

# **FATAL PURE DEFINITIONS**

# FATAL PURE ADJUDICATION DEFINITIONS

## Cardiovascular Death - Definitions

### 1.0 DEATH DUE TO CARDIOVASCULAR EVENTS

#### 1.10 Sudden unexpected Cardiovascular Death (SCVD)

Without evidence of other cause of death, death that occurred suddenly and unexpectedly (examples: witnessed collapse, persons resuscitated from cardiac arrest who later died) or persons seen alive less than 12 hours prior to discovery of death (example persons found dead in his/her bed).

- SCVD is either definite, probable or possible according to the following characteristics:

CVD is either definite, probable or possible according to the following characteristics:

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
1.11: <u>Definite</u>	One of the following in persons with: <ul style="list-style-type: none"><li>• known cardiovascular disease, or</li><li>• diabetes with an additional risk factor such as hypertension, smoking, dyslipidemia, micro albuminuria, serum creatinine 50% above upper limit of normal, or</li><li>• 3 of the above risk factors, or</li><li>• 2 of the above risk factors in men aged 60 and more and women aged 65 and more</li></ul>	No ICD-10 Code
1.12: <u>Probable</u>	One of the following in persons with: <ul style="list-style-type: none"><li>• diabetes, or</li><li>• 2 of the above risk factors in men aged less than 60 and in women less than 65, or</li><li>• one of the above risk factor in men aged 60 and more and in women aged 65 and more, or</li><li>• typical of chest pain or sudden severe dyspnea of less than 20-minute duration preceding the event</li></ul>	
1.13: <u>Possible</u>	In persons without risk factor	

For **SCVD**, the patient was well or had a stable CVD (example stable angina) when last seen alive. The event of a sudden death occurring during the hospitalization of MI is considered a fatal MI and not sudden death.

### 1.30 Fatal Myocardial Infarction

#### Symptoms of Myocardial Infarction:

Typical symptoms or suggestive symptoms of MI according to physician are characterized by severe anterior chest pain as tightness, crushing, burning, lasting at least 20 minutes, occurring at rest, or on exertion, that may radiate to the arms or neck or jaw and may be associated with dyspnea, diaphoresis and nausea. However, death associated with nausea and vomiting with or without chest pain not due to another cause may be considered as possible MI if ECG and cardiac markers are not done. These symptoms may have occurred the last month before death.

- Fatal myocardial infarction is either definite, probable or possible according to the following characteristics:

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>1.31: <u>Definite</u></b>	1. Autopsy demonstrating fresh myocardial infarction and/or recent coronary occlusion, <b>or</b> 2. ECG showing new and definite sign of MI (Minnesota code 1-1-1) <b>or</b> 3. Symptoms typical or atypical or inadequately described but attributed to cardiac origin lasting at least 20 minutes and by troponin or cardiac enzymes (CKMB, CK, SGOT, SLDH) above center laboratory ULN 4. ECG with new ischemic changes (new ST elevation/depression or T wave inversion $\geq 2$ mm) and by troponin or cardiac enzymes (CKMB, CK, SGOT, SLDH) above center laboratory ULN	I21- I22
<b>1.32: <u>Probable</u></b>	1. ECG with sign of probable MI (Minnesota code 1-2-1), <b>or</b> 2. Typical symptoms lasting at least 20 minutes considered of cardiac origin, with only new ST-T changes (new ST elevation/depression or T wave inversion $\geq 1$ but $< 2$ mm) without documented increased cardiac markers or enzyme as in PURE definition 1.31 (above), <b>or</b> 3. Increased cardiac enzymes as in PURE definition 1.31 (above) showing a typical pattern of MI as above without symptoms or significant ECG changes	
<b>1.33: <u>Possible</u></b>	1. ECG with sign of possible MI (Minnesota code 1-3-1) <b>or</b> 2. Typical symptoms or symptoms suggestive of MI according to the physician lasting at least 20 minutes without documented ECG or cardiac marker.	

The **Minnesota codes** for MI is taken from Rose and Blackburn and published in their book "Evaluation Methods of Cardiovascular Disease WHO 1969".

