

Covered Critical Illness Conditions Appendix

Effective Date: July 1, 2007

Version No. 1

IMPORTANT NOTES

- a. This Appendix contains definitions for those Conditions that are covered under each of Manulife Financial's Group Critical Illness plans (the "Plan(s)"), the Comprehensive Critical Illness Plan and the Child Critical Illness Plan. A Plan Member may not have Coverage for all conditions listed in this document, as his Coverage is limited to those Conditions covered under the Plan that applies to him. covered under the Plan that applies to him.
- b. Covered Conditions are those recognized within the medical profession as being of a critical nature. Advances in the medical knowledge and treatment of critical illnesses will evolve, and accordingly Manulife Financial reserves the right to change the contract definitions for Conditions covered under any given Plan. Any such changes shall be reflected in a re-issued version of this Appendix. All claims under this Policy shall be adjudicated using the definition of any Condition(s) that is in effect at the time the claim is incurred. Accordingly, the Plan Member must ensure that he has the most current version of this Appendix at the time he submits a claim under this Policy.

COMPREHENSIVE CRITICAL ILLNESS PLAN

The following Conditions are covered under the Comprehensive Critical Illness Plan:

Critical Illness Policy Definitions

CANCER

Cancer is defined as a tumour characterized by the uncontrolled growth and spread of malignant cells and the invasion of tissue.

Exclusion for Certain Cancers: The following cancers are excluded from coverage:

- a. carcinoma in situ
- b. Stage 1A malignant melanoma (melanoma less than or equal to 1.0 mm in thickness, not ulcerated and without level IV or V invasion)
- c. any non-melanoma skin cancer that has not become metastatic (spread to distant organs)
- d. stage A (T1a or T1b) prostate cancer
- e. any tumour in the presence of any HIV

Moratorium Period Exclusion: No Benefit will be payable in relation to this condition if, within the first 90 days following the later of:

- a. the effective date of this Policy, or
- b. the effective date of last reinstatement of this Policy,

the insured person has any of the following:

- a. signs or symptoms that lead to a diagnosis of cancer (covered or excluded under this Policy), regardless of the date when the diagnosis is made; or
- b. medical consultations or tests that lead to a diagnosis of cancer (covered or excluded under this Policy), regardless of the date when the diagnosis is made; or
- c. a diagnosis of cancer (covered or excluded under this Policy).

This information must be reported to Manulife Financial within 6 months of the date of the first diagnosis. If this information is not so provided, Manulife Financial has the right to deny any claim for cancer or, any critical illness caused by any cancer or its treatment.

**CORONARY ARTERY
BYPASS SURGERY**

Coronary Artery Bypass Surgery is defined as the undergoing of heart surgery to correct narrowing or blockage of one or more coronary arteries with bypass grafts, excluding any non-surgical techniques such as balloon angioplasty or laser relief of an obstruction or other non-coronary artery bypass graft medical treatments.

HEART ATTACK

Heart Attack (Myocardial Infarction) is defined as the death of a portion of heart muscle as a result of inadequate blood supply to the relevant area. The diagnosis must be based on:

- a. new electrocardiographic changes consisting of the development of Q waves and/or ST segment elevation not previously present or any other changes indicative of a myocardial infarction, and
- b. elevation of cardiac biochemical markers to levels considered diagnostic for infarction.

Exclusion: Heart attack does not include and no Benefit shall be payable for an incidental finding of ECG changes suggesting a prior myocardial infarction, in the absence of a corroborating event.

STROKE

Stroke (Cerebrovascular Accident) is defined as a cerebrovascular event producing neurological sequelae lasting more than 30 days and caused by intracranial thrombosis or hemorrhage, or embolism from an extra-cranial source. There must be evidence of measurable, objective neurological deficit.

Exclusion: Transient Ischemic Attacks are specifically excluded.

