CD Part 1

Musculoskeletal Disorders and Growth Impairments

A. Definitions

The following definitions are for words used in this chapter and during the SSA disability process. If you need additional definitions, consult a good medical dictionary, available in most bookstores and libraries. You can also look at online medical dictionaries like the one at www.medlineplus.gov.

Abduction. Movement of a limb away from the body in a right or left direction.

Adduction. Movement of a limb toward the body from a right or left position.

AK amputation (AKA). Above the knee amputation.

Ankylosing spondylitis. Inflammatory disease of the spine and its supporting ligaments, as well as of the sacroiliac joints and sometimes other parts of the body.

Ankylosis. When a joint or spine is fixed so that it can't move. Ankylosis may be caused by arthritis that fuses joint bones together. For example, an arthritic bone spur may grow across the space of the knee joint so that the joint cannot move. Ankylosis can also be caused by soft tissue damage around a joint, such as scarring of skin and inflamed fibrosis of ligaments and tendons.

Anterior and lateral ligaments. Ligaments that run up and down the outside of the spine, helping hold the vertebrae in place.

Antibodies. See *immunoglobulins.*

Antinuclear antibodies (ANA). Abnormal antibodies are found in bodily fluids of many patients with autoimmune diseases, such as systemic lupus. They form in an area of cells called the nuclei, which contain genetic material controlling cell metabolism. ANA is reported by laboratories as degrees of abnormality called titers. The higher the titer, the more times a sample of serum can be diluted and still have abnormal levels of antibodies. A higher titer reading suggests a more severe disease. For example, an ANA titer of 1:150 means abnormal levels of the antibody are still measured when the bodily fluid has been diluted 150 times; a titer of 1:500 means an abnormal level exists after the fluid is diluted 500 times. Although it is possible for positive ANA results to occur in normal people, they would be in the low titer ranges of 1:20 to 1:40, which are generally interpreted as negative results.

Apophyseal articulations. Parts of the upper and lower surfaces of vertebrae that attach to the intervertebral discs and anterior and lateral ligaments, and run up and down the outside of the spine.

Arachnoiditis. Inflammation of all three membranes covering the spinal cord, and also involving nerve roots.

Arthralgia. Joint pain. Not the same as arthritis, which is a disease affecting a joint. Arthralgia usually accompanies arthritis.

Arthrodesis. Surgical fixation of a joint by means of bone grafts taken from elsewhere in the body, such as a "triple arthrodesis" used to stabilize the ankle. Arthrodesis is also known as surgical fusion.

Atherosclerosis. Degenerative disease of the arteries, causing blockage of blood flow by fatty deposits.

Atrophy. To get smaller.

Biopsy. The process of taking a sample of tissue for detailed analyses of various kinds. Biopsy specimens are observed grossly with the eyes, microscopically with a variety of possible tissue stains, and in some cases may involve specific chemical and DNA analysis.

BK amputation (BKA). Below the knee amputation.

Bones. The skeleton of the body that provides support for softer tissues. The outer parts of bones are hard and stiff because they contain chemical compounds derived from calcium. Bones constantly dissolve and rebuild. Certain bones have a hollow interior containing marrow that is the manufacturing site for most blood cells.

Cauda equina. The nerves that hang down below the lowest end of the spinal cord, so named because of their resemblance to a horse's tail.

Cervical spine. Spine in the neck.

Chronic. Constantly present and incurable.

Computerized axial tomography (CAT or CT) scan. X-rays taken under computer guidance that can show much greater detail than regular x-rays.

Congenital. Dating from birth.

Contracture. When a limb strongly resists movement from a fixed abnormal position as a result of fibrosis or scarring of ligaments, tendons, muscles,

or other soft tissues around joints. Contractures of limbs in a bent position are the most common and known as "flexion contractures."

Deep tendon reflexes (DTRs). Brief involuntary muscle contractions caused by stimulation of nerve endings in muscle tendons. For example, tapping on the patella (the tendon below the kneecap) normally causes contraction of the quadriceps (upper thigh muscle) so that the leg extends in a brief kicking motion. This is called a knee jerk (KJ). Biceps jerks (BJ) and ankle jerks (AJ) are other commonly tested deep tendon reflexes.

Degenerative. Characterized by the progressive breakdown of tissues to a less functional state.

Degenerative arthritis. See *osteoarthritis*.

Degenerative disc disease (DDD). Drying and thinning of the intervertebral discs, identified by the abnormal narrowing of the spaces between vertebrae. DDD is most commonly seen with aging.

Discectomy. Removal of part of an intervertebral disc, often done with a *laminectomy*. Sometimes, a micro-discectomy is possible by making a small surgical incision in the back without performing a laminectomy.

Dorsolumbar spine. Spine area in the lower part of the chest and upper part of the lower back.

Effusion (of joint). Abnormal collection of fluid in a joint space.

Epiphyses. The special areas of bone from which new bone is formed in growing children.

Erosion of bone. Areas of bone loss due to a disease process.

Erythrocyte sedimentation rate (ESR). Test that measures how quickly red blood cells settle; the faster the settling, the more abnormal the result. An elevated ESR indicates some type of inflammation, not one particular disease. But it almost always increases greatly with severe joint inflammation, such as with active rheumatoid arthritis. While an elevated ESR by itself does not imply arthritis or joint inflammation, a normal ESR strongly argues against joint inflammation at the time the test is performed. A normal ESR is about ten mm/hr or less in men and 20 mm/hr or less in women, depending on the method used by the reporting laboratory.

Facet joints. Small joints between vertebrae.

Femur. Large bone in the thigh. The upper end of the femur forms the lower part the hip joint. The lower end of the femur forms the upper part of the knee joint.

Fibrosis. Degenerative process involving the replacement of normal tissue with fiber-like tissue. Fibrosis is always abnormal, while the word "fibrous" may refer to either normal or abnormal fiber-like tissues.

Fine movements. Coordinated manipulation with the fingers, such as picking up coins, buttoning a shirt, typing, playing the piano, or handling anything with the fingertips.

Forced vital capacity (FVC). Maximum volume of air that can be expired through the mouth with maximum effort, after taking as deep a breath as possible.

Fusion of spine (surgical). Placing living bone strips between adjacent vertebrae. The bone strips become incorporated with the vertebrae, fusing them together. The bone strips are taken from the top part of the pelvic bone.

Gross movements. Grasping and holding onto fairly large objects with the entire hand, for example turning a doorknob, lifting a pan, or handling a wrench.

Hemipelvectomy. Removal of the right or left pelvic bones.

Herniated nucleus pulposus (HNP). Protrusion of the cartilage-like central part of an intervertebral disc through its fibrous covering. Herniated nucleus pulposus is a frequent cause of radiculitis (inflammation of a spinal nerve root) and back pain and is commonly called a herniated disc.

Hip disarticulation. Amputation of an entire lower extremity through the hip joint.

Humerus. Arm bone, connecting the shoulder and elbow.

Hypertrophic arthritis. See *osteoarthritis*.

Immunoglobulins (Ig). Chemicals produced by plasma cells that are part of the body's immune response to antigens. Immunoglobulins perform many specialized functions. The various types of immunoglobulins are G, M, A, D, and E. These are abbreviated as IgG, IgM, IgA, IgD, and IgE. Also known as *antibodies*.

Inflammation of joints or other tissues. Redness, swelling, pain, warmth, and tenderness. Because skin tones vary, a lack of redness doesn't rule out inflammation if the other findings are present.

