## 5223.0480 MUSCULOSKELETAL SCHEDULE; HAND AND FINGERS.

## Subpart 1. General.

A. Permanent partial impairment of fingers is a disability of the whole body is as provided in subparts 2 to 4. The percent of whole body disability under this part may not exceed the percent of whole body disability for amputation of the hand or digit if the impairing condition is confined to a digit under part 5223.0540. Each mutually exclusive impairing condition must be rated separately and the ratings must be combined as described in part 5223.0300, subpart 3, item E. If an impairing condition is represented by a category designated as exclusive under subpart 2, it must be rated by that category only and that rating may not be combined with a rating under any other category of this part for that impairing condition.

If an impairing condition is represented by a category designated as combinable under subpart 3, it must be rated under that category and under the appropriate categories describing loss of function under subpart 4. The ratings obtained must be combined as described in part 5223.0300, subpart 3, item E.

If an impairing condition is not represented by a category designated either exclusive or combinable, it must be rated only under the appropriate categories describing loss of function under subpart 4.

- B. For purposes of computing the percent of disability due to injuries of the digits, each digit and each joint of each digit is assigned a percentage representing the percent of disability of the whole body resulting from 100 percent disability of that digit or joint. In subparts 2, item D; 3; and 4, the final percent disability of the whole body is computed by multiplying the overall percent disability to the digit or joint times the values listed in this subpart.
  - (1) Value of the digits:
    - (a) thumb, 22 percent;
    - (b) index finger, 11 percent;
    - (c) middle finger, 11 percent;
    - (d) ring finger, five percent;
    - (e) little finger, five percent.
  - (2) Value of the joints:
    - (a) thumb:
      - i. carpometacarpal joint, 17 percent;
      - ii. metacarpophalangeal joint, seven percent;

- iii. interphalangeal joint, two percent;
- (b) index and middle fingers:
  - i. metacarpophalangeal joint, 11 percent;
  - ii. proximal interphalangeal joint, eight percent;
  - iii. distal interphalangeal joint, five percent;
- (c) ring and little fingers:
  - i. metacarpophalangeal joint, five percent;
  - ii. proximal interphalangeal joint, four percent;
  - iii. distal interphalangeal joint, two percent.

## Subp. 2. Exclusive categories.

- A. Mallet deformity, loss of active extension at distal interphalangeal joint of 30 degrees or more, substantiated by objective clinical findings, and persisting despite therapy, or recurring and persisting after attempted surgical correction:
  - (1) index finger, 0.5 percent;
  - (2) middle finger, 0.5 percent;
  - (3) ring finger, 0.2 percent;
  - (4) little finger, 0.2 percent.
- B. Boutonniere deformity, flexion of the proximal interphalangeal joint of 30 degrees or more and extension of the distal interphalangeal joint, which can be reduced passively but not actively, substantiated by objective clinical findings, and persisting despite treatment, or recurring and persisting after attempted surgical correction:
  - (1) index finger, 1.1 percent;
  - (2) middle finger, 1.1 percent;
  - (3) ring finger, 0.5 percent;
  - (4) little finger, 0.5 percent.
- C. Swan neck deformity, hyperextension of the proximal interphalangeal joint exceeding 15 degrees or more and flexion of the distal interphalangeal, which can be reduced passively but not actively, substantiated by objective clinical findings; and persisting despite treatment, or recurring and persisting after attempted surgical correction:
  - (1) index finger, 1.1 percent;
  - (2) middle finger, 1.1 percent;

- (3) ring finger, 0.5 percent;
- (4) little finger, 0.5 percent.
- D. Arthroplasty, 100 percent of the value of the joint.

