Specifications of the public health theme tables (hlth_cd_pbt)

Treatable and preventable death

Preventable and treatable causes of mortality are defined as follows:

- **Preventable mortality**: Causes of death that can be mainly avoided through effective public health and primary prevention interventions (i.e. before the onset of diseases/injuries, to reduce incidence).
- **Treatable (or amenable) mortality**: Causes of death that can be mainly avoided through timely and effective health care interventions, including secondary prevention and treatment (i.e. after the onset of diseases, to reduce case-fatality).

[Note: The label "amenable" mortality previously used by Eurostat list was changed to "treatable" to make more explicit the link with the health care interventions.]

In 2018, the OECD and Eurostat worked together with an expert group to develop new joint lists of preventable and treatable causes of mortality. These lists built on earlier work carried out by researchers (e.g., Nolte and McKee, 2004 and 2011), by some OECD countries and by Eurostat. The new OECD-Eurostat lists were approved during the OECD Working Party on Health Statistics meeting in October 2018 and during the Eurostat Working Group on Public Health Statistics in December 2018.

Disclaimer: Both, the treatable mortality indicator and the preventable indicator are aimed to be used in a global context of peer reviewed health system performance assessments. They provide a warning signal of potential shortcomings in health systems but is not intended to be a definitive measure for monitoring health care across member states.

Table 1: Joint OECD/Eurostat lists of preventable and treatable causes of mortality

Group	Causes of deaths	Preventable mortality	Treatable mortality	ICD-10 Code	Age threshold	Rationale for inclusion
Infectious diseases	Intestinal diseases	x		A00-A09	0-74	Most of these infections can be prevented through prevention measures (e.g. improve water and food safety)
	Diphtheria, Tetanus, Poliomyelitis	x		A35, A36, A80	0-74	Most of these infections can be prevented through vaccination.
	Whooping cough	x		A37	0-74	Most of these infections can be prevented through vaccination.
	Meningococcal infection	x		A39	0-74	Most of these infections can be prevented through vaccination.
	Sepsis due to streptococcus pneumonia and depsis due to hemophilus influenzae	x		A40.3, , A41.3	0-74	Most of these infections can be prevented through vaccination.
	Haemophilus inflenza infections	x		A49.2	0-74	Most of these infections can be prevented through

					vaccination.
Sexually transmitted infections (except HIV/AIDS)	x		A50-A60, A63, A64	0-74	These infections can be prevented through prevention measures.
Varicella	x		B01	0-74	Most of these infections can be prevented through vaccination.
Measles	x		B05	0-74	Most of these infections can be prevented through vaccination.
Rubella	x		B06	0-74	Most of these infections can be prevented through vaccination.
Viral Hepatitis	x		B15-B19	0-74	This condition is preventable and will not require treatment if prevented.
HIV/AIDS	x		B20-B24	0-74	This condition is preventable and will not require treatment if prevented.
Malaria	x		B50-B54	0-74	This condition is preventable and will not require treatment if prevented.
Haemophilus and pneumococcal meningitis	x		G00.0, G00.1	0-74	Most of these infections can be prevented through vaccination.
Tuberculosis	x (50%)	x (50%)	A15-A19, B90, J65	0-74	Reduction in deaths from tuberculosis in several countries has been about evenly achieved through greater prevention (reduction in incidence) and earlier detection and more effective treatment (higher survival rates).
Scarlet fever		x	A38	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
Sepsis		x	A40 (excl. A40.3),A41 (excl. A41.3)	0-74	Case-fatality rates can be reduced through greater quality of care and reduced patient adverse events, and early detection and appropriate antibiotic treatment.
Cellulitis		x	A46, L03	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
Legionnaires disease		x	A48.1	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
Streptococcal and enterococci infection		x	A49.1	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.

	Other meningitis		x	G00.2, G00.3, G00.8, G00.9	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
	Meningitis due to other and unspecified causes		x	G03	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
Cancer	Lip, oral cavity and pharynx cancer	x		C00-C14	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking).
	Oesophageal cancer	x		C15	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking).
	Stomach cancer	x		C16	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking and alcohol consumption, and improve nutrition).
	Liver cancer	x		C22	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking and alcohol consumption).
	Lung cancer	x		C33-C34	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking).
	Mesothelioma	x		C45	0-74	This condition can be largely prevented through prevention measures (e.g. reduce asbestos exposure).
	Skin (melanoma) cancer	x		C43	0-74	This condition can be largely prevented through prevention measures (e.g. reduce sun exposure).
	Bladder cancer	x		C67	0-74	This condition can be largely prevented through prevention measures (e.g. reduce smoking).
	Cervical cancer	x (50%)	x (50%)	C53	0-74	Cervical cancer can be prevented through vaccination and screening can also find pre-cancerous abnormalities that can be treated to prevent cancer, but five-year survival after cancer detection is also relatively high and rising.
	Colorectal cancer		x	C18-C21	0-74	Case-fatality rates have been reduced through earlier detection and treatment. Five-year survival after detection is relatively high and rising.

