

# Extrapyramidal Symptom Scale (EPSS)<sup>©</sup>

Person's Name: \_\_\_\_\_

**WHY MONITOR?:** Schizophrenia<sup>20</sup> and the use of antipsychotics are independently associated with increased motor effects, which can contribute to non-adherence to medication, and increased morbidity and mortality<sup>4, 11, 14, 18</sup>.

**MINIMUM MONITORING FREQUENCY:** For newly initiated medication: baseline, 1, 3 and 12 months. For persons on the same medication > 1 year: q 12 months.

## A. MOTOR SIDE EFFECTS

<b>Medical History</b>		<input type="checkbox"/> No relevant motor/neurological history		<input type="checkbox"/> Motor/neurological disorders	
Details:					
<b>Family History in First Degree Relative</b>		<input type="checkbox"/> No relevant motor/neurological history		<input type="checkbox"/> Motor/neurological disorders	
Details:					
<b>Assessment Date (dd/mm/yy)</b>					
<b>Assessment Completed By:</b>					
<b>Current Antipsychotic and Side Effect Medication(s)</b>					
<b>SUBJECTIVE EXPERIENCE</b> (≤ 1 week)	<b>SCORE:</b> 0 = NONE 1 = QUESTIONABLE 2 = MILD 3 = MODERATE 4 = SEVERE				
	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>
Parkinsonism					
Dyskinesia					
Akathisia					
Dystonia					
<b>PARKINSONISM</b> Score right/left sides as indicated	<b>SCORE:</b> 0 = NONE 1 = QUESTIONABLE 2 = MILD 3 = MODERATE 4 = SEVERE				
	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>
Facial expression – reduced					
Hands – tremor (resting)	R	R	R	R	R
	L	L	L	L	L
Hands – tremor (with arms extended, fingers apart)	R	R	R	R	R
	L	L	L	L	L
Hands – bradykinesia	R	R	R	R	R
	L	L	L	L	L
Elbow – rigidity	R	R	R	R	R
	L	L	L	L	L
Gait – abnormality					
<b>DYSKINESIA</b> Score right/left sides as indicated	<b>SCORE:</b> 0 = NONE 1 = QUESTIONABLE 2 = MILD 3 = MODERATE 4 = SEVERE				
	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>
Face and mouth – <i>with activation</i>					
Tongue – <i>with activation</i>					
Upper extremities – arms, hands	R	R	R	R	R
	L	L	L	L	L
Trunk – neck, shoulders, hips					
Lower extremities – ankles/toes	R	R	R	R	R
	L	L	L	L	L
<b>AKATHISIA</b>	<b>SCORE:</b> 0 = NONE 1 = QUESTIONABLE 2 = MILD 3 = MODERATE 4 = SEVERE				
	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>
Observed motor restlessness					
<b>DYSTONIA</b>	<b>SCORE:</b> 0 = NONE 1 = QUESTIONABLE 2 = MILD 3 = MODERATE 4 = SEVERE				
	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>	<b>Score</b>
Observed dystonia					
Details – name affected body part (e.g. head, extremities, trunk):					

## B. ISSUE/ACTION/OUTCOME

DATE	ISSUE	ACTION	OUTCOME

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## C. EXAMINATION PROCEDURE

**RATIONALE:** The purpose of the EPSS is to improve the examination and documentation of motor side effects of antipsychotics, allowing for their earlier detection and management.

**SCORING PROCEDURE:** See anchor point below to guide scoring. Where uncertainty exists about the severity level of a side effect (e.g. questionable v. mild), record the higher of the two scores.

All “hands on” aspects of the examination should be done with passive movement of the person’s respective body part.