## Subp. 3. Combinable categories.

- A. Ulnar or radial deviation at a joint: permanent fixed deformity, measured with joint at neutral position:
  - (1) less than ten degrees, zero percent;
  - (2) mild: ten degrees to 19 degrees, ten percent of the value of the digit;
  - (3) moderate: 20 degrees to 30 degrees, 20 percent of the value of the digit;
  - (4) severe: greater than 30 degrees, 30 percent of the value of the digit.
- B. Rotational deformity: permanent fixed deformity, measured with joint at neutral position:
  - (1) less than five degrees, zero percent;
  - (2) mild: five degrees to 15 degrees, ten percent of the value of the digit;
  - (3) moderate: 16 degrees to 30 degrees, 20 percent of the value of the digit;
  - (4) severe: greater than 30 degrees, 30 percent of the value of the digit.
- C. Instability: excessive passive ulnar or radial motion in the joint in comparison to normal:
  - (1) less than five degrees, zero percent;
  - (2) mild: five degrees to ten degrees, ten percent of the value of the joint;
  - (3) moderate: 11 degrees to 20 degrees, 20 percent of the value of the joint;
  - (4) severe: greater than 20 degrees, 30 percent of the value of the joint.
- D. Intrinsic tightness: measured by hyperextending the digit at the metacarpophalangeal joint and then attempting to flex the proximal interphalangeal joint, and persisting despite therapy, or recurring and persisting after attempted surgical correction:
- (1) flexion greater than 80 degrees at the proximal interphalangeal joint, zero percent;
- (2) mild: flexion from 60 degrees to 80 degrees, 15 percent of the value of the digit;
- (3) moderate: flexion from 20 degrees to 59 degrees, 30 percent of the value of the digit;

- (4) severe: flexion less than 20 degrees, 40 percent of the value of the digit.
- E. Triggering: substantiated by objective clinical findings, and persisting despite therapy, or recurring and persisting after attempted surgical correction:
- (1) mild: inconstant during active range of motion, ten percent of the value of the digit;
- (2) moderate: constant during active range of motion, 20 percent of the value of the digit;
- (3) severe: constant during passive range of motion, 30 percent of the value of the digit.
- F. Fracture or dislocation involving metacarpal or phalanx not otherwise ratable under subpart 3 or 4, zero percent.
- Subp. 4. **Categories describing loss of function.** Function of the hand and fingers is measured by the available passive range of motion at each joint and by the quality and extent of tactile sensation in the hand. For injuries involving lacerated tendons, the available active range of motion is measured and applied to items A to H.

The passive range of motion at all joints of the digits excluding the carpometacarpal joint of the thumb is measured in one arc: flexion or extension. Examination with goniometer is performed to determine the limits of passive range of motion at each of these joints. The passive range of motion of the carpometacarpal joint of the thumb is measured by three movements of the thumb: extension or abduction, radial abduction, and opposition. Examination with a metric ruler is performed to determine the passive limitations of each of the movements of the carpometacarpal joint of the thumb.

For the thumb, all appropriate ratings for loss of motion at the interphalangeal, metacarpal, and carpometacarpal joints are added to determine the overall rating for loss of motion of the thumb. This overall rating for loss of motion of the thumb is multiplied by the value of the thumb as provided in subpart 1, item B, subitem (1), to find the whole body disability for loss of motion of the thumb.

For the fingers, ratings for loss of motion at different joints of the same finger are combined to determine the overall rating for loss of motion of the finger. The overall rating for loss of motion of a finger is multiplied by the value of the finger as provided in subpart 1, item B, subitem (1), to find the whole body disability for loss of motion of that finger.

When there is injury to more than one digit, the disabilities for loss of motion of each affected digit are added to determine the overall disability for loss of motion of the hand.

The quality and extent of tactile sensation is evaluated according to part 5223.0410, subpart 6.

Any disability for loss of sensation is combined with any overall disability for loss of range of motion to determine the final disability for loss of function.

- A. Extent of range of flexion or extension at metacarpophalangeal joint for fingers excluding the thumb:
  - (1) extension is greater than zero degrees and flexion is:
    - (a) to greater than 70 degrees, zero percent;
- (b) limited to between 51 degrees and 70 degrees, ten percent of the value of the digit;
- (c) limited to between 21 degrees and 50 degrees, 25 percent of the value of the digit;
- (d) limited to between zero degrees and 20 degrees, 40 percent of the value of the digit;
- (e) less than zero degrees, that is, there is an extension contracture, 60 percent of the value of the digit;
- (2) extension is limited to between zero degrees and nine degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 70 degrees, zero percent;
- (b) limited to between 51 degrees and 70 degrees, ten percent of the value of the digit;
- (c) limited to between 21 degrees and 50 degrees, 25 percent of the value of the digit;
- (d) limited to between zero degrees and 20 degrees, 40 percent of the value of the digit;
- (3) extension is limited to between ten degrees and 30 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 70 degrees, ten percent of the value of the digit;
- (b) limited to between 51 degrees and 70 degrees, 20 percent of the value of the digit;
- (c) limited to between 21 degrees and 50 degrees, 35 percent of the value of the digit;
- (d) limited to between ten degrees and 20 degrees, 50 percent of the value of the digit;

