ENTITLEMENT ELIGIBILITY GUIDELINE

CERVICAL SPINE CONDITIONS

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DEFINITION

For the purposes of this Entitlement Eligibility Guideline (EEG) the following conditions are included:

- Cervical Disc Disease
- Degenerative Disc Disease of the Cervical Spine
- Intervertebral Disc Prolapse/ Herniation of the Cervical Spine
- Osteoarthritis of the Cervical Spine
- Cervical Facet Syndrome
- Cervical Spondylosis
- Chronic Mechanical Cervical/ Neck Pain
- Chronic Cervical Sprain/ Strain
- Whiplash Associated Disorder/ Chronic Whiplash Syndrome
- Chronic Myofascial Pain of the Cervical Region

The diagnoses of Cervical Disc Disease, Degenerative Disc Disease of the Cervical Spine and Intervertebral Disc Prolapse/Herniation of the Cervical Spine are synonymous.

Degenerative disc disease is a term used to describe the changes in the spinal discs due to age and/ or injury.

The breaking open of a spinal disc is called a prolapsed or herniated disc.

Veterans Affairs Canada (VAC) considers the diagnosis of Cervical Facet Syndrome to be synonymous with the diagnosis of Osteoarthritis of the Cervical Spine.

Osteoarthritis of the Cervical Spine is a degenerative joint disease of the facet and/or uncovertebral joints.

Cervical Facet Syndrome is a clinical diagnosis which may be provided if facet joint injury, or dysfunction, results in neck pain but facet joint osteoarthritis is not seen on diagnostic imaging of the cervical spine, e.g., X-ray, CT or MRI.

Cervical Spondylosis is a broad term to identify degenerative changes of the cervical spine and includes Cervical Disc Disease and Osteoarthritis of the Cervical Spine.

Chronic Mechanical Cervical/ Neck Pain is a diagnosis used to indicate chronic neck pain is emanating from the structural elements of the cervical spine.

The structural elements of the cervical spine include the vertebrae, joints of the spinal column, and relevant intervertebral discs, ligaments, muscles and tendons.

Chronic Cervical Sprain is a diagnosis used to indicate chronic neck pain due to the stretching or tearing of a neck ligament(s).

Chronic Cervical Strain is a diagnosis used to indicate chronic neck pain due to the stretching or tearing of a neck muscle(s) and/or tendon(s).

Whiplash Associated Disorder/Chronic Whiplash Syndrome is a diagnosis used to indicate chronic neck symptoms after a neck injury due to forceful, rapid back-and-forth movement of the neck.

Chronic Myofascial Pain of the Cervical Region is a diagnosis used to indicate chronic neck pain attributed to muscles and the surrounding fasciae.

NOTE: The Anatomy and Physiology and Clinical Features sections of this EEG contain detailed information on the above conditions and Spinal Stenosis.

DIAGNOSTIC STANDARD

The diagnosis is made clinically by a qualified medical practitioner, with or without radiological evidence. The diagnosis of Cervical Disc Disease (CDD) or Osteoarthritis (OA) of the Cervical Spine cannot be made on the basis of degenerative changes on imaging studies alone (e.g., X-ray, CT or MRI). The diagnosis of CDD or OA of the Cervical Spine requires the presence of symptoms (e.g., neck pain, radicular symptoms).

The presence of degenerative changes, CDD or Cervical Spine OA, on imaging studies done at the time of the onset of neck symptoms does not indicate a pre-existing clinical condition of CDD or OA of the Cervical Spine.

Full entitlement of CDD or OA of the Cervical Spine can be considered in the presence of radiographic degenerative changes at the time of the onset of symptoms.

For example:
A CAF member of a helicopter aircrew has a claimed condition of Cervical Disc Disease.

He had the onset of symptoms during flight. He has no previous diagnosis of Osteoarthritis of the Cervical Spine or Cervical Disc Disease in his Service Health Records. His clinical symptoms have persisted for six months.

MRI completed two months after the onset of neck symptoms indicated moderate degenerative changes.

Full entitlement of the claimed condition of CDD can be considered.