- Definite MI** is Q/R ratio  $\geq 1/3$  and Q duration  $\geq 0.03$  second in one of the following leads: I, II, V2, 3, 4, 5, 6. (code 1-1-1)
- Probable MI** is Q/R ratio  $\geq 1/3$  and Q duration between 0.02 and 0.03 second in one of the following leads: I, II, V2, 3, 4, 5, 6. (code 1-2-1)
- Possible MI** is Q/R ratio between 1/5 and 1/3 and Q duration between 0.02 and 0.03 second in one of the following leads: I, II, V2, 3, 4, 5, 6. (code 1-3-1)

## 1.40 Fatal Stroke

Fatal stroke is either definite or possible according to the following characteristics:

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
1.41: <b><u>Definite</u></b>	<p>Stroke death is defined as death within 30 days from an acute focal neurological deficit <b><i>diagnosed by a physician</i></b> and thought to be of vascular origin (without other cause such as brain tumor) with signs and symptoms lasting <math>\geq 24</math> hrs.</p> <p>Stroke death is also considered if death occurred within 24 hrs. of onset of persisting signs and symptoms, or if there is evidence of a recent stroke on autopsy.</p> <p>N.B.</p> <ul style="list-style-type: none"> <li>• <b>In a subject with a stroke <math>\leq 30</math> days:</b> If death occurred with a pneumonia due to possible aspiration, death will be considered to be due to stroke.</li> <li>• <b>In a subject with a stroke <math>&gt; 30</math> days:</b> If death occurred with a pneumonia due to possible aspiration, the adjudicator will make a decision according to his/her clinical judgment if death is related to stroke or not.</li> <li>• Subarachnoid hemorrhage death manifested by sudden onset headache with/without focal signs and imaging (CT or MRI) evidence of bleeding primarily in the subarachnoid space is considered a fatal stroke in absence of trauma or brain tumor or malformation</li> <li>• Subdural hematoma death is <u>not</u> considered as a stroke death and may be related to previous trauma or other cause.</li> </ul>	I60- I64, I69
1.43: <b><u>Possible</u></b>	Death in a participant with a history of sudden onset of focal neurological deficit of one or more limbs, loss of vision or slurred speech lasting about 24 hours.	

## 1.50 Fatal Congestive Heart Failure

Fatal congestive heart failure is either definite or possible according to the following characteristics:

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>1.51: <u>Definite</u></b>	The diagnosis of congestive heart failure may be an autopsy finding in absence of other cause or requires signs (rales, increased jugular venous pressure or ankle edema) or symptoms (nocturnal paroxysmal dyspnea, dyspnea at rest or ankle edema) of congestive heart failure <b>and</b> one or both of the following: <ul style="list-style-type: none"> <li>radiological signs of pulmonary congestion,</li> <li>treatment of heart failure with diuretics</li> </ul> <p><i>If sudden death occurred in a patient with chronic severe heart failure, it should be adjudicated as fatal congestive heart failure.</i></p>	I50
<b>1.52: <u>Probable</u></b>	Progressive shortness of breath on lying down or at night, improving on sitting up AND any of the following signs or symptoms: swelling of feet, distension of abdomen, progressive cough in a person with known hypertension or a history of previous MI/angina or other heart disease	
<b>1.53: <u>Possible</u></b>	Progressive shortness of breath on lying down or at night, improving on sitting up AND any of the following signs or symptoms: swelling of feet, distension of abdomen, progressive cough	