Instability. When bones in a joint slip out of alignment under normal amounts of stress. For example, an unstable knee joint is liable to give way when weight is placed on it. Instability may be caused by arthritic deformity, destruction of a joint, or weakness of ligaments around a joint that normally stabilize it. Ligaments may be damaged by inflammation associated with some types of arthritis.

Intervertebral discs. Discs that separate and cushion the vertebrae.

Iridocyclitis. Inflammation of the eye's iris and ciliary body.

Joints. Spaces between bones. The ends of bones that form joints are often covered with cartilage. Joints are moistened with a substance called synovial fluid, which permits smooth motion with a minimum of friction. Synovial membranes surround joints and produce synovial fluid.

Kyphosis. Curvature of the spine normally present to a mild degree in the thoracic spine. The spine looks as if a flexible straight rod was pulled backward from behind while the bottom remained in place. The lay term is hunchback.

Laminectomy. Surgery to remove of a part of a vertebra known as its lamina. Laminectomies are done to relieve pressure on spinal nerve roots that often result in a herniated nucleus pulposus or arthritic spurs.

Ligaments. Flat, flexible, tough connective tissue that extends between bones and across joints to hold bones in position.

Limp. Avoidance of weight-bearing on one leg.

Lordosis. Curvature of the spine normally present to a moderate degree in the lumbar spine and to a mild degree in the cervical spine. The spine looks as if a flexible straight rod was pushed forward from behind while the bottom remained in place. The lay term is swayback.

Loss of motion (LOM). See *range of motion*.

Lumbar spine. Spine area in the lower back.

Magnetic resonance imaging (MRI). Method of producing pictures of internal body structures using magnetic fields and radiofrequency fields. MRIs do not utilize x-rays or other radiation.

Muscles. Relatively soft structures that consist of complex proteins with the ability to shorten and lengthen. Skeletal muscles move bones by contracting across joints.

Muscle spasm. Involuntary contraction of a muscle that cannot be relaxed by an act of will.

Myelography. X-ray technique for seeing pressure put on the spinal cord or nerve roots by herniated discs, arthritis, or tumors.

Nerve root. The first part of a nerve as it is formed from the spinal cord.

Nonradicular pain. Pain that does not follow the distribution of any specific nerve root.

Nonunion. Failure of a bone fracture to heal.

Orthosis. An artificial device that corrects or supports the function of some body part. For example, many people use an ankle-foot orthosis (AFO), a below-the-knee appliance that supports the ankle and foot.

Osteoarthritis (OA). Most common type of arthritis, especially associated with aging; it is characterized by bony outgrowths, such as the narrowing of joints, and spurs around joints or in the spine. Also known as *hypertrophic arthritis* or *degenerative arthritis*.

Osteomyelitis. Infection of bone.

Osteoporosis. Loss of bone mass—that is, a thinning of bone substance.

Pelvic bones (pelvis). Ilium, ischium, and pubis.

Percentile. Method of comparing something, like height or weight, to normal expected values, in order to decide the probability that it is normal or abnormal. For example, a person with a weight in the 60th percentile is heavier than 60% of other people and lighter than 40% of other people.

Pericarditis. Inflammation of the membrane surrounding the heart; a possible complication of rheumatoid arthritis.

Peripheral vascular disease. Any of several disorders affecting the arteries supplying the arms or legs with blood, the most common of which is caused by *atherosclerosis*, the buildup of fatty deposits.

Prosthesis. A cosmetic or functional artificial device that replaces a body part. Examples include prosthetic legs, arms, eyes, and joints.

Pseudoclaudication. Pain, usually of dull and aching quality in the lower back and thighs, accompanied by weakness in the lower extremities and caused by lumbar stenosis putting pressure on the spinal cord. Pseudoclaudication can be precipitated by standing, walking, or bending backward. It may be lessened by leaning forward. The pain is nonradicular.

Radicular distribution. The specific body area served by a particular nerve root from the spinal cord.

Radicular signs. Neurological signs in a limb indicating an irritation of the spinal nerve root of a particular limb. Radicular signs are decreased deep tendon reflexes, muscle weakness, pain, and decreased sensation.

Radius. Large bone in the forearm between the elbow and wrist, on the same side of the forearm as the thumb.

Range of motion (ROM). How well a joint moves. ROM is extremely important in determining how limiting arthritis is likely to be. For example, a knee joint that has only a small degree of motion will limit the ability to walk and otherwise use the legs much more than a knee with a normal or mildly restricted range of motion. ROM may be limited not only by arthritis, but also by loss of flexibility in soft tissues around joints. ROM is usually reported in degrees of flexion (bending of a limb or the spine) and extension (straightening a limb), abduction (movement of a limb away from the body in a right or left direction), adduction (movement of a limb toward the body from a right or left position), rotation, etc., depending on the joint involved.

For Social Security disability purposes, all musculoskeletal listings must be measured in terms of passive ROM—meaning measured when you relax and let a doctor move the joint for you. The only exception is the spine, for which you must actively participate in movements. Active range of motion is where you voluntarily move a joint, and most active ROM measurements are considered unreliable because they depend on applicants to honestly move their joints to the maximum degree when asked. Active ROM tests can lead to serious disagreements between you and the SSA. If you state that you cannot bend, but nothing through a physical test or x-ray verifies your claim, the SSA does not have to believe you. SSA evaluations frequently reveal (through physical examinations, x-rays, and other laboratory tests) that applicants alleging incapacitating arthritis and inability to move joints actually have a good ROM and minimal abnormalities.

Rheumatoid factor (RF). Certain abnormal antibodies that the body has produced and are especially associated with rheumatoid arthritis. An abnormal RF may be associated with rheumatoid arthritis, but it is possible to have rheumatoid arthritis without testing positive. At the same time, you may test positive even if you don't have arthritis, so an abnormal result does not guarantee the presence of arthritis. RF is reported by laboratories as "positive" or "negative," and also as degrees of abnormality called *titers*. The higher the titer, the more times a sample of serum can be diluted and still give a positive reaction, and this suggests a more severe disease process. For example, an RF titer of 1:150 is positive at up to 150 dilutions while a titer of 1:500 is still positive when diluted 500 times.

Sacroiliac joints. Joints between the pelvic bones and the sacrum of the spine.

Scapula. Shoulder blade.

Scoliosis. Abnormal lateral curvature of the spine.

Sensory nerves. Nerves that transmit sensory information (touch, pain, cold, etc.) from the body to the spinal cord and up to the brain.

Septic arthritis. Infection of the bones of a joint.

Soft tissues. Nonbony tissues such as muscles, nerves, blood vessels, lymphatic vessels, ligaments, and tendons.

Spinal stenosis. Narrowing of the spinal canal (protected space inside the spine containing the spinal cord and its nerve roots), usually as a result of arthritis.

Spine. Bony vertebrae stacked on top of each other and separated by intervertebral discs that permit some degree of cushioning and flexibility. The seven vertebrae of the neck (C1-C7) are called the cervical spine. The 12 vertebrae in the chest are the thoracic spine (T1-T12), and the five vertebrae in the lower back are known as the lumber spine (L1-L5). Beneath the lumbar spine is the sacrum, which consists of a triangular piece of bone of sacral vertebrae fused together (S1-S4). At the end of the spinal column is the tailbone (coccyx). The vertebrae forming the

spine are overlaid and connected by many spinal muscles and ligaments. They also form small joints between each other called *facet joints*.