ALZHEIMER'S DISEASE

Alzheimer's Disease is defined as a definitive clinical diagnosis by a specialist in the diagnosis and treatment of Alzheimer's Disease, which is a progressive degenerative disease of the brain. The Insured must exhibit the loss of intellectual capacity involving impairment of memory and judgment, which results in a significant reduction in mental and social functioning, as to require continuous daily supervision.

Exclusion: All other organic brain disorders and psychiatric illnesses that result in dementia are specifically excluded.

AORTIC SURGERY

Aortic Surgery is defined as the undergoing of surgery for disease of the aorta requiring excision and surgical replacement of the diseased aorta with a graft. Aorta refers to the thoracic and abdominal aorta but not its branches.

Exclusion: Surgery for the diseases of the branches of the thoracic aorta or abdominal aorta is specifically excluded.

BENIGN BRAIN TUMOUR

Benign Brain Tumour is defined as a non-malignant tumour arising from the brain or meninges. The histologic nature of the tumour must be confirmed by examination of tissue (biopsy or surgical excision).

Exclusion for Certain Tumours: Tumours of the bony cranium and pituitary microadenomas (less than 10 mm in diameter) are excluded.

Moratorium Period Exclusion: No benefit under this condition will be payable in relation to this condition if, within the first 90 days following the later of:

- a. the effective date of this Policy, or
- b. the effective date of last reinstatement of this Policy,

the insured person has any of the following:

- a. signs or symptoms that lead to a diagnosis of Benign Brain Tumour, regardless of the date when the diagnosis is made, or
- b. medical consultations, tests or any form of clinical evaluation, that lead to a diagnosis of Benign Brain Tumour, regardless of when the diagnosis is made; or
- c. a diagnosis of Benign Brain Tumour.

This information must be reported to Manulife Financial within 6 months of the date of the first diagnosis. If this information is not so provided, Manulife Financial has the right to deny any claim for Benign Brain Tumour or any critical illness caused by Benign Brain Tumour or its treatment.

BLINDNESS

Blindness is defined as the total and irreversible loss of vision in both eyes as confirmed by an ophthalmologist, with the corrected visual acuity being 20/200 or less in each eye or the field of vision is less than 20 degrees in both eyes.

COMA

Coma is defined as a state of unconsciousness with no reaction to external stimuli or response to internal needs for a continuous period of four days. The Glasgow coma score must be four (4) or less, continuously during the four days.

Exclusions: Medically induced comas are specifically excluded.

DEAFNESS

Deafness is defined as the total and irreversible loss of hearing in both ears, with an auditory threshold of 90 decibels or greater within the speech threshold of 500 to 3,000 cycles per second.

**HEART VALVE
REPLACEMENT**

Heart Valve Replacement is defined as the replacement of any heart valve with either a natural or mechanical valve.

Exclusion: Heart valve repair is specifically excluded.

KIDNEY FAILURE

Kidney Failure (End Stage Renal Disease) is defined as end stage renal disease presenting as chronic irreversible failure of both kidneys to function, as a result of which either regular hemodialysis, peritoneal dialysis or renal transplantation is initiated.

LOSS OF LIMBS

Loss of Limbs is defined as the irreversible severance of two or more limbs above the wrist or ankle joint as the result of an accident or medically required amputation.

LOSS OF SPEECH

Loss of Speech is defined as the total and irreversible loss of the ability to speak as the result of physical injury or disease which must be established for a continuous period of at least 180 days.

Exclusion: All psychiatric related causes are specifically excluded.

**MAJOR ORGAN OR
BONE MARROW
TRANSPLANT**

Major Organ or Bone Marrow Transplant is defined as the diagnosis of the irreversible failure of the heart, both lungs, liver, both kidneys or bone marrow as a result of which transplantation is medically necessary.

To qualify under Major Organ or Bone Marrow Transplant the Insured must undergo surgery as the recipient for transplantation of a heart, lung, liver, kidney or bone marrow, and limited to these entities.

Exclusion: A transplantation that is not medically necessary is specifically excluded.