## 1.60 Death Due to Other Cardiovascular Deaths (other causes [1.10 to 1.50 above] having been excluded)

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>1.61</b>	Arterial rupture of aneurysm	I71- I72
<b>1.62</b>	Pulmonary embolism <i>NOTE: Death associated with pulmonary embolism occurring <b>within 2 weeks</b> after a fracture such as hip, femur should attributed to death due to injury. Refer to Injury, Section 6.0</i>	I26
<b>1.63</b>	Arrhythmic death (A-V block, sustained ventricular tachycardia in absence of other causes)	I44- I45, I47- I49
<b>1.64</b>	Death after invasive cardiovascular intervention: a perioperative death extending to 30 days after coronary or arterial surgical revascularization and to 7 days after a coronary or arterial percutaneous dilatation (angioplasty) with or without a stent or an invasive diagnostic procedure.	I97
<b>1.65</b>	Congenital heart disease	Q20-Q28
<b>1.66</b>	Heart valve disease (including rheumatic heart disease)	I01, I05- I09, I34- I37
<b>1.67</b>	Endocarditis	I33, I38, <b>I39</b>
<b>1.68</b>	Myocarditis	I40, I41
<b>1.69</b>	Tamponade (pericarditis)	I30-I32
<b>1.70</b>	Other cardiovascular events ( <i>Excluding 1.61 to 1.69 above</i> )  <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	I00, I02, I10-I13, I15, I23-I25, I27, I28, I42, I43, I51, I52, I65-I68, I70, I73, I74, <b>I77-I83</b> , I85-I89, I95, I98, I99

# FATAL PURE ADJUDICATION DEFINITIONS

## Non-Cardiovascular Death - Definitions

### 2.00 DEATH DUE TO MOST FREQUENT INFECTIONS

#### 2.10 Typhoid and Paratyphoid

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
2.11: <b><u>Definite</u></b>	1. Symptoms and positive serology/culture 2. Long duration high fever progressively increasing, continuous <b>AND</b> Tongue highly coated <b>AND</b> Any of the following: <ul style="list-style-type: none"><li>• Severe headache</li><li>• Abdominal pain, distension</li><li>• Constipation/diarrhea</li><li>• Death occurred in 2nd or 3rd week</li><li>• Delirium</li><li>• Blood in stool</li></ul>	A01
2.12: <b><u>Probable</u></b>	Symptoms only (at least two of the above symptoms)	

#### 2.20 Diarrhoea and Gastroenteritis/Dysentery

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
2.21: <b><u>Definite</u></b>	1. Symptoms and positive bacteriology 2. Frequent /liquid / watery loose motions <b>AND</b> Fever & vomiting <b>AND</b> Any one of the following: <ul style="list-style-type: none"><li>• Low/nil urine content</li><li>• Deep dark yellow urine</li><li>• Restricted fluid intake</li><li>• Blood or mucus in stool</li></ul>	A00, A02-A09
2.22: <b><u>Probable</u></b>	Two of the above symptoms	

## 2.30 Pulmonary Tuberculosis

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>2.31: <u>Definite</u></b>	<p>1. Positive bacteriology (sputum or body fluid microscopy) or positive histopathology</p> <p><b><u>OR</u></b></p> <p>2. Chronic cough of long duration (&gt; 4 weeks) with fever <b>and</b> any one of the following signs or symptoms</p> <ul style="list-style-type: none"> <li>• Evening rise in fever</li> <li>• Blood in sputum</li> <li>• Chest pain</li> <li>• Breathlessness</li> <li>• Loss of appetite</li> <li>• Chronic weight loss</li> </ul> <p><b>AND</b> reported history of TB diagnosis by physician based on evidence and started on anti-tuberculosis treatment</p>	A15, A16, A19
<b>2.32: <u>Probable</u></b>	<p>1. Chronic cough of long duration (&gt; 4 weeks) with fever <b>and</b> any one of the following signs or symptoms</p> <ul style="list-style-type: none"> <li>• Evening rise in fever</li> <li>• Blood in sputum</li> <li>• Chest pain</li> <li>• Breathlessness</li> <li>• Loss of appetite</li> <li>• Chronic weight loss</li> </ul> <p><b>AND one</b> of the following:</p> <ul style="list-style-type: none"> <li>• diagnosis based on positive radiology <b><u>OR</u></b></li> <li>• Family history of diagnosed TB <b><u>OR</u></b></li> <li>• Positive TB serology or positive past Mantoux test</li> </ul>	
<b>2.33: <u>Possible</u></b>	<p>At least <b>one</b> of the symptoms below</p> <p>Chronic cough of long duration (&gt; 4 weeks) with fever <b>and</b> any one of the following signs or symptoms</p> <ul style="list-style-type: none"> <li>• Evening rise in fever</li> <li>• Blood in sputum</li> <li>• Chest pain</li> <li>• Breathlessness</li> <li>• Loss of appetite</li> <li>• Chronic weight loss</li> </ul> <p><b><u>AND</u></b> Empirical diagnosis by clinician</p>	

## 2.40 Septicaemia

Always try to identify the underlying cause of septicaemia as the cause of death; This PURE code 2.40 can **only** be used if no known underlying cause can be identified.