Spondylolisthesis. Forward subluxation of a vertebra, most commonly of the fifth lumbar (L5) over the next lower vertebra (first sacral, S1). Spondylolisthesis does not put pressure on nerve roots, and therefore does not cause neurological abnormalities such as muscle weakness, loss of sensation, or reflex changes.

Straight leg raising (SLR) test. Testing a patient who is lying on his or her back by lifting the outstretched leg until the patient complains of pain. The SLR is used to detect pressure on spinal nerve roots such as could be caused by an HNP, tumors, bone spurs, and the like. In people of normal health, the leg can be lifted 80 degrees or more without pain. An SLR test should not be considered positive if leg movement is limited by tight hamstring tendons behind the knee. Back pain shooting down the leg during SLR is stronger evidence of nerve root compression than is back pain alone.

Stump. Remaining length of leg after amputation.

Subcutaneous nodules. Lumpy abnormalities of tissues beneath the skin that are sometimes associated with rheumatoid arthritis.

Subluxation. Slippage of bones out of normal relation to each other—dislocation.

Synovial membranes. Membranes that surround and help lubricate joints; they become inflamed and tender in active rheumatoid arthritis.

Systemic. Affecting the body as a whole.

Tarsal bone. Any ankle bone.

Tendons. Cable-like, flexible, tough connective tissue strands that anchor muscles to bones. Muscles pull on tendons to move bones.

Thoracic spine. Spine area in the chest.

Tibia. Large bone in the front of the leg, commonly known as the shin bone. The upper end of the tibia forms the lower side of the knee joint, and the lower end of the tibia forms the joint with the ankle.

Ulna. Small bone in the forearm between the elbow and wrist, on the same side of the forearm as the little finger.

Ulnar deviation. Deformities of the fingers that severely limit use of the hands, usually found in rheumatoid arthritis and resulting in a sideways pointing of the fingers.

B. General Information

This chapter describes the disorders that affect the musculoskeletal system of the body, consisting of bones, muscles, tendons, ligaments, and joints. The SSA frequently sees impairments of the musculoskeletal system. The effect a particular disease has on the musculoskeletal system depends on the individual patient, as well as whether the disease is in an early or advanced stage. Musculoskeletal disorders can be hereditary, congenital, or acquired. The resulting impairments from various disorders can result from infections, inflammation, degenerative processes, trauma, tumors, blood vessel diseases, abnormal development, and metabolic diseases.

The SSA accepts diagnosis of a disorder's severity only from medical doctors (M.D.s) and osteopaths (D.O.s). Reports from chiropractors, nurses, physical therapists, naturopaths, and others who don't have an actual license to practice medicine are evaluated but are not sufficient to establish disability.

1. Arthritis

Most allegations of disability involving musculoskeletal disorders are associated with arthritis. Examples of types of arthritis and diseases that can cause arthritis include the following:

- AIDS
- ankylosing spondylitis
- autoimmune diseases, such as systemic lupus erythematosus
- cancer
- infections—bacterial, fungal, or viral
- inflammatory bowel diseases, such as ulcerative colitis and regional enteritis (Crohn's disease)
- metabolic diseases, such as gout and pseudogout
- osteoarthritis
- psoriasis
- Reiter's syndrome, and
- rheumatoid arthritis.

To the extent that inflammation of soft tissues in joints or the spine is involved, evaluation would be done under the Immune System Listings 14.09 and 114.09. Some musculoskeletal disorders, such

as rheumatoid arthritis of joints and ankylosing spondylitis of the spine, can produce both soft tissue inflammation and bony damage. It may be necessary to evaluate such disorders under more than one of the SSA's listings.

2. Traumatic Damage

Most traumatic damage the SSA sees comes from automobile, motorcycle, and industrial accidents. Major trauma may fracture multiple bones, including the spine, rupture organs, amputate limbs, tear away skin and muscle, damage joints, crush or sever the spinal cord with resulting paralysis, or fracture the skull with permanent brain injury.

3. Back Pain

Most back pain is caused by age-related degenerative processes like degenerative disc disease and arthritis. Other, less common causes of back pain include inflammatory diseases (ankylosing spondylitis) and cancer (such as breast or prostate cancer) that has spread to the spine. Medical judgment must be used in evaluating each case in regard to severity and chances for improvement.

4. Amputations

Amputations can result from trauma itself, or be required as surgery to remove a limb that has been too badly damaged to repair after trauma. Most amputations the SSA sees, however, result from surgery to remove a diseased leg to which adequate blood flow cannot be restored—usually as a consequence of diabetes. Atherosclerosis can also lead to a diseased leg requiring amputation. In these instances, however, modern surgical techniques can often restore blood flow sufficiently to avoid amputation.

5. Other Diseases

Several genetic diseases, such as muscular dystrophy, affect muscle strength. Inflammatory muscle diseases, such as polymyositis, can cause muscle weakness but are discussed in CD Part 14. Neurological disorders such as strokes, cerebral palsy, and polio can also cause muscle weakness and are discussed in CD Part 12. Muscle strength also may be decreased by chronic use of drugs such as steroids and alcohol—an added factor in severity that must be considered in all cases.

6. Loss of Function

Loss of function is vitally important in determining the extent of disability caused by musculoskeletal disorders. Although a physical examination and x-rays must reveal objective abnormalities, your inability to function, particularly due to pain, fatigue, or other symptoms, is equally as important. Of course, saying that you're feeling pain or other symptoms if you don't also have physical abnormalities that would reasonably explain such symptoms may be given little credibility in a disability determination. The SSA needs evidence from your treating doctor to support your disability claim. Unfortunately, a treating doctor's records often do not contain sufficient details about alleged musculoskeletal disorders for the SSA to make an accurate disability determination. In fact, the records of many treating doctors report disorders that cannot possibly be present based on physical examinations and x-rays. You may very well have to undergo a consultative examination or have x-rays or other tests through the state DDS.

Unless you have some obviously irreversible impairment, such as an amputation or degenerative arthritis, the SSA will need multiple examinations to determine if your condition is going to last 12 months. This is particularly true in soft tissue injuries. Your treating doctor's records can help show that the findings have been present for some time. If you have no treating doctor records, the SSA would have you examined at its expense, wait at least three months, and have you examined again after you have been treated.

Loss of function may be due to bone or joint deformity or destruction from any cause; miscellaneous disorders of the spine with or without neurological deficits; amputation; or fractures or soft tissue injuries including burns that require prolonged periods of immobility or convalescence.

a. Pain or Other Symptoms

Pain or other symptoms may be an important factor contributing to functional loss. The musculoskeletal listings that include pain or other symptoms among their criteria also include criteria for limitations caused by pain.

b. How the SSA Defines Loss of Function

Regardless of the cause of a musculoskeletal impairment, functional loss refers to an (1) inability to walk effectively on a sustained basis, or (2) inability to perform fine and gross movements effectively on a sustained basis. The SSA will consider whether your daily activities are consistent with your doctor's exam findings, or with a consultative examination. In children, function should always be looked at in terms of what is appropriate for the child's age. In older teenagers, age-appropriate function can be similar to that of an adult.

If you feel that you cannot return to your prior job, supporting statements from supervisors or coworkers can be helpful in verifying your work-related limitations. These are people who have seen your work-related difficulties firsthand. Your own statements and those of your family members can also help complete the picture of your limitations. In children, limitations at school, at home, and at play can help the SSA establish the severity of their functional loss.