NOTE: Entitlement should be granted for a chronic condition only. For VAC purposes, "chronic" means the signs and symptoms of the condition have existed for at least six months. Signs and symptoms are generally expected to persist despite medical attention, although they may wax and wane over the six month period and thereafter.

ANATOMY AND PHYSIOLOGY

The spinal region consists of soft tissues, bony elements and nerve tissue.

Soft tissues of the Cervical Spinal Region:

The soft tissues of the cervical spinal region include the muscles, overlying fascia, tendons and ligaments.

There are many layers of muscles in the cervical spinal region controlling the movement of the neck. Each muscle is attached to a bone with a strong fibrous cord called a tendon.

Fascia is a sheet of fibrous tissue which separates, encloses and stabilizes muscles.

A ligament is a band of fibers which serves to connect bones and stabilize joints.

The Bony Elements of the Cervical Spine:

The main function of the back bone, the spine, is to provide rigid support for the neck and back and to provide bony protection to the spinal cord.

The spinal cord is a large bundle of nerves which carries information between the brain and the rest of the body to provide sensation to the skin, control muscle movement and regulate the function of body organs such as the heart or bladder. The information is carried from the spinal cord to the body by spinal nerves.

The Spine:

The spine is composed of 33 individual bones called vertebrae. Each vertebra resembles a building block. Each vertebrae sits on top of the next lower vertebra to form

a column down the spine. The spine is also referred to as the spinal, or vertebral, column.

The vertebral column is divided into five sections. The top section, in the neck, is the cervical region, or cervical spine, and consists of 7 vertebrae. The top cervical vertebrae is identified as C1, the second cervical vertebrae is identified as C2, the third as C3 and so on.

The spinal section below the cervical vertebrae is the thoracic spine. This is the region of the spine which is behind the chest. Each vertebra in the thoracic region has an attached rib. There are twelve thoracic vertebrae which are labelled, in descending order down the spine, T1 to T12.

The next lower section is the lumbar spine. This region is often called the “low back”. The lumbar spine has five lumbar vertebrae, L1-L5.

Below the lumbar spine is the sacrum. The sacrum has five vertebrae, S1-S5. These vertebrae are fused into one large bone and form the back section of the pelvis. Occasionally the lowest lumbar vertebrae, L5, can be partially, or completely, fused to the top of the sacrum. This is termed sacralization of the lumbar vertebrae.

Below the sacrum are the coccygeal vertebrae, Co1- Co4. These are four small vertebrae often referred to as the tailbone. These vertebrae may be fused or separate.

The Curvature of the Spine:

The vertebral column is slightly s-shaped when viewed from the side. The cervical spine is convex and curves slightly towards the throat. This normal curvature of the cervical spine is termed lordosis. The thoracic vertebrae is concave and curves slightly away from the rib cage. The lumbar vertebrae is also convex and curves towards the abdomen. The curvature of the lumbar spine is also referred to as lordosis.

Vertebrae:

The vertebrae change shape and size down the vertebral column but most share a basic structure. The typical vertebra has a body which resembles a building block. Attached to the body is the neural arch. The neural arch is a semicircle of bone which extends posteriorly from the body of the vertebrae. This arch has a large central opening, or canal. This spinal canal is the opening through which the spinal cord passes as it travels from the brain down the spine.

On each side of the neural arch is a notch, the neural foramina. The spinal nerve travels from the spinal cord through the neural foramina and out to the body.

On each side of the neural arch is a small synovial joint called the facet joint. The function of the facet joints is to guide, and limit, the movement of the vertebra within the

spinal column. The facet joints are also called apophyseal joints, zygoapophyseal joints or z-joints.

Cervical Vertebrae:

The cervical vertebrae have several distinct differences from the vertebrae in the rest of the spinal column.

The first and second cervical vertebrae, C1 and C2, are uniquely shaped. The first cervical vertebrae, C1, is a ring of bone which sits under the skull and supports the weight of the skull. It is often called the atlas.

The second cervical vertebrae, C2, is the strongest of the cervical vertebrae and termed the axis. C2 has an upward bony projection, the dens, which helps to stabilize C1. The shape of C1 and C2 allow for significant movement. C1 and C2 provide much of the rotation, flexion, extension and lateral bending of the neck.