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
2.40	1. High fever of medium duration with chills delirium and confusion 2. Possibly with cuts, boils, recent surgical intervention or other source of infection (After excluding other causes such as diarrhoea, malaria, TB, ....such history is considered as definite)	A40-A41

## 2.50 Viral Hepatitis

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
2.51: <b><u>Definite</u></b>	1. Positive serology <b>or</b> abnormal liver function tests 2. Marked acute jaundice with abdominal pain; progressive yellowness of eyes and skin <b>AND</b> 3. Any of the following signs and symptoms: <ul style="list-style-type: none"><li>• Fever</li><li>• Headache</li><li>• Nausea</li><li>• Vomiting</li><li>• Loss of appetite</li><li>• Urine is yellow in colour</li></ul> <b>AND</b> no other obvious cause Possibly without break of jaundice	B15-B19
2.52: <b><u>Probable</u></b>	Two of the above	

## 2.60 AIDS

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
2.61: <b><u>Definite</u></b>	1. Positive serology plus symptoms 2. H/o severe weight loss in less than 3 months <b>AND</b> 3. History of prolonged unexplained fever, or diarrhoea or persistent cough for more than 1 month (intermittent or continuous) <b>OR</b> 4. HIV Positive serology 5. Possibly with Mouth sores / white patches in mouth, Skin rash, Generalized swelling of nodes in armpits, neck, groin, history of ulcers in genital area, history of spouse/partner with similar illness/ death of spouse partner from illness	B20-B24
2.62: <b><u>Probable</u></b>	One of the above	



## 2.70 Malaria

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>2.71: <u>Definite</u></b>	<ol style="list-style-type: none"> <li>Positive blood smear examination or other parasitology test plus symptoms</li> <li>Acute onset of high grade fever, with chills and rigor. Fever may be intermittent <b>AND</b></li> <li>Blood test positive for malaria <b>AND</b></li> <li>Any of the following: <ul style="list-style-type: none"> <li>Jaundice</li> <li>Breathlessness</li> <li>Decreased urine output</li> <li>Convulsion / Unconscious</li> <li>Headache</li> </ul> </li> </ol> <p><b>AND</b></p> <p>None of the following:</p> <ul style="list-style-type: none"> <li>ARI</li> <li>Diarrhoea</li> <li>Burning during micturition</li> <li>Rash on body</li> <li>Heatstroke</li> </ul>	B50-B54
<b>2.72: <u>Probable</u></b>	Two of the above	

## 2.80 COVID-19

### Clinical Criteria

At least two of the following symptoms: fever, chills, rigor, myalgia, headache, sore throat, new olfactory and taste disorder **OR** at least one of the following symptoms: cough, shortness of breath/difficult breathing **OR** severe respiratory illness with at least one of the following: clinical/radiological evidence of pneumonia and/or ARDS

### Laboratory criteria

Confirmatory: Molecular testing: real-time reverse-transcription polymerase chain reaction (rRT-PCR)

Presumptive: Serology testing – specific antibody/specific antigen.

### Epidemiological Linkage

Close contact [within 6 feet for at least 10-30 minutes] exposure within 14 days before onset of symptoms, with a confirmed or probable case **OR** travel to an area with sustained ongoing community transmission

### Vital record criteria (applicable for fatal only)

Death certificate with COVID-19 as cause of death or condition contributing to cause of death.