If you are an adult, detailed information about your functional limitations can be critical in determining your residual functional capacity—which, in turn, is important in the SSA's decision whether you will be allowed benefits on a medical-vocational basis.

7. Diagnosis and Evaluation

Diagnosis and evaluation of your musculoskeletal impairments should be appropriately supported by detailed descriptions of your joints, including ranges of motion. Additionally, the report on the condition of your muscles should discuss the presence of any weakness or atrophy. Any abnormal sensation or reflexes, decreased circulation, and laboratory findings should be described. Findings on your x-rays or other appropriate imaging may be used in making a disability determination. Medically acceptable imaging includes:

- plain x-ray imaging
- computerized axial tomography (CAT scan)
- magnetic resonance imaging (MRI)
- myelography, and
- radionuclear bone scans.

The SSA tries to avoid buying expensive tests for you such as MRIs, and will never purchase invasive tests such as myelography. However, such tests can be extremely useful when provided by your treating doctor. Also, if you've had any surgical procedures done, be sure your documentation includes a copy of the operative notes and any available pathology reports.

8. Orthotic, Prosthetic, or Assistive Devices

If you use an orthosis, the SSA will want your medical exam data to include an evaluation of your maximum ability to function with the orthosis in place. Normally, the SSA will not require that you be evaluated for ability to function without your orthosis. However, if you state that you cannot use an orthosis, the SSA will want the reason documented and your ability to function without it evaluated by a doctor who actually examines you. An exception would be made if the doctor submits a reasonable medical explanation of why you cannot be evaluated without your orthosis.

If you use a prosthesis, the SSA will want you to have a medical exam with the prosthetic device in place. Of course, if you have an amputation, the SSA will not require an evaluation of your ability to walk without a leg prosthesis. However, the SSA will require that the condition of the stump be described. This is important, because some claimants have ulcers, infection, or other problems that can cause short- or long-term problems in wearing the prosthesis.

If you use a hand-held assistive device such as a cane, crutch, or walker, you will be examined both with and without the device unless this goes against the medical judgment of a doctor who has treated or examined you. Your ability to walk with and without the device provides information about how well you can ambulate without assistance. The SSA tries to

document the medical basis, such as instability of a joint or muscle weakness, to explain why you use an assistive device.

The requirements are similar for evaluating children with orthotic, prosthetic, or other devices, except that the evaluation must be done based on age-appropriate expectations for the particular child.

C. Specific Listings and Residual Functional Capacity

The listings that follow are in the federal regulations. They have been interpreted and commented on for greater ease of understanding while explaining their requirements. It is impossible to discuss here all of the medical possibilities related to every kind of disorder, and you may need help from your treating doctor to more fully understand how your particular impairment relates to these listings. The discussion of residual functional capacity does not apply to children.

1. Listing 1.02: Major Dysfunction of a Joint (Adults)

This listing relates to severe functional loss caused by any type of joint dysfunction, regardless of the specific medical diagnosis. For example, the problem could have been caused by trauma or by any of the many types of arthritis. Trauma resulting from industrial, automobile, and motorcycle accidents accounts for most of the traumatic cases the SSA sees. Severe traumatic bone fracture into a joint space is often followed by post-traumatic degenerative arthritis after the fracture is healed. Inflammatory processes, such as rheumatoid and psoriatic arthritis, can eventually lead to bone destruction and joint deformity if not adequately controlled with treatment. So, by the time gross deformity of a joint is present, there usually has been a joint disorder present for quite some time.

a. Listing Level Severity

First, the listing requires you to have an obvious (gross) deformity. Possible examples of such deformity are subluxation, contracture, ankylosis, and instability. You must also have a history of chronic joint pain and stiffness, as well as loss of motion or some other kind of abnormal movement. In addition, some type of imaging technique, such as x-rays, must verify the presence of arthritic changes such as joint space narrowing. A particular percentage of joint space narrowing or other abnormality is not required.

Once it's been established that your condition meets the requirements above, your condition must be shown to satisfy Ⓐ or Ⓑ, below.

Ⓐ Involvement of one hip, knee, or ankle joint that results in extreme limitation in your ability to walk. You must be unable to sustain a reasonable walking pace over a sufficient distance to carry out your activities of daily living. You should be unable to travel without a companion's assistance to and from your job or school. More specifically, some examples of ineffective ambulation given by the SSA include your inability to:

- walk without the use of a walker
- walk without the use of two crutches or two canes
- walk a block at a reasonable pace on rough or uneven surfaces
- use standard public transportation
- carry out ordinary activities involving walking, such as shopping and banking, and
- climb a few steps at a reasonable pace with the use of a single handrail.

The listing does not require complete inability to walk in all circumstances. For example, if you can walk about your home without the help of a person or an assistive device, that does not, by itself, mean you cannot qualify under the listing. The requirement is that you have serious difficulty in starting, sustaining, or completing activities. Also, using only one crutch or cane would not necessarily restrict you from qualifying under the listing, provided that your functional limitations are severe enough. In addition, the SSA recognizes that people who cannot walk effectively might be able to stand without assistive devices. Therefore, your ability to stand without assistance would not disqualify you under the listing.

Ⓑ Involvement of one major joint *in each upper extremity* that results in extreme limitation in your

ability to perform fine and gross movements. Major joints are the shoulder, elbow, or hand/wrist.

To use your upper extremities effectively in carrying out your activities of daily living, you must be able to perform such functions as reaching, pushing, pulling, grasping, and fingering. Therefore, examples of inability to perform fine and gross movements effectively include, but are not limited to, an inability to prepare a simple meal and feed yourself, inability to take care of personal hygiene, inability to sort and handle papers or files, and an inability to place files in a file cabinet at or above waist level.

To qualify under part Ⓑ, it is not necessary that you have a *total* inability to use your upper extremities. The requirement is that you have serious difficulty in starting, sustaining, or completing activities.

b. Residual Functional Capacity

In analyzing residual functional capacity, the SSA divides your body in two, analyzing your upper extremities separately from your lower extremities.

i. Upper Extremity Dysfunction

The SSA needs information regarding how well you can use your upper extremities—specifically, whether you're able to push, pull, lift, carry, and grasp objects and do small movements with your fingers (fine manipulations). Think of all the things you cannot do because of pain, deformity, or fatigue. Can you pick up coins? Easily grasp and turn doorknobs? Open jars? If you were unable to perform prior work because of arthritis, exactly how did the arthritis interfere? Specific examples of why you can no longer perform the job are much better than vague generalizations such as, "I was in pain" or "My arthritis bothered me." For instance, how much weight can you lift and carry? Did pain limit the use of hand controls necessary for working? Exactly how? Include environmental factors: Arthritis that is tolerable working in normal temperatures might be limiting in the cold. If you have significant arthritis in your shoulder, pain will probably limit the amount of overhead work you can do. Shoulder, elbow, or hand arthritis will limit how much pushing and pulling you can do.

Note that the use of an assistive device such as a cane ties up the use of an arm and hand. So, if you require a cane to walk, the SSA cannot refer you to jobs requiring that you lift and carry with both arms while walking.

ii. Lower Extremity Dysfunction

In evaluating your RFC, the SSA must determine how long you can stand and walk on arthritic joints. Let the SSA know if the arthritis is severe enough that you can't stand or walk most of a workday—and have your treating doctor provide supporting statements. For the SSA to claim that you can perform light, medium, or heavy work, you must be able to walk or stand six to eight hours a day. Significant arthritis in a major joint of a lower extremity would prevent such standing or walking. Even if your hands and arms are unaffected by the arthritis, you'll be restricted to sedentary work. If you are older and have a limited education, these restrictions may mean that you'll be awarded benefits on the basis of the RFC.