The appearance of the C3-C7 vertebrae is more typical. These vertebrae contain unique joints; the uncovertebral joints, or Joints of Luschka. These joints are on small upward projections on the sides of the upper surface of the body of C3-C7. These joints are important in preventing excessive movement of the cervical spine.

Intervertebral Discs:

The intervertebral discs lie between the bodies of adjacent vertebrae. These discs serve as a cushion between the vertebrae. Discs consist of a tough outer fibrous ring, the annulus fibrosis, which surrounds the soft gel-like center the nucleus pulposis. The area where the disc attaches to the bony vertebra is the vertebral end plate.

Intervertebral discs are typically named for the vertebra above and the vertebra below. For example, the intervertebral disc between C3 and C4 is referred to as the C3-C4 disc.

Nerve Tissue of the Cervical Spinal Region:

Spinal Cord:

The spinal cord carries information between the brain and the rest of the body to provide sensation to the skin, control muscle movement and regulate the function of body organs such as the heart or bladder.

The spinal cord is a cylindrical structure which begins as a continuation of the brain and exits the skull at the foramen magnum; a large opening on the bottom of the skull. The spinal cord is thicker in the cervical region than in the thoracic or lumbar regions and fills more of the space in the spinal canal.

The spinal cord continues down the spinal column to the level of the first or second lumbar vertebrae.

The end of the spinal cord is the conus medullaris. Below the spinal cord the spinal nerves travel through the spinal canal and exit at the appropriate lumbar vertebrae. The appearance of the spinal nerves in the spinal canal of the lumbar region resembles a horse's tail and is named the cauda equina (latin for horse's tail).

Spinal Nerves:

The spinal cord carries information between the brain and body to provides sensation to the skin, control the movement of muscles and regulate the function of body organs such as the heart or bladder. The information leaves the spinal cord as the spinal nerves. Two spinal nerves exit below each vertebra. One exits from the left side of the vertebrae and travels to the left side of the body, the other exits from the right side of the vertebrae and travels to the right side.

The cervical spine has seven vertebrae but there are eight cervical spinal nerves. The first cervical spinal nerve emerges from the spinal column above C1. The second cervical spinal nerve emerges below C1. Spinal nerves C3- C7 emerge above their corresponding vertebrae. For example, C3 spinal nerve emerges above the third cervical vertebrae. The eighth spinal nerve, C8 emerges below the seventh cervical vertebrae.

The part of the spinal nerve as it exits the spinal canal is termed the spinal root.

The spinal nerves are delicate structures and are subject to injury from compression or stretching.

Spinal nerves travel to very specific destinations. For example, the spinal nerve which exits above the right side of the fifth cervical vertebrae, spinal nerve C5, travels to, or innervates, the muscles which lift the right shoulder and to the skin to provide sensation to the lateral aspect of the right upper arm. The C5 spinal nerve which exits the left side of the vertebrae travels to the same areas on the left side of the body.

The area of skin innervated by a single nerve root is a dermatome. The muscle, or group of muscles, which are innervated by a spinal nerve are a myotome.

Spinal Nerve	Dermatome (provides sensation)	Myotome (controls the muscles)
C5	lateral aspect of the upper arm and shoulder	abduction of the shoulder flexion of the elbow
C6	lateral forearm and thumb	flexion of the elbow

C7	dorsal aspect of the arm, forearm and middle finger	extension of the elbow
C8	medial forearm, ring and little fingers	flexion of the fingers

CLINICAL FEATURES

Cervical Sprains and Strains:

Cervical Sprain, the stretching or tearing of a neck ligament(s) and Cervical Strain, the stretching or tearing of a neck muscle(s) and/or tendon(s) present with identical signs and symptoms.

Signs and symptoms may include discomfort/ pain, tenderness, tightness/stiffness and/or decreased range of motion.

Myofascial Pain of the Cervical Region:

Myofascial Pain of the Cervical Region may present with the same signs and symptoms as Cervical Sprains and Strains and/ or with typical patterns of radiating pain referred from trigger points (sensitive areas in muscles or fasciae that become painful when compressed).