- (4) extension is limited to between 31 degrees and 60 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 70 degrees, 35 percent of the value of the digit;
- (b) limited to between 51 degrees and 70 degrees, 45 percent of the value of the digit;
- (c) limited to between 31 degrees and 50 degrees, 60 percent of the value of the digit;
- (5) extension is limited to between 61 degrees and 80 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 70 degrees, 70 percent of the value of the digit;
- (b) limited to between 61 degrees and 70 degrees, 80 percent of the value of the digit;
- (6) extension is limited to greater than 80 degrees flexion, that is, there is a flexion contracture, 100 percent of the value of the digit;
- (7) ankylosis, as defined in part 5223.0310, subpart 7, of the metacarpophalangeal joint for the fingers excluding the thumb occurs:
  - (a) in extension, 60 percent of the value of the digit;
- (b) between neutral and 30 degrees of flexion, 50 percent of the value of the digit;
- (c) between 31 degrees of flexion and 60 degrees of flexion, 60 percent of the value of the digit;
- (d) between 61 degrees of flexion and 80 degrees of flexion, 80 percent of the value of the digit;
- (e) at greater than 80 degrees of flexion, 100 percent of the value of the digit.
- B. Extent of range of flexion or extension and the proximal interphalangeal joint for fingers excluding the thumb:
  - (1) extension is greater than zero degrees and flexion is:
    - (a) to greater than 90 degrees, zero percent;
- (b) limited to between 61 degrees and 90 degrees, ten percent of the value of the digit;
- (c) limited to between 46 degrees and 60 degrees, 25 percent of the value of the digit;

- (d) limited to between zero degrees and 45 degrees, 45 percent of the value of the digit;
- (e) less than zero degrees, that is, there is an extension contracture, 80 percent of the value of the digit;
- (2) extension is limited to between zero degrees and nine degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 90 degrees, zero percent;
- (b) limited to between 61 degrees and 90 degrees, ten percent of the value of the digit;
- (c) limited to between 46 degrees and 60 degrees, 25 percent of the value of the digit;
- (d) limited to between zero degrees and 45 degrees, 45 percent of the value of the digit;
- (3) extension is limited to between ten degrees and 45 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 90 degrees, ten percent of the value of the digit;
- (b) limited to between 61 degrees and 90 degrees, 20 percent of the value of the digit;
- (c) limited to between 46 degrees and 60 degrees, 35 percent of the value of the digit;
- (d) limited to between ten degrees and 45 degrees, 55 percent of the value of the digit;
- (4) extension is limited to between 46 degrees and 60 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 90 degrees, 30 percent of the value of the digit;
- (b) limited to between 61 degrees and 90 degrees, 40 percent of the value of the digit;
- (c) limited to between 46 degrees and 60 degrees, 55 percent of the value of the digit;
- (5) extension is limited to between 61 degrees and 90 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 90 degrees, 45 percent of the value of the digit;

- (b) limited to between 61 degrees and 90 degrees, 55 percent of the value of the digit;
- (6) extension is limited to greater than 90 degrees flexion, that is, there is a flexion contracture, 80 percent of the value of the digit;
- (7) ankylosis, as defined in part 5223.0310, subpart 7, at the proximal interphalangeal joint for the fingers excluding the thumb occurs:
  - (a) in extension, 80 percent of the value of the digit;
- (b) between zero degrees and 45 degrees of flexion, 55 percent of the value of the digit;
- (c) between 46 degrees of flexion and 90 degrees of flexion, 65 percent of the value of the digit;
- (d) at greater than 90 degrees of flexion, 90 percent of the value of the digit.
- C. Extent of range of flexion or extension at the distal interphalangeal joint for fingers excluding the thumb:
  - (1) extension is greater than zero degrees and flexion is:
    - (a) to greater than 45 degrees, zero percent;
- (b) limited to between zero degrees and 45 degrees, 20 percent of the value of the digit;
- (c) less than zero degrees, that is, there is an extension contracture, 45 percent of the value of the digit;
- (2) extension is limited to between zero degrees and nine degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 45 degrees, zero percent;
- (b) limited to between zero degrees and 45 degrees, 20 percent of the value of the digit;
- (3) extension is limited to between ten degrees and 45 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 45 degrees, ten percent of the value of the digit;
- (b) limited to between ten degrees and 45 degrees, 30 percent of the value of the digit;
- (4) extension is limited to greater than 45 degrees flexion, that is, there is a flexion contracture, 45 percent of the value of the digit;