If you had an arthritic hip, knee, or ankle joint replaced with an artificial one, see the RFC comments under Listing 1.03.

2. Listing 101.02: Major Dysfunction of a Joint (Children)

First, the listing requires that the child have an obvious (gross) deformity. Possible examples of such deformity are subluxation, contracture, ankylosis, and instability. The child must also have a history of chronic joint pain and stiffness, as well as loss of motion or some other kind of abnormal movement. In addition, some type of imaging technique, such as x-rays, must verify the presence of arthritic changes like joint space narrowing. The child doesn't need to have any specific percentage of joint space narrowing or other abnormality.

Second, once it's been established that the child's condition meets the requirements above, the condition must also be shown to satisfy Ⓐ or Ⓑ, below.

Ⓐ Involvement of one hip, knee, or ankle joint that results in extreme limitation in the child's ability to walk. The child must be unable to sustain a reasonable walking pace over a sufficient distance

to be able to carry out age-appropriate activities of daily living.

For children who are too young to be expected to walk independently, the SSA considers their function in terms of how well they can perform age-appropriate activities with their lower extremities. For such children, an extreme level of limitation means skills or performance at no greater than one-half of age-appropriate expectations based on an overall developmental assessment rather than on one or two isolated skills.

Older children would not have the ability to travel without a companion's assistance to and from a job or school. More specific examples of ineffective ambulation given by the SSA include the older child's inability to:

- walk without the use of a walker
- walk without the use of two crutches or two canes
- walk a block at a reasonable, age-appropriate pace on rough or uneven surfaces
- use standard public transportation
- carry out ordinary age-appropriate activities involving walking, such as shopping and school activities, or
- climb a few steps at a reasonable pace with the use of a single handrail.

The listing does not require that the child be completely unable to walk in all circumstances. For example, the child's ability to walk about its home (or short distances at school) without the help of a person or an assistive device does not, in and of itself, mean the child cannot qualify under the listing. The requirement is that the child have serious difficulty in starting, sustaining, or completing activities. Nor would the use of only one crutch or cane necessarily restrict the child from qualifying under the listing, provided that his functional limitations are severe enough. Also, the SSA recognizes that people who cannot walk effectively might nevertheless be able to stand without assistive devices. Therefore, the child's ability to stand without assistance would not disqualify him or her under the listing.

Ⓑ Involvement of one major joint *in each upper extremity* that results in extreme limitation in the child's age-appropriate ability to perform fine and gross movements. Major joints are the shoulder, elbow, or hand/wrist.

For very young children, the SSA will look at how limited they are in their ability to perform age-appropriate activities involving the upper extremities. Determinations of extreme limitation in such children are made by comparison with the limitations for persistent motor dysfunction for infants and young children described in Listing 110.07Ⓐ.

For an older child to use his upper extremities effectively in carrying out age-appropriate activities of daily living, the child must be able to perform age-appropriate functions like reaching, pushing, pulling, grasping, and fingering. Therefore, in older children, examples of inability to effectively perform fine and gross movements include inability to prepare simple meals and feed themselves, inability to take care of personal hygiene, and inability to sort and handle papers or files (depending on which activities are age appropriate).

To qualify under part Ⓑ, it is not necessary that the child be *totally* unable to use his upper extremities. The requirement is that they have serious difficulty in starting, sustaining, or completing age-appropriate activities.

3. Listing 1.03: Reconstructive Surgery on a Hip, Knee, or Ankle (Including Surgical Arthrodesis of a Joint) (Adults)

Reconstructive surgery usually involves placing an artificial joint into a person. An alternative procedure is surgical arthrodesis—fusing an arthritic joint with healthy, living bone to relieve pain and make it more stable. In most cases, reconstructive surgery is successful. Patients are able to put at least partial weight on the joint and walk within a few days, and to put full weight on the joint soon after that. Certainly, walking usually occurs within a year of surgery. Only in cases of surgical failure—such as a loose artificial joint or infection of the bone—is the patient likely to remain unable to walk. Even then, a second operation usually corrects the problem.

Your surgeon may try to help you by reporting to the SSA that "recovery will require a year" in the absence of any documented complications. However, the SSA is likely to disregard this kind of statement if the surgeon cannot provide evidence to back it up.

a. Listing Level Severity

To qualify, you'll need to show that reconstructive surgery failed on your hip, knee, or ankle and that you'll be unable to walk effectively on the joint for at least 12 months. See the discussion under Listing 1.02Ⓐ regarding how the SSA decides whether walking is ineffective.

b. Residual Functional Capacity

If you had an arthritic hip, knee, or ankle joint replaced with an artificial one, you will still have some limitations. You should not be expected to work in a setting where you'd be walking on grossly uneven surfaces or climbing or using leg controls more than occasionally. Similarly, you should probably be restricted to no more than light lifting, up to 20 pounds. If your artificial joint has problems or you have had artificial joint replacements in multiple major weight-bearing joints, your RFC rating should not be higher than sedentary work. However, the SSA has no official policies in regard to how much a person with a prosthetic joint can lift and carry. Of course, if you are restricted to sedentary work because of an inability to walk over two hours daily, you wouldn't have to lift over ten pounds anyway.

If you have a solid arthrodesis in a joint, the SSA could give you an RFC for as high as medium work. Remember that an arthrodesis, unlike a prosthesis, will fix a joint so that it cannot bend. This can limit you from certain kinds of work-related activities. For example, a fused knee joint will prevent use of leg controls with that leg. It will also rule out various activities such as squatting, kneeling, and climbing anything more than a slight incline.

4. Listing 101.03: Reconstructive Surgery on a Hip, Knee, or Ankle (Including Surgical Arthrodesis of a Joint) (Children)

See comments under adult Listing 1.03.

a. Listing Level Severity

Failure of reconstructive surgery of the child's hip, knee, or ankle with an inability to walk effectively on the joint expected to last at least 12 months. See the discussion under Listing 101.02 regarding how the SSA decides whether walking is ineffective in a child.

5. Listing 1.04: Disorders of the Spine (Adults)

This listing deals with various spinal disorders common in adults, such as:

- herniated nucleus pulposis (HNP)
- spinal arachnoiditis
- spinal stenosis
- osteoarthritis
- degenerative disc disease
- facet arthritis, and
- vertebral fracture.

(Note that inflammatory disorders involving the spine, known as spondyloarthropathies, are evaluated under Listing 14.09. Examples of disorders that can cause spondyloarthropathy are ankylosing spondylitis and Reiter's syndrome.)

The SSA requires that your spinal exam include testing your reflexes, sensation, and muscle strength. Additionally, your exam should test your ability to squat and arise, walk on your heels and toes, and bend your back. The presence or absence of muscle spasms in your back should be noted, as this is an objective finding that lends credibility to lower back pain complaints. Weakness, as well as reflexes and sensation, must rationally relate to the nerve root that is compressed. (Specific nerves supply specific muscles and carry sensation from specific areas of skin.) If you have muscle atrophy, there must be measurements of your muscles, documenting the degree to which they have actually gotten smaller. Weakness should be graded on a scale of zero to five. The examining doctor will be asked to add any other relevant observations about you, such as your ability to get on and off an examining table and whether you need help putting on your socks and shoes, or slacks or trousers.