Spondylosis:

Spondylosis is a broad term to identify degenerative changes of the spine and includes cervical disc disease, facet joint osteoarthritis and uncovertebral joint osteoarthritis. Most individuals with cervical spondylosis are older than 40 years.

Cervical Disc Disease:

In the earliest stage of cervical disc degeneration, fissures or cracks develop in the annulus fibrosis. The cracks extend from the nucleus pulposis and travel into, but not completely through, the annulus fibrosis. This is known as internal disc disruption (IDD).

Degeneration of the disc causes a loss of disc height.

In later stages of disc degeneration, the fissure(s) in the annulus fibrosis can go completely through the annulus fibrosis. The nucleus pulposus may herniate through the fissure(s) in the annulus. This is referred to as a herniated disc or a ruptured disc.

A ruptured disc can cause pain by several mechanisms. The disc can compress the adjacent pain sensitive soft tissues or the exposed disc material can cause inflammation of adjacent tissues.

The ruptured disc can also protrude and compress, or inflame, the spinal nerve root. The symptoms resulting from the compressed spinal nerve are called radiculopathy.

Most cervical disc disease involves the lower cervical spine and spinal nerves C5-C8.

Facet Joint Osteoarthritis:

Osteoarthritis is a degenerative joint disease of synovial joints. The facet joints of the cervical spine are synovial joints and are a very common site for the development of osteoarthritis. Osteoarthritis can also affect the uncovertebral joints (Joints of Luschka).

Osteophytes can be present on the margins of a joint affected by osteoarthritis. Osteophytes, commonly referred to as bone spurs, are bony projections. Osteophytes may be produced by a normal joint attempting to adapt to excessive loads or an injured joint which is no longer able to support the expected load.

As facet and uncovertebral joint osteoarthritis progresses, the joint may become enlarged. The enlarged joint and osteophytes can encroach on the surrounding structures.

The facet joints are located just behind the spinal nerve as the nerve emerges from the neural foramina. The enlargement of the joint and presence of osteophytes can cause narrowing of the neural foramina and compression of the nerve root.

Spinal Stenosis:

Cervical spondylosis can result in ruptured intervertebral discs, enlarged facet joints and/or osteophytes which can crowd the bony spinal canal. This crowding can decrease the volume of the space in the spinal canal available for the spinal cord.

This narrowing of the spinal canal is termed spinal stenosis.

Acquired spinal stenosis is spinal stenosis due to cervical disc disease or cervical facet joint osteoarthritis.

Congenital spinal stenosis is present at birth as a normal variant in the population or due to congenital conditions.

NOTE: Entitlement of a spinal condition includes spinal stenosis. See Entitlement Considerations, Section B of this EEG.

Signs and symptoms of Cervical Spondylosis:

Cervical spondylosis can result in three main clinical presentations:
1) axial pain
2) cervical radiculopathy
3) cervical myelopathy

An individual's clinical presentation may be a combination of any, or all, of these clinical presentations.

Axial neck pain:

Axial neck pain is pain along the spinal column in the neck and the adjacent muscles. The pain can radiate to the back of the head (subocciptal area), to the upper back (periscapular area) or to the shoulder area. Axial pain is often accompanied by stiffness.

Cervical Radiculopathy - Compression of a Spinal Nerve Root:

The spinal nerves are delicate structures and are subject to injury from compression or stretching.

The signs and symptoms which result from an injured spinal nerve are termed radiculopathy.

The signs and symptoms of radiculopathy can include:
1) sensory change, such as tingling, known as paresthesia
2) sensory loss to the skin in the dermatone (the area of skin innervated by the nerve)
3) weakness in the myotome (the muscles innervated by the spinal nerve)
4) diminished, or absent, reflex in the muscles controlled by the spinal nerve
5) pain felt along the path of the spinal nerve (radicular pain).

Radicular pain is the most common symptom of cervical radiculopathy.

Radicular arm pain is frequently unilateral.

Radicular pain is typically exacerbated by sneezing or straining.

Compression of a spinal nerve results in an expected pattern of signs and symptoms which is distinct for each spinal nerve. This distinct pattern is called the radicular, or dermatomal, pattern.

The diagnosis of a spinal nerve compression is based upon the presence of one, or more, signs and symptoms present in the expected dermatomal pattern of the spinal nerve being compressed.

