H	I	I	-	B	I	B	I	I	A	I	I	E	H	I
• Primary care visits of possible under-diagnosed individuals in private car	I	H	I	I	-	B	I	I	I	I	A	I	I	H	H	I
• Primary care visits of individuals with asthma diagnosis in PHCC	I	D	I	I	-	B	B	A	I	I	A	I	I	E	H	I
• Primary care visits of individuals with asthma diagnosis in private car	I	D	I	I	H	B	B	I	I	I	A	I	I	H	H	I
• Out-patient visits of individuals with a diagnosis of asthma in a Respiratory Unit	I	D	B	I	H	B	B	A	I	C		G	B	H	H	I
• Out-patient visits of individuals with a diagnosis of asthma in a Allergy Unit	I	H	B	I	H	B	B	I	I	H		G	B	H	H	I

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Short acting with β_2 -agonists prescribed	B	F	E	B	B	B	B	B	E	C	E	B	A	E	H	A
• Long acting with β_2 -agonists prescribed	B	E	E	B	B	B	B	B	E	C	E	B	A	E	H	A
• Inhaled glucocorticosteroids prescribed	B	F	E	B	B	B	B	B	E	C	E	B	A	E	B	A
• Theophylline prescribed	B	F	E	B	B	B	B	B	E	C	E	B	A	E	B	A
• Leukotriene modifier prescribed	B	E	E	B	B	B	B	B	E	C	E	B	A	E	B	A
• DDD on all listed drugs	-	B	B	B	B	B	B	B	A	C	E	B	A	G	B	A
• Ratio steroids/ β_2 -agonists	B	H	B	B	B	B	B	B	E	C	E	B	A	E	B	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Hospitalization cost	B	B	B	E	A	B	B	G	A	B	A	B	A	B	B	A
• Out-patient cost	B	B	B	E	A	B	B	G	G	G	A	B	A	B	B	A
• Emergency room cost	B	B	I	E	A	B	B	G	G	G	A	B	A	B	G	A
• Specialist visits cost	B	B	B	E	A	B	B	G	G	G	A	B	A	B	G	A

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Total cost of medicines prescribed for asthma treatment	B	B	B	B	B	B	B	B	A	B	A	B	E	B	G	A
• Total cost of medicines paid by the patient (out of pocket) prescribed for asthma	B	B	B	B	-	-	B	B	I	B		G	G	B	G	B
• Cost of total asthma health care	B	B	B	E	-	E	B	B	I	B	A	G	E	G	B	B
• Total cost of asthma private care	I	G	I	I	-	E	B	I	I	I		G	B	G	H	B
• Individuals paying a private insurance	B	G	B	B	-	E	B	B	I	I		G	B	G	H	B

INDICATORS AVAILABILITY BY COUNTRY																
Indicators	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Sweden	Spain	U. Kingdom	Norway
• Day time once a week	I	G	E	I	-	E	I	I	I	I	I	I	E	E	G	I
• Sleep disturbances once a week	I	G	E	I	-	E	I	I	I	I	I	I	E	E	G	I
• Shortness of breath once a month	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	I
• No emergency visits	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	I
• No limitation of activities	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	I
• No limitation of sport activities	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	D
• No limitation of physical activity	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	D
• No limitations in the choice of job	I	G	E	I	-	E	I	I	I	I	I	I	E	E	H	D
• Work absence days	I	G	E	I	-	E	B	B	I	I	I	I	E	E	H	D
• Normal or near normal lung function	E	G	E	I	-	E	I	I	I	I	I	I	E	E	H	I

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