The SSA will also evaluate the restrictions on your daily activities. If you allege marked limitations in your daily activities because of pain but have not seen

your treating doctor, be prepared to explain why not. If your treating doctor's records are incomplete or not current, the SSA will send you for a consultative examination.

Because pain is the factor that most limits the activities of claimants with back disorders, it is important that you have a fairly good grasp of how the SSA looks at back pain. The SSA cannot directly measure your actual pain level. By evaluating your behavior, however, the SSA can get a general picture of your pain. Even if you don't meet this listing, evaluation of your pain will become the main consideration in determining your residual functional capacity.

A person in really severe pain tries to obtain relief. The SSA will look at how often you go to the doctor for your pain, what your doctor says about the pain, and the medical records showing your history of severe pain. If you have transportation or money problems that limit your ability to obtain the best treatment, make that clear to the SSA. Be aware that the SSA may check such an assertion with your treating doctor.

The SSA will look at the types of treatments your doctor has administered or recommended to treat the pain, and at how you responded. The treatments may help indicate the degree of your pain—at least as your doctor has understood it—and show how well you responded. Possible pain treatments include pain relievers, muscle relaxants, physical therapy, braces, epidural steroid injections, transcutaneous electrical nerve stimulators (TENS), biofeedback, psychotherapy, spinal cord electrical stimulators, treatment in special pain clinics, and treatment with radio-frequency fields to damaged pain fibers in the facet joints that connect vertebrae. (See Chapter 5 for more information about pain and other symptoms.) If you have prominent neurological abnormalities, evaluation should also be done under the appropriate neurological listing.

a. Listing Level Severity

Once a disorder has been documented, your condition must satisfy either Ⓐ, Ⓑ, or Ⓒ, below.

Ⓐ Evidence of pressure on your spinal nerve root or spinal cord, as evidenced by:
- pain
- loss of motion in the spine
- muscle weakness
- decreased deep tendon reflexes and sensation, and
- an abnormal straight-leg-raising test, if the lower back is involved.

This part of the listing is quite difficult to satisfy, as most cases of back pain are not associated with significant neurological abnormalities.

Ⓑ Spinal arachnoiditis, as evidenced by:
- confirmation of the disorder by a pathology report of a biopsy, an operative note confirming arachnoiditis, or an appropriate imaging test (myelography, CT scan, or MRI)
- severe burning pain, or other abnormal and painful sensation (dyesthesia), and
- pain severe enough to require changing your position or posture more than once every two hours.

Ⓒ Lumbar spinal stenosis resulting in pseudoclaudication, as evidenced by:
- an appropriate imaging test (myelography, CT scan, or MRI), and
- chronic nonradicular pain and weakness that results in your being unable to walk effectively.

To read about how the SSA defines being unable to walk effectively, see the discussion under Listing 1.02Ⓐ.

b. Residual Functional Capacity

Most of the work-related limitations for back impairments are for pain caused by sitting or standing for prolonged periods, as well as lifting and bending. The majority of disability claimants the SSA sees for back pain have some osteoarthritis of the spine or degeneration of the intervertebral discs, or have had a single back surgery. They are usually assigned an RFC for medium or light work with occasional bending. They may be granted disability, especially if they are over age 55, have a limited education, and cannot return to their prior work.

You should receive an RFC rating for no more than medium work, even lower if you suffer any of the following impairments:
- lumbar fusion (bending should be restricted to occasional)
- cervical fusion (overhead work should be restricted to occasional)

- scoliosis of the thoracic or lumbar spine with at least 40° of scoliotic curve
- at least 50% compression fracture of a vertebral body
- significant spondylolisthesis associated with chronic pain
- significant osteoporosis of the spine
- significant degenerative disc disease in the cervical or lumbar spine with associated chronic pain
- chronic pain after a lumbar or cervical laminectomy, or
- significant degenerative arthritis of the spine with associated chronic pain.

Some claimants with multiple back surgeries or other severe back problems have so much pain that they cannot do even sedentary work, even though they don't have severe neurological abnormalities. These cases are exceptions, but they do occur. For example, pain might keep you from being able to stand long enough to do light work. But then severe pain would also prevent you from sitting for long enough to do sedentary work (about two hours). Instead, you would have to frequently alternate sitting and standing. In such an instance, you would qualify for a medical-vocational allowance by RFC regardless of your age. In fact, this is the only way some claimants with incapacitating back pain can qualify for benefits. However, such cases are rare and require convincing evidence of a very severe back impairment, along with marked pain. This is difficult to document for claimants who do not see their treating doctor. Actually, most claimants with pain this severe have arachnoiditis and can be allowed under part Ⓑ of the listing.

One final note: A disability applicant who appears to live a life of extreme pain with no physical impairment may be asked by the SSA to undergo a mental examination.

6. Listing 101.04: Disorders of the Spine (Children)

Arthritis and degenerative disc disease do not occur as often in children as adults. It's rare, for example, to see a herniated nucleus pulposis or spinal stenosis in a child. Nor is arachnoiditis seen as often in children as in adults. Traumatic fractures may be seen in children as well as adults. However, there are other spinal disorders that the SSA mentions with regard to children, such as:

- infection of the spine (vertebral osteomyelitis)
- metabolic disorders that weaken the spine
- developmental disorders resulting in incomplete or abnormal formation of the spine, or
- disorders of spinal curvature (scoliosis, kyphosis, kyphoscoliosis) that may appear alone or in association with some other disorder.

a. Listing Level Severity

Actually, a spinal disorder of any cause can qualify under the listing, provided that it produces the required abnormalities. The same kinds of physical examination abnormalities are required as for adults (see adult Listing 1.04Ⓐ), taking into account the child's age. If the child has prominent neurological abnormalities, evaluation should also be done under the appropriate neurological listing.

7. Listing 1.05: Amputation (Adults)

Trauma, diabetes mellitus, and atherosclerosis are the most common causes of lower-extremity amputations in adults. Most upper-extremity amputations are related to trauma, such as industrial accidents. However, the cause of the amputation is irrelevant—it is the functional result that matters to SSA. This fact is reflected in the requirements of the listing.

a. Listing Level Severity

Once the fact of your amputation has been documented, you must show that your condition satisfies Ⓐ, Ⓑ, Ⓒ or Ⓓ below.

Ⓐ Amputation of both hands.

Ⓑ Amputation of one or both lower extremities at or above the ankle and an inability to walk effectively, as described in Listing 1.02Ⓐ.

Ⓒ Amputation of one hand and one lower extremity at or above the ankle, along with an inability to walk effectively, as described in Listing 1.02Ⓐ. The SSA generally considers ineffective walking as that which ties up both hands in the use of assistive devices—such as two canes, two crutches, or a walker. Part Ⓒ is an exception to this general

rule, because the claimant has the use of only one upper extremity due to the amputation of a hand.

Ⓓ Hemipelvectomy or hip disarticulation. These types of surgery are so functionally limiting that once you've proven the surgery took place, nothing else is required. The resulting functional limitation can be assumed. A hemipelvectomy is even more extensive than a hip disarticulation, because it involves the additional removal of some pelvic bones.

b. Residual Functional Capacity

Few disability applicants have problems severe enough to qualify for this listing level. But many have some degree of damage to the legs that requires an RFC. These are evaluated case by case, but some of the frequently used RFCs are as follows:

- sedentary work for an above-the-knee amputation when you can walk effectively on an artificial leg, or
- medium work for a below-the-knee amputation when you can walk effectively on an artificial leg.