Category	Condition			ICD code	Age	Description
	Breast cancer (female only)		x	C50	0-74	Case-fatality rates have been reduced through earlier detection and treatment. Five-year survival after detection is relatively high and rising.
	Uterus cancer		x	C54,C55	0-74	Case-fatality rates have been reduced through earlier detection and treatment. Five-year survival after detection is relatively high and rising.
	Testicular cancer		x	C62	0-74	Case-fatality rates have been reduced through earlier detection and treatment. Five-year survival after detection is relatively high and rising.
	Thyroid cancer		x	C73	0-74	Case-fatality rates have been reduced through early detection and appropriate treatment.
	Hodgkin's disease		x	C81	0-74	Case-fatality rates have been reduced through early detection and appropriate treatment.
	Lymphoid leukaemia		x	C91.0, C91.1	0-74	Case-fatality rates have been reduced through early detection and appropriate treatment.
	Benign neoplasm		x	D10-D36	0-74	Case-fatality rates have been reduced through early detection and appropriate treatment.
Endocrine and metabolic diseases	Nutritional deficiency anaemia	x		D50-D53	0-74	This condition can be largely prevented through prevention measures (e.g. improve nutrition).
	Diabetes mellitus	x (50%)	x (50%)	E10-E14	0-74	Type 1 diabetes is not preventable, but appropriate treatments can reduce mortality. Type 2 diabetes is largely preventable (e.g. improve nutrition), but appropriate treatments can also reduce mortality.
	Thyroid disorders		x	E00-E07	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Adrenal disorders		x	E24-E25 (except E24.4), E27	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.

Disease group	Condition			ICD	Age	Notes
Diseases of the nervous system	Epilepsy		x	G40,G41	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
Diseases of the circulatory system	Aortic aneurysm	x (50%)	x (50%)	I71	0-74	This condition is both preventable through prevention measures (similar risk factors as for ischaemic heart diseases) and treatable.
	Hypertensive diseases	x (50%)	x (50%)	I10-I13, I15	0-74	This condition is both preventable through prevention measures (e.g. reduce smoking, improve nutrition and physical activity) and treatable.
	Ischaemic heart diseases	x (50%)	x (50%)	I20-I25	0-74	Reduction in deaths from IHD over the past decades in several countries has been about evenly achieved through greater prevention (reduction in incidence) and earlier detection and more effective treatment (higher survival rates).
	Cerebrovascular diseases	x (50%)	x (50%)	I60-I69	0-74	Reduction in deaths from CVD over the past decades in several countries has been about evenly achieved through greater prevention (reduction in incidence) and earlier detection and more effective treatment (higher survival rates).
	Other atherosclerosis	x (50%)	x (50%)	I70, I73.9	0-74	This condition is both preventable through prevention measures (e.g. improve nutrition) and treatable.
	Rheumatic and other heart disease		x	I00-I09	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Venous thromboembolism		x *	I26, I80, I82.9	0-74	The majority of venous thrombosis events result from hospitalisations. These cases are treatable to the extent that they are linked to the quality of care that people receive.
Diseases of the respiratory system	Influenza	x		J09-J11	0-74	Most of the deaths can be prevented through prevention measures (e.g. vaccination).
	Pneumonia due to Streptococcus pneumonia or Haemophilus influenza	x		J13-J14	0-74	Most of these infections can be prevented through vaccination.
	Chronic lower respiratory	x		J40-J44	0-74	This condition can be

	diseases					largely prevented through prevention measures (e.g. reduce smoking).
	Lung diseases due to external agents	x		J60-J64, J66-J70, J82, J92	0-74	This condition can be largely prevented through prevention measures (e.g. reduce exposure to chemical, gases and other agents).
	Upper respiratory infections		x	J00-J06, J30-J39	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Pneumonia, not elsewhere classified or organism unspecified		x	J12, J15, J16- J18	0-74	Case-fatality rates can be reduced through early detection and appropriate antibiotic treatment.
	Acute lower respiratory infections		x	J20-J22	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Asthma and bronchiectasis		x	J45-J47	0-74	Case-fatality rates can be reduced through appropriate treatment (e.g. medication).
	Adult respiratory distress syndrome		x	J80	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Pulmonary oedema		x	J81	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Abscess of lung and mediastinum pyothorax		x	J85, J86	0-74	Case-fatality rates can be reduced through appropriate treatment.
	Other pleural disorders		x	J90, J93, J94	0-74	Case-fatality rates can be reduced through appropriate treatment.
Diseases of the digestive system	Gastric and duodenal ulcer		x	K25-K28	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment..
	Appendicitis		x	K35-K38	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Abdominal hernia		x	K40-K46	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Cholelithiasis and cholecystitis		x	K80-K81	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Other diseases of gallbladder or biliary tract		x	K82-K83	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Acute pancreatitis		x	K85.0,1,3,8,9	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Other diseases of pancreas		x	K86.1,2,3,8,9	0-74	Case-fatality rates can be

