The Post-Stroke Spasticity (PSS) Risk Classification System was created with the assistance of a group of international experts in the field of PSS, utilising both published risk factors and their own clinical experience.

### Post-Stroke Spasticity (PSS) Risk Classification System

**Refer to a spasticity specialist**

If both of the following criteria are met:

1. Moderately, markedly or severely increased muscle stiffness across two or more joints\(^a\)\(^b\)
2. Severe loss of sensorimotor function (e.g., severe decrease in surface sensation, impaired proprioception and severe motor dysfunction)\(^c\)\(^d\)

### Consult with the multidisciplinary team (MDT)

In the presence of mildly\(^c\) increased muscle tone across one joint and involuntary muscle contractions in the affected limb\(^c\)\(^d\) plus one or more of the following:

1. Reduced sensitivity on one side of the body and / or visual inattention\(^e\)\(^f\)\(^g\)
2. Weakness of the limbs and problems with function that cause difficulties with active range of motion and / or daily living\(^h\)\(^i\)\(^j\)
3. Lesion load in the corticospinal tract\(^*\), as seen on CT and / or MRI scan\(^k\)

### Monitor periodically

Monitor periodically (re-evaluate in three to six months) if the patient has persistent dexterity problems in the absence of increased tone\(^l\)

### Possible additional risk factors for the development of PSS include:

- Smoking (defined as current and past smokers)\(^1\)\(^1\)
- Left-sided stroke\(^1\)
- Enhanced manual activities prior to the stroke\(^1\)

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**NEXT STEPS**

- Urgently initiate physiotherapy (evaluation and treatment)
- Immediately refer the patient to a physician or other healthcare professional who is a spasticity specialist\(^8\)\(^9\)
- Initiate physiotherapy and consult with the MDT for advice\(^5\)\(^1\)
- If the patient is still under your care and symptoms do not resolve, refer them to a spasticity specialist and request that they assess the patient and decide if additional intervention is needed\(^8\)
- Refer to a general physiotherapist or occupational therapist for treatment and / or a self-stretching programme\(^8\)
- Patient should be evaluated within three months, and monitored by a physiotherapist or occupational therapist with experience in stroke management\(^8\)
- Provide the patient and caregivers with information about post-stroke management and relevant contacts\(^9\)

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\(^a\)\(^b\) This tool is recommended by experts in the field of stroke rehabilitation and neurorehabilitation to be used when evaluating patients who have had a stroke, ideally within the first 12 weeks post stroke. However, it can still be used at other timepoints. It is recommended that this screening tool is used during regular follow-up visits following a stroke, to identify and manage symptoms of PSS.
The PSS Classification System was created with the assistance of a group of international experts in the field of PSS, utilising both published risk factors and their own clinical experience.

* Based on the clinical expertise of Dr Rhoda Allison, Dr Ganesh Bavikatte, Professor Philippe Marque, Associate Professor Barry Rawicki, Dr Maria Matilde de Mello Sposito, Dr Paul Winston & Professor Jörg Wissel.

a Mildly increased muscle stiffness is a Modified Ashworth Scale (MAS) 1 or +1, while moderately is MAS 2, markedly is MAS 3 and severe is MAS 4*. (See Bohannon RW et al. 1987 for more information)12.

b Measured using the Fugl-Meyer Upper Extremity Scale3 (see Fugl-Meyer AR et al. 1975 for more information)4.

c Muscle contractions may occur due to spasms, disturbed reciprocal inhibition or spastic dystonia and should be differentiated from contractures.

d Visual inattention includes hemianopsia, scotoma or visual neglect.

e Can be measured with the Barthel Index (low score) and EQ-5D (low score)1.

REFERENCES