You would also face restrictions on walking on uneven surfaces, climbing, kneeling, crawling, and using leg controls. In most instances, working at unprotected heights (such as on roofs or other structures requiring good balance to keep from falling) would also be restricted.

8. Listing 101.05: Amputation (Children)

In children, the cause of most upper- and lower-extremity amputations is trauma. In some cases, amputation of a limb may be necessary to treat a cancerous tumor, such as an osteosarcoma. Amputations are also done, though rarely, to treat an irreversibly deformed limb. However, the cause of the amputation is irrelevant—it is the functional result that matters to the SSA. This fact is reflected in the requirements of the listing.

a. Listing Level Severity

Once the fact of the child's amputation has been documented, the condition must satisfy Ⓐ, Ⓑ, Ⓒ, or Ⓓ, below.

Ⓐ Amputation of both hands.

Ⓑ Amputation of one or both lower extremities at or above the ankle, along with an inability to walk effectively, as described in Listing 101.02Ⓐ.

Ⓒ Amputation of one hand and one lower extremity at or above the ankle, along with an inability to walk effectively, as described in Listing 1.02Ⓐ. The SSA generally considers ineffective walking as that which ties up both hands in the use of assistive devices—such as two canes, two crutches, or a walker. Part Ⓒ is an exception to this general rule, however, because the claimant has the use of only one upper extremity due to the amputation of a hand.

Ⓓ Hemipelvectomy or hip disarticulation. These types of surgery are so functionally limiting that once you've proven the surgery took place, nothing else is required. The resulting functional limitation can be assumed. A hemipelvectomy is even more extensive than a hip disarticulation, because it involves the additional removal of some pelvic bones.

9. Listing 1.06: Fracture of the Femur, Tibia, Tarsal Bone, or Pelvis (Adults)

The SSA frequently sees applicants with recently broken bones, but many are denied benefits because the breaks are expected to heal well within 12 months. This is true even for people with multiple fractures from automobile or motorcycle accidents. Only in rare cases where an applicant has a history of fractures not healing would the SSA predict that the current fractures would not heal within 12 months.

In general, for you to be granted disability on this basis, your fracture would have to remain unhealed for least six months and be likely to remain unhealed for a total of at least 12 months. Lack of healing for six months is not an SSA policy—but as a matter of medical fact, no doctor can reliably assert that the required 12-month duration will be satisfied without first seeing at least six months of failed healing. If your doctor states to the SSA that your fracture will not heal within 12 months, your doctor must provide supporting evidence. A simple letter stating that recovery from your fracture will require at least 12 months, without convincing medical reasons, will be almost useless.

a. Listing Level Severity

In addition to documentation of the fracture, your condition must qualify under both Ⓐ and Ⓑ, below.

Ⓐ Solid union of your fracture is not evident on appropriate medically acceptable imaging and the fracture is not clinically solid. To satisfy the listing, an x-ray or other imaging test such as an MRI must confirm the failure of your fracture to heal. The x-ray must show that the space of the fracture line is still visible with little or no healing bony callus having formed across it. If the fracture is in a bone that can be evaluated on physical examination, then a doctor must feel or see movement evidence that the bone portions haven't reunited. Some healing of the fracture won't disqualify you as long as a solid union has not occurred.

Ⓑ An inability to ambulate effectively, with no expectation that you'll regain your ability to walk effectively within 12 months of onset. The ability to walk effectively is described in Listing 1.02Ⓐ.

b. Residual Functional Capacity

The extent of your RFC depends on the severity and location of your fractures. That means that the analysis must be highly individualized. The fractures that are most likely to heal poorly are those involving multiple bone fragments, fractures into joint spaces, and fractures complicated by infection. Fractures that occur into joint spaces of the lower extremities may result in post-traumatic arthritis that remains as a permanent impairment after the fracture has healed. Such arthritis in a knee, hip, or ankle can greatly reduce your ability to stand or walk for long periods, or to use leg controls. If you can't stand or walk for at least six to eight hours daily, your RFC is reduced to sedentary work and your chances of receiving a medical-vocational allowance are greatly increased.

10. Listing 101.06: Fracture of the Femur, Tibia, Tarsal Bone, or Pelvis (Children)

See comments under adult Listing 1.06.

a. Listing Level Severity

In addition to documentation of the fracture, the child's condition must qualify under both Ⓐ and Ⓑ, below.

Ⓐ Solid union of the child's fracture is not evident on appropriate medically acceptable imaging and the fracture is not clinically solid. To satisfy the listing, an x-ray or other imaging test such as an MRI must confirm the failure of the fracture to heal. The x-ray must show that the space of the fracture line is still visible with little or no healing bony callus having formed across it. If the fracture is in a bone that can be evaluated on physical examination, then a doctor must feel or see movement evidence that the bone portions have failed to reunite. Some healing of the fracture won't disqualify the child as long as it hasn't healed into a solid union.

Ⓑ An inability to ambulate effectively, with no expectation that the child will regain the ability to walk effectively within 12 months of onset. The ability to walk effectively is described in Listing 101.02Ⓐ.

11. Listing 1.07: Fractures of an Upper Extremity (Adults)

The SSA frequently sees applicants with broken bones, but many are denied because the breaks are expected to heal well within 12 months. This is true even for people with multiple fractures from automobile or motorcycle accidents. Only in rare cases where an applicant has a history of fractures not healing would the SSA predict that the current fractures would not heal within 12 months.

Allowances are made under this listing not merely because of the fracture itself, but because of the limiting effects of treatment and possible complications. The SSA may find that the listing is met based on your symptoms, signs, and laboratory findings from any recent or anticipated surgical procedures and postsurgery recuperative periods. The SSA should also consider any related medical complications, such as infections, illnesses, and therapies that will impede or delay the efforts toward restoration of function of your upper extremity.

In general, for you to be granted disability under this condition, your fracture would have to remain unhealed for least six months and be likely to remain unhealed for a total of at least 12 months. Lack of healing for six months is not an SSA policy—but as a matter of medical fact, no doctor can reliably assert

that the required 12-month duration will be satisfied without first seeing at least six months of failed healing. If your doctor states to the SSA that your fracture will not heal within 12 months, the doctor must provide supporting evidence. A simple letter stating that recovery from a fracture will require at least 12 months, without convincing medical reasons, will be almost useless.

a. Listing Level Severity

To meet the required severity level under this listing, you must have a fracture of an arm bone (humerus) or of the forearm bones (radius or ulna) that has not healed, be under the continuing care of a surgeon who is treating you with the intention of restoring use of the arm, and be unlikely to recover within 12 months of the date of the fracture.

The requirement that you be "under continuing surgical management" means that you should be receiving surgical procedures and other associated treatments directed toward the salvage or restoration of functional use of the affected part. Restoration of function may be delayed by postsurgical procedures, surgical complications, infections or other medical complications, related illnesses, or related treatments.