Diseases of the genitourinary system						
						reduced through early detection and appropriate treatment.
Diseases of the genitourinary system	Nephritis and nephrosis		x	N00-N07	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Obstructive uropathy		x	N13,N20-N21, N35	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Renal failure		x	N17-N19	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Renal colic		x	N23	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Disorders resulting from renal tubular dysfunction		x	N25	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Unspecified contracted kidney, small kidney of unknown cause		x	N26-N27	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Inflammatory diseases of genitourinary system		x	N34.1,N70-N73,N75.0,N75.1,N76.4,6	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
	Prostatic hyperplasia		x	N40	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
Pregnancy, childbirth and perinatal period	Tetanus neonatorum	x		A33	0-74	Most of these infections can be prevented through vaccination.
	Obstetrical tetanus	x		A34	0-74	Most of these infections can be prevented through vaccination.
	Pregnancy, childbirth and the puerperium		x	O00-O99	0-74	Effective treatment is available in most cases to avoid maternal mortality.
	Certain conditions originating in the perinatal period		x	P00-P96	0-74	Case-fatality rates can be reduced through early detection and appropriate treatment.
Congenital malformations	Certain congenital malformations (neural tube defects)	x		Q00, Q01, Q05	0-74	These conditions can be prevented through prevention measures (improve maternal nutrition, e.g. folic acid consumption).
	Congenital malformations of the circulatory system (heart defects)		x	Q20-Q28	0-74	These conditions can be treated through surgical operations

Group	Subgroup		Preventable	Treatable	ICD codes	Age	Comment
Adverse effects of medical and surgical care	Drugs, medicaments and biological substances causing adverse effects in therapeutic use			x *	Y40-Y59	0-74	These conditions are treatable through better drug prescription and adherence.
	Misadventures to patients during surgical and medical care			x *	Y60-Y69, Y83-Y84	0-74	These conditions are treatable through better quality of care that patients receive.
	Medical devices associated with adverse incidents in diagnostic and therapeutic use			x *	Y70–Y82	0-74	These conditions are treatable through better quality of care that patients receive.
Injuries	Transport Accidents		x		V01-V99	0-74	Deaths can be prevented through public health interventions (e.g. road safety measures).
	Accidental Injuries		x		W00-X39, X46-X59	0-74	Deaths can be prevented through public health interventions (e.g. injury prevention campaigns).
	Intentional self-harm		x		X66-X84	0-74	Deaths can be prevented through public health interventions (e.g. suicide prevention campaigns).
	Event of undetermined intent		x		Y16-Y34	0-74	Deaths can be prevented through public health interventions (e.g. harm prevention campaigns).
	Assault		x		X86-Y09	0-74	Deaths can be prevented through public health interventions.
Alcohol-related and drug-related deaths	Alcohol-related deaths	Alcohol-specific disorders and poisonings	x		E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, Q86.0, R78.0, X45, X65, Y15	0-74	Deaths can be largely prevented through public health interventions (e.g. alcohol control policies).
		Other alcohol-related disorders	x		K73, K74.0-K74.2, K74.6	0-74	Deaths can be largely prevented through public health interventions (e.g. alcohol control policies).
	Drug-related deaths**	Drug disorders and poisonings	x		F11-F16, F18-F19, X40-X44, X85, Y10-Y14	0-74	Deaths can be largely prevented through public health interventions (e.g. drug control policies).
		Intentional self-poisoning by drugs	x		X60-X64	0-74	Deaths can be largely prevented through public health interventions (e.g. drug control policies).
Provisional assignment of new diseases	COVID-19		x		U07.1-U07.2	0-74	Most of these infections and deaths can be prevented through prevention measures (including vaccination).

* Some of these conditions that are mainly acquired when people are hospitalised or in contact with health services might also be considered to be preventable, in the sense that the incidence of these health care-associated infections or health problems might be reduced through greater prevention in health care facilities.

** Drug-related deaths include both illegal and legal drugs.

Please note that Eurostat does not the groups listed in the above table in its dissemination of data.

Table 2: Breakdown by group of cause for infectious disease

Group of cause	ICD 10 codes	Age group
Certain infectious Diseases	A00-A40, A42-B99	TOTAL
Other septicaemia	A41	TOTAL
Pneumonia, organism not specified	J18	TOTAL
Other infectious diseases	G00, G03-G04, G06, G08-G09, H00-H01, H10, H16, H20, H30, H46, H60, H65-H66, H68, H70, I00-I02, I30, I33, I38, I40, I80, J00-J16, J20-J22, J31-J32, J36-J37, J40-J42, J85-J86, K04-K05, K20, K29, K35-K37, K61, K65, K73, K75, K81, K85, L00-L08, M00, M02, N10-N12, N15, N30, N34, N39, N41, N45, N49, N61, N70-N73, N75-N76, O23, O85-O86, O91, O98, P35-P39, R50	TOTAL

Information on tables hlth_cd_tro and hlth_cd_troeu: Quality of data on transport accidents might be affected by the comparability of coding practice. Hence, data on transport accidents is not published if the number of other or unspecified deaths (ACC_TRNS_OTHER) is above 35% of all transport deaths (=V01-V99).