Determining the presence of radiculopathy of cervical spinal nerves is more difficult than other areas of the spine, such as the lumbar spine. There is much crossover in the innervation of the arm which results in much crossover of the myotomes and dermatomes of the arm.

Radiculopathy of cervical spinal nerves does not always result in the expected dermatomal pattern of a single nerve root.

Most cervical spondylosis involves spinal nerves C5, C6, C7 and C8. C7 spinal nerve is the most commonly involved spinal nerve and results from C6-7 disc disease or facet joint osteoarthritis.

The expected dermatomal patterns of signs and symptoms for spinal nerves C5, C6, C7 and C8 are:

C5 spinal nerve
Sensory loss, or change, over the lateral aspect of the upper arm.
Weakness of shoulder abduction and elbow flexion.
Loss of biceps reflex.

C6 spinal nerve
Sensory loss, or change, over the radial (lateral) aspect of the forearm and the thumb.
Weakness of elbow flexion.
Weak biceps reflex.
Radicular pain radiates from the base of the neck to the lateral elbow, the radial (lateral) forearm and into the thumb.

C7 spinal nerve (most commonly involved cervical nerve root)
Sensory loss, or change, over the dorsal aspect of arm and forearm and middle finger.
Weakness of elbow extension.
Loss of triceps reflex.
Radicular pain radiates from the neck to the shoulder, down along the triceps along the dorsum (back) of the forearm to the middle finger.

C8 spinal nerve
Sensory loss over the ulnar (medial) aspect of the forearm and the ring and little fingers.
Weakness of finger flexion.
Radicular pain involves the ulnar (medial) aspect of the arm and forearm and radiates to the ring and little fingers.

Other Physical Examination Signs due to Compression of a Spinal Nerve Root:

Individuals with radicular arm pain often hold their head titled away from the painful arm. They sometimes rest the wrist, or forearm, of the painful arm on top of their head.

Extension and lateral rotation of the neck towards the side of the pain typically exaggerates the pain.

The neck is usually tender to palpation.

Cervical Myelopathy - Compression of the Spinal Cord in the Cervical Region:

The spinal cord is thicker in the cervical region than in the thoracic or lumbar regions and fills more of the space in the spinal canal.

Cervical spondylosis can crowd the bony spinal canal. This crowding can decrease the volume of the space in the spinal canal available for the spinal cord. This narrowing of the spinal canal is termed spinal stenosis.

With spinal stenosis, the larger cervical spinal cord can become compressed and injured. Injury of the spinal cord is termed myelopathy.

Signs and Symptoms due to Cervical Myelopathy:

The symptoms due to myelopathy, spinal cord compression, often develop gradually over many months or years.

The spinal cord in the cervical region carries nerves to, and from, the arms (upper extremities) and the legs (lower extremities).

Compression of the spinal cord in the cervical region can result in symptoms in the upper and lower extremities. The symptoms can include changes in both sensation and motor function.

In the upper extremities, the most common symptom is weakness in the hands. This weakness affects the dexterity of the hand. Individuals may indicate difficulty with buttoning and unbuttoning their shirt, picking up coins or a change in handwriting. Grip strength may also be affected. Individuals may drop cups or forks or be unable to carry heavy objects.

Changes to, or loss of, sensation tends to occur in the fingers or palms.

Physical examination of the upper extremities may indicate an increase or a decrease in reflexes.

Bending the neck forward can result in parasthesias or a shock-like pain which extends down the back and into the legs (positive Lhermitte sign). The Hoffman sign may also be positive. The sign is elicited when the distal joint of the middle finger is quickly extended causing a reflex bending of the thumb or index finger.

The more common symptoms in the lower extremities include a change in the ability to walk. Individuals may exhibit a wide based gait in which the feet are placed widely apart when walking. A cane or walker may be required. The individual may lose their ability to tandem walk (placing one foot directly in the front of, and touching, the other foot).

Individuals may have a positive Romberg test. This test is performed by having the person stand with arms at his/her side and with feet together. When the eyes are closed he/she may lose their balance and/or fall.