If you have not experienced any significant changes for six months after your last definitive surgical procedure or other treatment, the SSA will assume that you've reached your maximum therapeutic benefit and will then evaluate your remaining condition. At that point in time, since the listing requires that you be under active surgical management to restore function, the listing can no longer be satisfied.

b. Residual Functional Capacity

The RFC depends on the severity and location of the fractures and therefore must be highly individualized. The fractures most likely to heal poorly are those involving multiple bone fragments, fractures into joint spaces and fractures complicated by infection. Although upper extremity fractures won't affect your ability to stand or walk, your RFC could be reduced by the effect of your impairment on the amount of weight you can lift and carry. For example, suppose you have a right arm fracture that involves the right shoulder joint and is healing poorly. Coupled with pain, you might have very little use of that arm for lifting. You also would not be able to use right arm controls or do any kind of overhead work with the right arm.

12. Listing 101.07: Fractures of an Upper Extremity (Children)

See comments under adult Listing 1.07.

a. Listing Level Severity

To reach the required level of severity under this listing, the child must have a fracture of an arm bone (humerus) or of the forearm bones (radius or ulna) that has not healed, be under the continuing care of a surgeon who is treating the child with the intention of restoring use of the arm, and be unlikely to recover within 12 months of the date of the fracture.

Also see the comments under adult Listing 1.07.

13. Listing 1.08: Soft Tissue Injuries of an Upper or Lower Extremity, Trunk, or Face (Adults)

Allowances are made under this listing not merely because of the injury itself, but because of the limiting effects of treatment and possible complications. Severe burns are a good example of an impairment that might be evaluated under this listing. A finding that the listing is met is based on a consideration of the symptoms, signs, and laboratory findings associated with recent or anticipated surgical procedures and the resulting recuperative periods. Included in this consideration should be any related medical complications, such as infections, illnesses, and therapies that impede or delay the efforts toward restoration of function in your upper extremity.

In general, for you to be granted disability under this section, your injury would have to remain unhealed for least six months and be likely to remain unhealed for a total of at least 12 months. Lack of healing for six months is not an SSA policy—but as a matter of medical fact, no doctor can reliably assert that the required 12-month duration will be satisfied without first seeing at least six months of failed healing. If your doctor states to the SSA that the injury will not heal within 12 months, your doctor must provide

supporting evidence. A simple letter stating that your recovery will require at least 12 months, without convincing medical reasons, will be almost useless.

Major function of the face and head relates to impact on any or all of the activities involving vision, hearing, speech, chewing (mastication), and swallowing.

a. Listing Level Severity

To meet the required level of severity under this listing, you must have soft tissue injuries that are undergoing multiple surgeries spread out over time. The surgeries must be intended to save one of your limbs from amputation or to restore a major function such as walking or using your hand. In addition, the surgery should not have restored or be expected to restore the major function within 12 months of the injury.

The phrase "under continuing surgical management" used in the listing refers to surgical procedures and other associated treatments directed toward the salvage or restoration of functional use of the affected part. Restoration of function may be delayed by post-surgical procedures, surgical complications, infections or other medical complications, related illnesses, or related treatments.

If you have not experienced any significant changes for six months after your last definitive surgical procedure or other treatment, the SSA will assume that you've reached your maximum therapeutic benefit level and then evaluate your remaining condition. At this point, since the listing requires that you be under active surgical management to restore function, the listing can no longer be satisfied.

b. Residual Functional Capacity

Your level of RFC will depend on the nature and severity of your individual injury. For example, if you are a young claimant and have an amputated or nonfunctional arm and no planned surgery, you might be denied benefits based on your ability to perform one-armed light work with lifting of no more than 20 pounds. Even if you have some remaining function in an upper extremity, the SSA should pay close attention to your ability to grasp, push, pull, and perform small (fine) manipulations with your fingers because these can have an important affect on your ability to work.

Lower extremity injuries that do not permit standing or walking six to eight hours a day will prevent heavy, medium, and even light work. You could do no more than sedentary work that requires standing or walking no more than two hours daily. The SSA should consider your ability to walk with adequate balance, as well as climb, and use leg controls.

14. Listing 101.08: Soft Tissue Injuries of an Upper or Lower Extremity, Trunk, or Face (Children)

See comments under adult Listing 1.08.

a. Listing Level Severity

The listing requires the child to have soft tissue injuries that are undergoing multiple surgeries spread out over time, in which the surgeries are intended to save a limb from amputation or to restore a major function such as walking or using a hand. In addition, the surgery should not have restored or be expected to restore the major function within 12 months of the injury.

See comments under adult Listing 1.08.

15. Listing 100.02: Growth Impairment Related to Known Cause (Children)

Growth impairments linked to a definite medical cause include skeletal abnormalities like dwarfism, infections before birth, fetal alcohol poisoning, genetic abnormalities, diabetes, hypothyroidism, severe heart disease, sickle cell anemia, malnutrition, cystic fibrosis, kidney failure, or other severe chronic diseases. Children who are small because their parents are small are not considered to have a growth impairment.

Growth in a child is considered normal when his height is within the range appropriate to the child's age and sex. The SSA considers ranges of normality because there is no exact height that is normal for a child at a specific age and sex. Doctors refer to growth charts to determine if a child is growing properly. Growth is expressed as a percentile

ranking regarding children's height for age and sex. For example, if a child is at the 50th percentile in height, then 50% of other children are taller and 50% are shorter. If a child is at only the third percentile in height, then 97% of all other children are taller. This strongly suggests the presence of a growth impairment.

a. Listing Level Severity

The listing requires a specific medical condition that causes the growth impairment. Additionally, the child's condition must satisfy Ⓐ or Ⓑ.

Ⓐ Sustained fall in height of greater than 15 percentiles. This listing takes into account that a child who is not growing will have a fall in their percentile ranking of height as a result of increasing age, since older children are expected to be taller. For example, a child with a growth impairment who is in the 30th percentile at age six months will be at a much lower percentile at age one year if she doesn't grow. This listing is concerned with a *change* in a child's height as an indicator of growth impairment, rather than the child's actual percentile rankings in height.

Ⓑ Fall to, or persistence of, height below the third percentile. This listing is concerned with a child's actual percentile ranking in height being low enough to be diagnostic of a severe growth impairment.

For both parts Ⓐ and Ⓑ, a child would need to be measured at several different ages to satisfy the listing. If several height measurements are not available when the child applies for disability, the SSA will hold the claim for months until more measurements can be made.

16. Listing 100.03: Growth Impairment of Unknown Cause (Children)

Only children with growth impairments not related to some known medical disorder are evaluated under this listing.

Part Ⓐ is similar to part Ⓐ in Listing 100.02, except that a greater fall in percentile ranking for height is required. Part Ⓑ requires x-ray verification that the age of the child's bones is far below that normally expected for her age. This should be done by a doctor experienced in interpreting such x-rays—a radiologist. If the child's epiphyses (bone growth centers) are "closed," then they are no longer active and the child's growth has stopped. Such closure of the epiphyses is normal as a person becomes an adult and growth stops. In older children when the epiphyses have already closed at the time of disability determination, bone age determination can't be done and this listing cannot be used.

If several height measurements are not available when the child applies for disability, the SSA will hold the claim for months until more measurements can be made.

a. Listing Level Severity

To meet the required severity level, the child's condition must satisfy both Ⓐ and Ⓑ.

Ⓐ Sustained fall of greater than 25 percentiles.

Ⓑ Bone age greater than two standard deviations below the mean for chronological age. Before puberty, x-rays of the child's hand and wrist bones are sufficient. In older children, additional x-rays of a knee and ankle are required. ■