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>2.81 : <u>Definite</u></b>	Confirmed by molecular testing: real-time reverse-transcription polymerase chain reaction (rRT-PCR) irrespective of severity of clinical criteria on a confirmed death with or without death certificate.	U07
<b>2.82: <u>Probable</u></b>	<ol style="list-style-type: none"> <li>Confirmed death, which meets clinical criteria and epidemiological evidence with no confirmed laboratory testing <b>OR</b></li> <li>Meets presumptive laboratory testing and either clinical criteria or epidemiological evidence <b>OR</b></li> <li>Meets vital record criteria</li> </ol>	

## 02.90 Other Infections

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>2.90</b>	Other Infections (Excluding all categories listed above) <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	A17-A18, A20-A39, A42-A99, <b>B00-B09</b> , B25-B49, B55-B99

**3.00 Death due to Cancer** (according to primary site and may be either definite, probable or possible)

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
3.01	Mouth	C00-C06, C10, C12, C14
3.02	Esophagus	C15
3.03	Stomach	C16
3.04	Small Intestine	C17
3.05	Large Intestine including rectum	C18-C20
3.06	Pancreas	C25
3.07	Liver	C22, C24
3.08	Lung/Pleura	C33-C34, C38-C39, C45
3.09	Breast	C50
3.11	Prostate	C61
3.13	Head and neck	C31-C32, C70
3.14	Skin	C43-C44
3.15	Multi-site	C97
3.16	Other, specify	C07-C09, C11, C13, C23, C26, C30, C37, C46-C49, C57-C58, C63, C68-C69, C74-C79, C96, D37- D45, D47, <b>D48</b>
3.17	Cervical	C53
3.18	Uterine/Ovarian	C54-C56
3.19	Vaginal/Vulva	C51-C52
3.20	Kidney	C64, C65
3.21	Bladder	C66-C67
3.22	Anus	C21
3.23	Testis	C62
3.24	Penis	C60
3.25	Brain/Spinal Cord	C71-C72
3.26	Leukemia	C91-C95, D46
3.27	Lymphoma	C81-C86, C88
3.28	Multiple Myeloma	C90
3.29	Musculoskeletal (muscle, bones, tendons,	C40-C41
3.30	Thyroid	C73
3.40	Unknown Site	C80
<b>A: Definite</b>	Diagnosis made on histopathology	
<b>B: Probable</b>	1) Imaging proof and therapeutic intervention, or 2) Physician diagnosis followed by therapeutic	
<b>C: Possible</b>	1. Symptoms and signs (weight loss without other cause) suggestive of cancer, or 2. Diagnostic imaging (the participant dies before histological proof or therapeutic intervention)	

## **4.00 DEATH DUE TO DISEASES OF THE RESPIRATORY SYSTEM**

### **4.10 Pneumonia**

<b>PURE Adjudication Code</b>	<b>Event Type</b>	<b>Acceptable ICD-10 codes</b>
<b>4.11: <u>Definite</u></b>	<ol style="list-style-type: none"><li>1. Acute cough (dry or productive) &lt; 4 weeks AND</li><li>2. High fever <b>AND</b></li><li>3. Any of the following:<ul style="list-style-type: none"><li>• Shortness of breath/ fast breathing</li><li>• Chest pain</li><li>• Blood in sputum</li><li>• Wheezing</li></ul></li><li>4. <b>AND without</b> any of the following:<ul style="list-style-type: none"><li>• Swelling of legs</li><li>• Distension of abdomen</li></ul></li><li>5. <b>AND</b> Treated with antibiotics</li><li>6. <b>AND</b> radiological evidence of Pneumonia</li></ol>	J12-J18
<b>4.12: <u>Probable</u></b>	As for 4.11, without chest X-Rays done (# 6 above)	
<b>4.13: <u>Possible</u></b>	As for 4.11, without a history of antibiotics and chest X-Rays done (# 5 and 6 above)	