Most individuals do not have urinary symptoms. If cervical myelopathy has been present for a long time urinary symptoms, such as incontinence, can develop.

Cervical myelopathy rarely results in bowel incontinence.

Whiplash Associated Disorder / Chronic Whiplash Syndrome:

A whiplash injury can affect the soft tissues in the neck and/or the cervical vertebrae, joints of the spinal column and the intervertebral discs. This can lead to a variety of clinical presentations.

A whiplash injury which primarily affects the soft tissues of the neck will have signs and symptoms similar to a sprain or strain.

A whiplash injury which affects the structural elements will have signs and symptoms of similar to Cervical Spondylosis e.g., radicular symptoms.

A whiplash injury can result in the clinical onset of Cervical Spondylosis at the time of the injury or in the onset of Cervical Spondylosis many years later.

Mechanical Cervical/Neck Pain:

Mechanical Cervical/Neck Pain includes pain emanating from the structural elements of the cervical spine, the vertebrae, joints of the spinal column, intervertebral discs, ligaments, muscles and/or tendons.

The clinical features of Mechanical Cervical/Neck Pain are dependent on the structure(s) affected by an injury and/or a disease process. This can lead to a variety of clinical presentations.

Mechanical Cervical/Neck Pain which primarily affects the soft tissues of the neck will have signs and symptoms similar to a sprain or strain.

Mechanical Cervical/Neck Pain which affects the structural elements will have signs and symptoms of similar to Cervical Spondylosis e.g., radicular symptoms.

Imaging Techniques for the detection of Cervical Spine Conditions:

- Cervical Disc Disease
- Facet Joint and Uncovertebral Joint Osteoarthritis
- Spinal Stenosis

Plain X-rays:
Plain x-rays of the cervical spine can identify spondylosis such as osteophytes, disc space narrowing, facet joint hypertrophy, or uncovertebral joint hypertrophy.

Plain X-rays can indicate a loss of the normal cervical lordosis which may be due to localized pain and muscle spasm or cervical disc disease.

Oblique views can demonstrate foraminal narrowing.

Flexion and extension views can demonstrate instability.

Plain x-rays cannot identify the presence of a herniated intervertebral disc or spinal stenosis.

Computerized Tomography:
Computerized Tomography (CT) can identify cervical disc disease, facet joint osteoarthritis and spinal stenosis.

Magnetic Resonance Imaging:
Magnetic Resonance Imaging (MRI) is considered the current standard for advanced imaging of cervical disc disease and spinal stenosis. MRI can image the entire cervical spine, intervertebral discs, the spinal cord and nerve roots.

MRI can identify the presence of degenerative disc disease including annular tears in the disc and small central herniations. MRI can also identify which discs are involved.

MRI is considered to be superior to CT in the detection of degenerative changes within the intervertebral discs.

MRI can identify degeneration of the uncovertebral and facet joints and foraminal stenosis.

MRI is highly sensitive in detecting nerve root entrapment.

MRI can identify spinal stenosis and if the spinal stenosis has resulted in myelopathy (compression of the spinal cord).

ENTITLEMENT CONSIDERATIONS

A. CAUSES AND/OR AGGRAVATION

THE TIMELINES CITED BELOW ARE NOT BINDING. EACH CASE SHOULD BE ADJUDICATED ON THE EVIDENCE PROVIDED AND ITS OWN MERITS.

NOTE: The factors listed in Section A of the Entitlement Considerations include specific timelines for the clinical onset or aggravation of Cervical Spine Conditions. The timelines are not binding. Each case should be adjudicated on the evidence provided and its own merits. If the medical evidence indicates an alternate timeline, consultation with Medical Advisory is strongly recommended.

NOTE: The following list of factors is not all inclusive. Factors, other than those listed in Section A, may be claimed to cause or aggravate a Cervical Spine Condition(s). Other factors may be considered based upon the individual merits and medical evidence provided for each case. Consultation with Medical Advisory is strongly recommended.

1a) Experiencing neck pain during flight in a helicopter or high performance aircraft at the time of the clinical onset or aggravation of the Cervical Spine Condition

NOTE: The neck pain must persist and meet the VAC definition of a chronic condition.