**MAJOR ORGAN OR
BONE MARROW FAILURE
ON WAITING LIST**

Major Organ or Bone Marrow Failure on Waiting List is defined as the diagnosis of the irreversible failure of the heart, both lungs, liver, both kidneys or bone marrow as a result of which transplantation must be medically necessary.

To qualify under Major Organ or Bone Marrow Failure on Waiting List the Insured must become enrolled as the recipient in an approved government organ or bone marrow transplant program in Canada or the U.S., for one or more of the organs or bone marrow specified in this provision. For the purposes of the Survival Period, the date of diagnosis is the date your enrolment in such a transplant program takes effect.

**MOTOR NEURON
DISEASE**

Motor Neuron Disease is defined as a definitive diagnosis of one of the following: amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease), primary lateral sclerosis, progressive spinal muscular atrophy, progressive bulbar palsy, or pseudo bulbar palsy, and limited to these entities.

MULTIPLE SCLEROSIS

Multiple Sclerosis is defined as a diagnosis that is made in accordance with one of the two methods outlined below, either of which will be acceptable to Manulife Financial:

- a. A diagnosis by a neurologist of Multiple Sclerosis, characterized by well defined neurological abnormalities persisting for a continuous period of at least six months or with evidence of two separate clinically documented episodes. Multiple areas of demyelination must be confirmed by MRI scanning or imaging techniques generally used to diagnose multiple sclerosis.

OR

- b. A diagnosis of Multiple Sclerosis by a neurologist, in accordance with definitions established by the International Panel on MS Diagnostic Criteria in the tables below:

TABLE 1

INTERNATIONAL PANEL CRITERIA (2005 REVISIONS TO THE MCDONALD CRITERIA) FOR DIAGNOSIS OF MS	
Clinical Presentation	Additional Data Needed for MS Diagnosis
Two or more attacks; objective clinical evidence of 2 or more lesions	None ^a
Two or more attacks; objective clinical evidence of 1 lesion	Dissemination in space, demonstrated by: • MRI ^b OR • 2 or more MRI-detected lesions consistent with MS plus positive CSF ^c OR • await further clinical attack implicating a different site
One attack; objective clinical evidence of 2 or more lesions	Dissemination in time, demonstrated by: • MRI ^b OR • Second clinical attack
One attack; objective clinical evidence of 1 lesion (monosymptomatic presentation; clinically isolated syndrome)	Dissemination in space, demonstrated by: • MRI ^b OR • 2 or more MRI-detected lesions consistent with MS plus positive CSF ^c AND Dissemination in time, demonstrated by: • MRI ^b OR • Second clinical attack
Insidious neurological progression suggestive of MS	One year of disease progression (retrospectively or prospectively determined) AND 2 out of the following 3: a. Positive brain MRI (9 T2 lesions or 4 or more T2 lesions with positive visual evoked potentials) b. Positive spinal cord MRI (2 or more focal T2 lesions) c. Positive CSF (isoelectric focusing evidence of OCB and/or elevated IgG index)
^a Brain MRI is recommended to exclude other etiologies ^b MRI criteria for dissemination in space or time are described in Table 2 ^c Positive CSF defined as oligoclonal bands different from those in serum, or raised IgG index	

TABLE 2

**MAGNETIC RESONANCE IMAGING CRITERIA FOR BRAIN ABNORMALITY:
SPACE AND TIME DISSEMINATION**
Magnetic Resonance Imaging Criteria to Demonstrate Dissemination of Lesions in Time (DIT)

There are two ways to show DIT using imaging:

- a. Detecting gadolinium enhancement at least 3 months after the onset of the initial clinical event, if not at the site corresponding to the initial event.
- b. Detecting a NEW T2 lesion if it appears at any time compared to a reference scan done at least 30 days after the onset of the initial clinical event.