**4.30 Asthma may be either definite, probable or possible according to the following characteristics**

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>4.31: <u>Definite</u></b>	<p>Symptoms of episodic wheeze or shortness of breath or chest tightness for more than 3 months of the year <b>AND evidence of variable airflow limitation EITHER as</b></p> <ol style="list-style-type: none"> <li>1. Abnormal spirometry and 12% improvement from baseline FEV1 15 minutes after inhaled short acting broncho-dilator <b>OR</b></li> <li>2. If spirometry is normal, diagnosis may be established by methacholine challenge test.</li> </ol> <p><b>(aka: symptoms + demonstrated variable airflow obstruction)</b></p>	J45-J46
<b>4.32: <u>Probable</u></b>	<ol style="list-style-type: none"> <li>1. Episodic symptoms of wheezing or shortness of breath or chest tightness for more than 3 months of the year AND onset before age 40 years AND physician's diagnosis</li> </ol> <p><b>(aka symptoms + no demonstrated variable obstruction + physician diagnosis)</b></p> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. If symptoms unknown <b>EITHER</b> <ul style="list-style-type: none"> <li>• abnormal spirometry and 12% improvement from baseline FEV1 15 minutes after inhaled short acting broncho-dilator + physician's diagnosis, without confirmation of airflow limitation <b>OR</b></li> <li>• abnormal spirometry and 12% improvement from baseline FEV1 15 minutes after inhaled short acting broncho-dilator + Therapy with bronchodilators, including inhaled steroids <b>OR</b></li> <li>• If spirometry is normal, diagnosis may be established by methacholine challenge test + Physician diagnosis <b>OR</b></li> <li>• If spirometry is normal, diagnosis may be established by methacholine challenge test + Therapy with bronchodilators, including inhaled steroids</li> </ul> </li> </ol> <p><b>(aka no symptoms, but demonstrated variable airflow obstruction + physician diagnosis/ treatment)</b></p>	
<b>4.33: <u>Possible</u></b>	<p>Episodic symptoms of wheezing or shortness of breath or chest tightness for more than 3 months of the year AND onset before age 40 years</p> <p><b>AND</b></p> <p><b>WITHOUT</b> history of significant exposure to smoking (&lt;10 pack-years) and/or other risk factors (including inhaled noxious particles or gases)</p> <p><b>AND</b></p> <p>Therapy with bronchodilators, including inhaled steroids</p> <p><b>(aka symptoms + negative exposure history + therapy)</b></p> <p><i>Pack-years= number of tobacco sticks per day x duration of tobacco use in years divided by 12</i></p>	

#### 4.40 COPD (Chronic Obstructive Airway Disease) may be either definite, probable or possible

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>4.41: <u>Definite</u></b>	<ol style="list-style-type: none"> <li>1. Symptoms of chronic cough, sputum production, shortness of breath for &gt;3 months of year <b>AND</b></li> <li>2. History of significant exposure to smoking (&gt;10 pack-years) and/or other risk factors (include inhaled noxious particles or gases) <b>AND</b></li> <li>3. Confirmatory laboratory: post-bronchodilator FEV1/VC &lt; 70%. <b>(aka symptoms + exposure history + fixed airflow obstruction)</b></li> </ol> <p><i>Pack-years= number of tobacco sticks per day x duration of tobacco use in years divided by 12</i></p>	
<b>4.42: <u>Probable</u></b>	<ol style="list-style-type: none"> <li>1. Confirmatory laboratory: post-bronchodilator FEV1/VC &lt; 70% <b>AND</b> <b>EITHER</b></li> <li>2. Symptoms of chronic (&gt; 3 months of the year) cough, sputum production and shortness of breath <b>OR</b></li> <li>3. History of exposure to smoking (&gt; 10 pack-years) and/or other risk factors (Include inhaled noxious particles or gases) <b>OR</b></li> <li>4. Physician diagnosis <b>OR</b></li> <li>5. Therapy with bronchodilators <b>(aka fixed airflow obstruction + symptoms/ exposure history/ physician diagnosis/ treatment)</b></li> </ol> <p><i>Pack-years= number of tobacco sticks per day x duration of tobacco use in years divided by 12</i></p>	J44
<b>4.43: <u>Possible</u></b>	<p>Individual &gt;= 40 years of age and</p> <ul style="list-style-type: none"> <li>• Symptoms of chronic cough, sputum production and shortness of breath for more than 3 months of the year for at least 2 years <b>AND</b> history of exposure to smoking (&gt;10 pack-years) and other risk factors (including inhaled noxious particles or gases) <b>(aka symptoms + exposure history but no demonstrable fixed airflow obstruction)</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Symptoms of chronic cough, sputum production and shortness of breath AND Physician diagnosis of COPD <b>(aka symptoms + physician diagnosis but no demonstrable fixed airflow obstruction)</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Symptoms of chronic cough, sputum production and shortness of breath AND Therapy with bronchodilators with history of exposure to smoking and other risk factors (including inhaled noxious particles or gases) <b>(aka symptoms + COPD therapy but no demonstrable fixed airflow obstruction)</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• No symptoms but with History of exposure to smoking and other risk factors (including inhaled noxious particles or gases) <b>AND</b> Physician diagnosis of COPD <b>(aka no symptoms + exposure history + diagnosis)</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• No symptoms but with History of exposure to smoking and other risk factors, (Include inhaled noxious particles or gases) <b>AND</b> Therapy with bronchodilators <b>(aka no symptoms + exposure history + therapy)</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Physician diagnosis of COPD AND Therapy with bronchodilators <b>(aka no symptoms + diagnosis + therapy)</b></li> </ul> <p><i>Pack-years= number of tobacco sticks per day x duration of tobacco use in years divided by 12</i></p>	