1b) Having a cumulative total of at least 500 hours of flight time in a helicopter or high performance aircraft within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

High performance aircraft is defined as an aircraft capable of routinely sustaining a significant positive G force. G Force is a measure of acceleration.

High performance aircraft include jet fighters (e.g. CF-188 Hornet/CF-18 or equivalent), aircraft flown by the Snowbirds (e.g. modified CT-114 Tutor or equivalent) and certain trainer aircraft (e.g. CT155-Hawk, CT-156 Harvard II or equivalent).

Equivalent aircraft means an aircraft with equivalent capability of routinely sustaining a significant positive G force.

2) Having a cumulative total of at least 5000 hours of flight time in an aircraft within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

3) Having a fracture of the cervical spine before the clinical onset or aggravation of the Cervical Spine Condition

4) Having trauma to the cervical spine within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

Trauma is defined as a discrete event involving the application of significant physical force, including G force.

Trauma includes a whiplash injury which involves forceful, rapid back-and-forth movement of the neck.

5) Carrying loads of at least 2 kilograms on the head while upright for a cumulative total of at least 4500 hours within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

For example: Helmets, night vision goggles.

6) Using a hand-held, vibrating, percussive, industrial tool for a cumulative total of at least 2600 hours within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

7) Maintaining a sustained awkward non-anatomical position of the cervical spine for a cumulative total of at least 4500 hours within the 25 years before the clinical onset or aggravation of the Cervical Spine Condition

Example occupations:
Dental Officer
Vehicle Technician
Combat Engineer
Firefighter

8) Inability to obtain appropriate clinical management of the Cervical Spine Condition.

B. MEDICAL CONDITIONS WHICH ARE TO BE INCLUDED IN ENTITLEMENT/ ASSESSMENT OF A CERVICAL SPINE CONDITION:

- Cervical Disc Disease
- Degenerative Disc Disease of the Cervical Spine
- Intervertebral Disc Prolapse/Herniation of the Cervical Spine
- Osteoarthritis of the Cervical Spine
- Cervical Facet Syndrome
- Cervical Spondylosis
- Cervical Spondylolysis/Spondylolisthesis
- Chronic Mechanical Cervical/Neck Pain
- Chronic Cervical Strain/Sprain
- Whiplash Associated Disorder/Chronic Whiplash Syndrome
- Chronic Myofascial Pain of the Cervical Region
- Cervical Spinal Stenosis

- Diffuse Idiopathic Skeletal Hyperostosis (DISH) of the Cervical Spine
- Spasmodic Torticollis/Cervical Dystonia

C. COMMON MEDICAL CONDITIONS WHICH MAY RESULT IN WHOLE OR IN PART FROM A CERVICAL SPINE CONDITION(S) AND/OR ITS TREATMENT

Section C medical conditions may result in whole or in part as a direct result of a Cervical Spine Condition(s), from the treatment of a Cervical Spine Condition(s) or the combined effects of a Cervical Spine Condition(s) and its treatment.

Conditions listed in Section C of the Entitlement Considerations are only granted entitlement if the individual merits and medical evidence of the case determines a consequential relationship exists. Consultation with Medical Advisory is strongly recommended.

If it is claimed a medication required to treat a Cervical Spine Condition(s) resulted in whole, or in part, in the clinical onset or aggravation of a medical condition the following must be established:

1) The individual was receiving the medication at the time of the clinical onset or aggravation of the medical condition.
2) The medication was used for the treatment of the Cervical Spine Condition(s).
3) The medication is unlikely to be discontinued or the medication is known to have enduring effects after discontinuation.
4) The individual's medical information and the current medical literature support the medication can result in the clinical onset or aggravation of the medical condition.

Note: Individual medications may belong to a class, or grouping, of medications. The effects of a specific medication may vary from the grouping. The effects of the specific medication should be considered and not the effects of the group.

The list of Section C conditions is not all inclusive. Conditions, other than those listed in Section C, may be claimed to have a consequential relationship to a Cervical Spine Condition(s) and/or its treatment. Other conditions may be considered for entitlement based on the individual merits and medical evidence provided for each case. Consultation with Medical Advisory is strongly recommended.

- Cervicogenic Headaches
- Occipital Neuralgia

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