**Magnetic Resonance Imaging Criteria to Demonstrate Brain Abnormality and Demonstration of
Dissemination in Space (DIS)**

Three out of four of the following:

1. One gadolinium-enhancing lesion or nine T2 hyperintense lesions if there is no gadolinium-enhancing lesion
2. At least one infratentorial lesion
3. At least one juxtacortical lesion
4. At least three periventricular lesions

NOTE: A spinal cord lesion can be considered equivalent to a brain infratentorial lesion: an enhancing spinal cord lesion is considered to be equivalent to an enhancing brain lesion, and individual spinal cord lesions can contribute along with individual brain lesions to reach the required number of T2 lesions.

**OCCUPATIONAL
HIV INFECTION**

Occupational HIV Infection is defined as the diagnosis of Human Immunodeficiency Virus (HIV) resulting from accidental injury during the course of the Insured's normal occupation, which exposed the person to HIV contaminated body fluids.

Payment of the Benefit in relation to this condition requires satisfaction of all of the following criteria:

- a. The accidental injury must be reported to the Policyholder within fourteen (14) days of the accidental injury;
- b. An HIV test must be taken within fourteen (14) days of the accidental injury and the result must be negative;
- c. An HIV test must be taken between ninety (90) days and one hundred eighty days (180) after the accidental injury and the result must be positive;
- d. All HIV tests must be performed by licensed HIV testing facilities and personnel;
- e. The accidental injury must have been reported, investigated and documented in accordance with current Canadian workplace guidelines.

Exclusions: No payment of this Benefit will be made if:

- a. the Insured has elected not to take any available licensed vaccine or any other form of treatment offering protection against HIV;
- b. a licensed cure for HIV infection has become available prior to the payment of the Benefit; or
- c. HIV infection has occurred as a result of non-accidental injury (including, but not limited to, sexual transmission or intravenous (IV) drug use).

PARALYSIS

Paralysis is defined as the complete and permanent loss of use of two or more limbs for a continuous period of 90 days following the precipitating event, during which time there has been no sign of improvement.

Exclusion: All psychiatric related causes for paralysis are specifically excluded.

PARKINSON'S DISEASE

Parkinson's Disease is defined as a definitive diagnosis by a specialist of primary idiopathic Parkinson's Disease, which is characterized by a minimum of two or more of the following clinical manifestations: muscle rigidity, tremor, or bradykinesia (abnormal slowness of movement, sluggishness of physical and mental responses). The Insured must require substantial physical assistance from another adult to perform at least 2 of the following 6 Activities of Daily Living:

- a. Bathing – the ability to wash oneself in a bathtub, shower or by sponge bath, with or without the aid of equipment.
- b. Dressing – the ability to put on and remove necessary clothing including braces, artificial limbs or other surgical appliances.
- c. Toileting – the ability to get to and from the toilet and maintain personal hygiene.
- d. Bladder and Bowel Continence – the ability to manage bowel and bladder function with or without protective undergarments or surgical appliances so that a reasonable level of hygiene is maintained.
- e. Transferring – the ability to move in and out of a bed, chair or wheelchair, with or without the use of equipment.
- f. Feeding – the ability to consume food or drink that already have been prepared and made available, with or without the use of adaptive utensils.

Exclusion: All types of Parkinsonism other than the type described in this section are specifically excluded.

SEVERE BURNS

Severe Burns is defined as third degree burns over at least 20% of the body surface.

CHILD CRITICAL ILLNESS PLAN

The following Conditions are covered under the Child Critical Illness Plan:

Critical Illness Policy Definitions

CANCER

Cancer is defined as a tumour characterized by the uncontrolled growth and spread of malignant cells and the invasion of tissue.

Exclusion for Certain Cancers: The following cancers are excluded from coverage:

- carcinoma in situ
- Stage 1A malignant melanoma (melanoma less than or equal to 1.0 mm in thickness, not ulcerated and without level IV or V invasion)
- any non-melanoma skin cancer that has not become metastatic (spread to distant organs)
- stage A (T1a or T1b) prostate cancer
- any tumour in the presence of any HIV

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- a. the effective date of this Policy, or
- b. the effective date of last reinstatement of this Policy,

the insured person has any of the following:

- a. signs or symptoms that lead to a diagnosis of cancer (covered or excluded under this Policy), regardless of the date when the diagnosis is made; or
- b. medical consultations or tests that lead to a diagnosis of cancer (covered or excluded under this Policy), regardless of the date when the diagnosis is made; or
- c. a diagnosis of cancer (covered or excluded under this Policy).