**4.90 Other Respiratory Diseases** (Excluding all categories [4.10, 4.30 and 4.40] listed above)

Example: professional lung diseases such as Asbestosis...

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>4.90</b>	Other Respiratory Diseases  <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	J00-J11, J20-J43, J47-J99, Q30-Q34

**5.00 Death related to Pregnancy/Delivery/Puerperium ( $\leq 42$  after delivery/abortion) - Direct obstetrical causes**

Abortion (spontaneous or induced or unknown), Hypertensive disorders of pregnancy (pre-eclampsia/eclampsia), Ante-Partum Haemorrhage (abruption placenta or placenta praevia), Obstructed Labour, Post-Partum Haemorrhage, Puerperal (sepsis)....

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>5.00</b>	Death related to Pregnancy/Delivery/Puerperium ( $\leq 42$ after delivery/abortion) - Direct obstetrical causes  <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	O00-O99

**6.00 Death due to Injury - Accident – Suicide**

Death due to an accident or trauma (vehicles, work...) in absence of other causes

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
<b>6.00</b>	Death due to Injury - Accident – Suicide <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>  <i>NOTE: Death associated with pulmonary embolism occurring <u>within 2 weeks</u> after a fracture such as hip, femur should attributed to death due to injury.</i>	V01-V99, W00-W99, X00-X99, Y00-Y98

## 7.00 Death due to Other Causes (Excluding Other Cardiovascular Diseases, Other Infections and Other Respiratory Diseases)

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
7.10	Diseases of the Nervous System: <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	G00-G99, Q00-Q07
7.20	Diseases of the Digestive System: <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	K00-K93, Q39-Q45
7.30	Diseases of the Genito-Urinary System: <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>	N00-N99, Q50-Q64
7.50	Other causes: <i>Please refer to PURE ICD-10 Code Listing and PURE Fatal Adjudication Code Sheet.</i>  <b>Valid ICD-10 Codes include the following:</b> "E" - Endocrine "F" - Mental "H" – Eye/Ear (uncommon) "L" – Skin (uncommon) "M" – Musculoskeletal, or "Q" (Congenital) not already classified above  <i>ICD-10 Codes that should never be indicated: Any "P" (Perinatal) code or "R" (Signs/Symptoms)</i>	D50-D89, E00-E90, F00-F99, H58, H59, H94, H95, L00-L99, M00-M99, Q35-Q38, Q65-Q99

## 8.00 Death from Unknown Cause

Death of unknown cause in a participant with known cardiovascular disease: See **Code 08.10** below

Death of unknown cause in a participant with known cancer diagnosed less than 5 years ago: See **Code 08.20** below

PURE Adjudication Code	Event Type	Acceptable ICD-10 codes
8.10	<b>Presumed Cardiovascular Death:</b> This applies to a participant with documented cardiovascular disease whose cause of death is considered unknown (i.e. no other fatal cause such as cardiovascular disease, cancer, trauma, infection)	No ICD code
8.20	<b>Presumed Cancer Death:</b> Applies to a participant with documented cancer within the last 5 years whose cause of death is considered unknown (i.e. no other fatal cause such as cardiovascular disease, cancer, trauma, infection)	No ICD code
8.30	<b>Unknown Death:</b> Death of unknown cause in a participant without documented evidence of cancer, cardiovascular disease, infection.	R99