

Conférence d'Helsinki 1994

Un engagement pour l'action

La 2^e Conférence Européenne sur « Environnement et Santé » s'est tenue à Helsinki du 20 au 22 juin 1994 regroupant plus de 60 ministres de la Santé et de l'Environnement de 47 pays européens. Des représentants de l'Organisation des Nations Unies, des organisations intergouvernementales et de 13 organisations non-gouvernementales ont également participé à cette conférence.

Une déclaration en 33 points sur l'action à engager pour l'Environnement et Santé en Europe a été adoptée. Parmi les points envisagés figurent les problèmes liés aux pollutions de l'air extérieur et intérieur.

Le texte intégral en anglais peut être trouvé dans le bulletin européen Environnement et Santé de novembre 1994. Nous avons pensé utile de reproduire pour nos lecteurs les 3 tableaux annexés à cette déclaration.

Table 1
Estimated exposure of the general population to selected environmental risk factors and their potential health effects.

Environmental factor	Level or circumstance of concern for health	Size and type of reference population (million)	Estimated people exposed at level of concern		Potential health effects	Comments
			Number (million)	Percentage of reference population		
Air pollution (ambient)						
SO ₂ - short-term exposure	> 24-hour WHO air quality guideline level for at least 1 day/year	700 Total west of the Urals	200	29	Transient respiratory disorders, aggravation of (existing) chronic respiratory diseases potentially precipitating death	The number of people exposed is extrapolated to all cities from the mean number exposed in areas with data
SO ₂ - long-term exposure	Annual mean > 100 mg/m ³ (twice the WHO air quality guideline level)	314 Urban west of the Urals	6	2	4-7 % decrease in average level of pulmonary function	The level of concern for health is based on a multicentre study conducted in France. The number of people exposed is extrapolated to all cities from the mean number exposed in areas with data
Total suspended particulates - short-term exposure	> 24-hour WHO air quality guideline level for at least 1 day/year	314 Urban west of the Urals	29	9	Transient respiratory disorders, aggravation of (existing) chronic respiratory diseases potentially precipitating death	Only the people exposed in cities with data were included in the analysis. The number of exposed may be up to 10 times higher of other cities have similar exposure to total suspended particulates.
Total suspended particulates - long-term exposure	Annual mean > 140 mg/m ³	314 Urban west of the Urals	5	2	5 % decrease in pulmonary function, increased incidence of chronic airways disease	
NO ₂ - short-term exposure	> 24-hour WHO air quality guideline level for at least 1 day/year	314 Urban west	31	10	Lower respiratory illness in children, throat and eye irritation in adults	The number of people exposed is extrapolated to all cities from the mean number exposed in areas with data

Table 1 (suite)
Estimated exposure of the general population to selected environmental risk factors and their potential health effects.

Environmental factor	Level or circumstance of concern for health	Size and type of reference population (million)	Estimated people exposed at level of concern		Potential health effects	Comments
			Number (million)	Percentage of reference population		
O ₃ - short-term exposure	1 hour mean > 200 mg/m ³ (the WHO air quality guideline level) at least once a year	170 Children west of the Urals	85	50	Cough and eye irritation ; small, transient changes in pulmonary function in children	
Lead	Annual mean > 0,5 mg/m ³ (the WHO air quality guideline level)	170 Children west of the Urals	0,5	0,3	Impaired mental development of children	
Air pollution (indoor)						
Environmental tobacco smoke	Mother smoking at home	7 Infant west of the Urals	2	30	Lower respiratory illness in infants	Effects are also seen in schoolchildren but it is more difficult to assess the extent of their exposure
	Being married to smoker	340 Non-smoking adults west of the Urals	85	25	Lung-cancer in non-smokers	
NO ₂	Use of gas stove, equivalent to + 30 mg/m ³	31 Schoolchildren west of the Urals	15	50	Lower respiratory illness in schoolchildren	
Water and food	Occurrence of microbiological contamination (Salmonella spp., Campylobacter spp.)	852 Total in the WHO European Region	130	15	From mild gastrointestinal disturbances to severe gastroenteritis	Extrapolation to the entire population of the Region based on data from the Netherlands
Housing	Lack of piped water	852 Total in the WHO European Region	110	12	Waterborne infections	86 million out of 110 million are in NIS
	Dampness	852 Total in the WHO European Region	170-250	20-30	Allergies, including asthma, and respiratory infection	Extrapolation from data from the United Kingdom
Ionizing radiation Radon gas concentration	> 200 Bq/m ³	852 Total in the WHO European Region	43	5	Lung cancer	Estimate based on information on population exposure to radon provided by 12 countries
Noise	> 65 dBA	700 Total west of the Urals	180	26	Annoyance and sleep disturbances	

Table 2
Estimated exposure of the working population to selected environmental risk factors and their potential health effects.

Environmental factor	Level of concern for health	Size and type of reference population in the WHO European (million)	Estimated people exposed at level of concern		Potential health effects	Comments
			Number (million)	Percentage of reference population		
Radiation	15mSv per year	? 1-2 Radiation workers	< 0,01 to 0,02	< 1	Cancer	Data not available for many countries on radiation workers/doses. Percentage based on data from Germany and the United Kingdom
Chemicals	Above occupational limits	400 Working	40	10	From acute intoxications to permanent health impairment or death	Based on surveys in Finland and the Netherlands and a questionnaire study in the countries of the European Union
Carcinogenic agents	Occurrence	400 Working	16	4	Increased risk of cancer, e.g. lung or bladder	The potential to be exposed to carcinogenic agents at work exists but cannot be estimated. The estimated exposure is based on the Finnish register of workers exposed to carcinogens.
Allergens	Occurrence	400 Working	52	13	Sensitization or allergic reactions of respiratory system, skin or mucous membranes	The potential to be exposed to allergenic agents at work exists but cannot be estimated. The estimated exposure is based on a survey in Finland.
Physical workload/ergonomic conditions	Physical overload, objectively assessed	400 Working	108	27	Overload of cardio-respiratory or musculo-skeletal system, strain injury, accident or sudden death	Number of workers exposed are those in occupations where (a) the oxygen consumption is at an average > 30 % of maximal value, (b) the maximal duration of static muscular contraction occurs up to exhaustion, or (c) repetitive movements at frequency > 30/min are performed for several hours a day
Psychological overload	Perception of stress	400 Working	120	30	Stress symptoms, psychosomatic	In systematically validated questionnaire or interview surveys, the population exposed to some type of psychological stressor is assessed as suffering substantial psychological strain, measured by the occurrence of stress symptoms
Noise	> 85 dBA	400 Working	60	15	Transient threshold shift in hearing, permanent hearing loss, psychological reaction	Based on surveys of noise levels in various industries in Finland and a questionnaire survey in countries of the European Union. In the countries of the European Union, 10 % of workers are continuously exposed to hazardous noise levels and 27 % for at least a quarter of the time.

Table 3
Estimated number of accidents and their health effects.

Accident	Health effort	Cases per year		Comments
		Number (thousand)	Rate per thousand	
Home	Injury treated in a clinic Fatal injury	50 000 61	56 0,07	Extrapolation of rates from the United Kingdom to the entire Region
Road traffic	Injury Fatal injury	2 150 120	3 0,14	
Occupational	Notified injury Fatal injury	10 000 25	25 0,06	Estimated from data reported by 22 countries to the International Labour Organisation