This information must be reported to Manulife Financial within 6 months of the date of the first diagnosis. If this information is not so provided, Manulife Financial has the right to deny any claim for cancer or, any critical illness caused by any cancer or its treatment.

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PARALYSIS

Paralysis is defined as the complete and permanent loss of use of two or more limbs for a continuous period of 90 days following the precipitating event, during which time there has been no sign of improvement.

Exclusion: All psychiatric related causes for paralysis are specifically excluded.

**CONGENITAL
HEART DISEASE**

Congenital Heart Disease is defined as any one or more diagnosis(es) from the following lists of heart conditions:

List A

- a. Total Anomalous Pulmonary Venous Connection
- b. Transposition of The Great Vessels
- c. Atresia of any heart valve
- d. Coarctation of The Aorta
- e. Single Ventricle
- f. Hypoplastic Left Heart Syndrome
- g. Double Outlet Left Ventricle
- h. Truncus Arteriosus
- i. Tetralogy of Fallot
- j. Eisenmenger Syndrome
- k. Double Inlet Ventricle
- l. Hypoplastic Right Ventricle
- m. Ebstein's Anomaly

The foregoing conditions shall be covered following the expiry of a 30 day Survival Period, commencing from the date of diagnosis or birth, whichever is the later of the two. The diagnosis of any of the conditions in List A must be made by a qualified pediatric cardiologist, and supported by appropriate cardiac imaging.

List B

- a. Pulmonary Stenosis
- b. Aortic Stenosis
- c. Discrete Subvalvular Aortic Stenosis
- d. Ventricular Septal Defect
- e. Atrial Septal Defect

The foregoing conditions shall be covered only when open heart surgery is performed for correction of the condition and following the expiry of a 30 day survival period from the date of diagnosis or birth, whichever is the later of the two. The diagnosis of any of the conditions in this List B must be made by a qualified pediatric cardiologist and supported by appropriate cardiac imaging. The surgery must be recommended by a qualified pediatric cardiologist and performed by a cardiac surgeon in Canada.

List B Exclusion: Trans-catheter procedures such as balloon valvuloplasty or percutaneous Atrial Septal Defect closure are excluded.

General Exclusions: All other congenital cardiac conditions, not specifically listed herein, are excluded.

CEREBRAL PALSY

Cerebral Palsy is defined as a definitive diagnosis of definite Cerebral Palsy, a non-progressive neurological defect characterized by spasticity and incoordination of movements.

DOWN'S SYNDROME

Down's Syndrome is defined as a definitive diagnosis of Down's Syndrome supported by chromosomal evidence of Trisomy 21.

CYSTIC FIBROSIS

Cystic Fibrosis is defined as a definitive diagnosis of Cystic Fibrosis with evidence of chronic lung disease and pancreatic insufficiency.

MUSCULAR DYSTROPHY

Muscular Dystrophy is defined as a definitive diagnosis of Muscular Dystrophy, characterized by well defined neurological abnormalities, confirmed by electromyography and muscle biopsy.

AUTISM

Autism is defined as an organic defect in brain development characterized by failure to develop communicative language or other forms of social communication, with the diagnosis confirmed either by a pediatric psychiatrist or a pediatrician before the Child's third birthday.

**TYPE 1
DIABETES MELLITUS**

Type 1 Diabetes Mellitus (Juvenile Diabetes) is defined as a diagnosis of type 1 diabetes mellitus, characterized by absolute insulin deficiency and continuous dependence on exogenous insulin for survival. The diagnosis must be made by a qualified pediatrician or endocrinologist licensed and practising in Canada, and there must be evidence of dependence on insulin for a minimum of three months.

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