- (5) ankylosis, as defined in part 5223.0310, subpart 7, at the interphalangeal joint for the fingers excluding the thumb occurs:
  - (a) in extension, 45 percent of the value of the digit;
- (b) between zero degrees and 45 degrees of flexion, 30 percent of the value of the digit;
- (c) greater than 45 degrees of flexion, 45 percent of the value of the digit.
- D. Extent of range of flexion or extension at the metacarpophalangeal joint for the thumb:
  - (1) extension is greater than zero degrees and flexion is:
    - (a) to greater than 30 degrees, zero percent;
- (b) limited to between zero degrees and 30 degrees, six percent of the thumb;
- (c) limited to less than zero degrees, that is, there is an extension contracture, six percent of the thumb;
- (2) extension is limited to between zero degrees and 30 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 30 degrees, zero percent;
- (b) limited to between zero degrees and 30 degrees, six percent of the thumb;
- (3) extension is limited to greater than 30 degrees flexion, that is, there is a flexion contracture, 11 percent of the thumb;
- (4) ankylosis, as defined in part 5223.0310, subpart 7, at the metacarpophalangeal joint of the thumb occurs:
- (a) at less than or equal to 30 degrees of flexion, six percent of the thumb;
  - (b) at greater than 30 degrees of flexion, 11 percent of the thumb.
- E. Extent of range of flexion or extension at the interphalangeal joint for the thumb:
  - (1) extension is greater than zero degrees and flexion is:
    - (a) to greater than 40 degrees, zero percent;
- (b) limited to between zero degrees and 40 degrees, three percent of the thumb;

- (c) limited to less than zero degrees, that is, there is an extension contracture, nine percent of the thumb;
- (2) extension is limited to between zero degrees and nine degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 40 degrees, zero percent;
- (b) limited to between zero degrees and 40 degrees, three percent of the thumb;
- (3) extension is limited to between ten degrees and 40 degrees flexion, that is, there is a flexion contracture, and flexion is:
  - (a) to greater than 40 degrees, three percent of the thumb;
- (b) limited to between ten degrees and 40 degrees, six percent of the thumb;
- (4) extension is limited to greater than 40 degrees flexion, that is, there is a flexion contracture, nine percent of the thumb;
- (5) ankylosis, as defined in part 5223.0310, subpart 7, at the interphalangeal joint of the thumb occurs:
  - (a) in extension, nine percent of the thumb;
- (b) between zero degrees and 40 degrees of flexion, four percent of the thumb;
  - (c) greater than 40 degrees of flexion, nine percent of the thumb.
- F. Abduction of the thumb is the greatest possible distance from the flexor crease of the metacarpophalangeal joint of the fifth metacarpophalangeal joint to the palmar skin of the thumb tuft. The limit of passive abduction is:
  - (1) greater than ten centimeters, zero percent;
  - (2) eight to ten centimeters, five percent of the thumb;
  - (3) less than eight centimeters, 20 percent of the thumb.
- G. Radial abduction of the thumb is the greatest possible distance from the radial border of the index finger to the ulnar border of the thumb. The limit of passive radial abduction is:
  - (1) greater than eight centimeters, zero percent;
  - (2) between five centimeters and eight centimeters, 20 percent of the thumb;
  - (3) less than five centimeters, 40 percent of the thumb.

- H. Opposition of the thumb is the smallest possible distance between the thumb and index fingertips. The limit of passive opposition is:
  - (1) less than one centimeter, zero percent;
  - (2) between one centimeter and three centimeters, 25 percent of the thumb;
  - (3) greater than three centimeters, 50 percent of the thumb.

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