SUBJECTIVE EXPERIENCE	
Screen	Ask the person: “During the last week, have you...” a) noticed any shakes, muscle stiffness, or problems walking? (PARKINSONISM) b) noticed any abnormal body movements? (DYSKINESIA) c) felt restless or had the need to move even when you didn’t want to? (AKATHISIA) d) experienced any muscle spasms that lasted at least 1 minute? (DYSTONIA) If yes, explore and record the pertinent details.
<b>PARKINSONISM</b>	<i>Consists of motor disturbances, which include: tremor, impaired gait/posture, postural instability, rigidity, reduced facial expression/speech, and bradykinesia.</i>
Facial expression - reduced	Observe the person’s face for reduced facial expression, decreased blinking or parted lips.
Hands – tremor (resting)	Observe the person’s hands for a resting tremor, with the person sitting with their elbows resting on their thighs and their hands hanging over their knees.
Hands – tremor (with arms extended, fingers apart)	Observe the person’s hands for a tremor, with their palms facing down and arms fully extended with fingers apart.
Hands – bradykinesia	Ask the person to fully open and close their hands, one at a time, in rapid succession, observing for bradykinesia.
Elbow – rigidity	Flex and extend the person’s arms, one at a time, with your thumb on their bicep tendon, noting rigidity (“cog-wheel” or “lead pipe”).
Gait – abnormality	Observe the person’s gait either entering or exiting the room. Note evidence of stooped posture, shuffling gait, decreased arm swing or bradykinesia.
<b>DYSKINESIA</b>	<i>Characterized by movements that are repetitive, purposeless, and involuntary.</i>
Muscles of face and mouth – with activation	While engaging the person in an activation activity (e.g. finger tapping), observe the person’s face and mouth, noting any frowning, blinking, grimacing, puckering, repetitive opening and closing of the mouth, clenching of the jaw or lateral movements of the jaw.
Tongue – with activation	While engaging the person in an activation activity (e.g. finger tapping), with the person’s mouth open, observe for in and out or lateral movements of the tongue.
Upper extremities – arms, hands	While the person is sitting in a chair, face the patient to observe for evidence of dyskinesias of the: a) Arms and hands. Do NOT include tremor. b) Ankles and/or toes (including inversion/eversion of the foot). c) Neck, shoulders, hips (including rocking, twisting, squirming).
Trunk – neck, shoulders, hips	
Lower extremities – ankles/toes	
<b>AKATHISIA</b>	<i>Consists of subjective feelings of inner restlessness with the urge to move, and/or objective movements such as restless movement of one extremity, changing position, rocking while standing or sitting, lifting feet as if marching on the spot, and inability to sit down for long periods with pacing back and forth.</i>
Observed motor restlessness – lower limbs	The person should be observed (while seated) for a minimum of 5 minutes. A “severe” score should be reserved for persons who are unable to remain seated for the entire 5 minute time period, due to akathisia.
<b>DYSTONIA</b>	<i>Characterized by muscles which are contracted, contorted and often painful, sometimes accompanied by repetitive jerking or twisting movements, resulting in the person’s assuming abnormal postures.</i>
Observed dystonia – head, upper and lower extremities, trunk	The person’s entire head, neck, limbs and trunk should be observed while sitting or standing. The details of observed dystonias should be recorded.

## D. AUTHORS

Co-created for the Canadian Consortium for Early Intervention in Psychosis by:

**Thomas Hastings, MD, FRCPC**

Associate Clinical Professor, Department of Psychiatry, McMaster University  
 Hamilton, Ontario  
 Lecturer, Department of General Psychiatry, University of Toronto  
 Toronto, Ontario

Address for correspondence: [tom.hastingsMD@gmail.com](mailto:tom.hastingsMD@gmail.com)

**Phil Tibbo, MD, FRCPC**

Professor and Dr Paul Janssen Chair in Psychotic Disorders, Department of Psychiatry  
 Dalhousie University  
 Halifax, Nova Scotia  
 Director, Nova Scotia Early Psychosis Program  
 Halifax, Nova Scotia

**Richard Williams, MD, FRCPC**

Director of Schizophrenia Service, Vancouver Island Health Authority  
 Victoria, British Columbia  
 Adjunct Professor of Psychology, University of Victoria  
 Victoria, British Columbia  
 Clinical Professor, Department of Psychiatry, University of British Columbia  
 Victoria, British Columbia



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## E. ANCHOR POINTS

### Parkinsonism:

#### Facial Expression:

None = no symptoms present

Questionable = unclear if symptom present

Mild = mild decrease in facial expressiveness

Moderate = consistently blunted affect, but some expressiveness with engagement, frequent staring gaze, reduced blinking

Severe = no facial expressiveness, staring gaze, notably reduced blinking

#### Tremor:

None = no symptoms present

Questionable = unclear if symptom present

Mild = infrequently present and/or small/fine amplitude movements

Moderate = frequently present with moderate amplitude movements

Severe = continuously present with moderate to large amplitude movements

#### Rigidity:

None = no symptoms present

Questionable = unclear if symptom present

Mild = some resistance to passive movement

Moderate = moderate resistance to passive movement but easily able to move limb

Severe = marked resistance to passive movement, difficult to move limb

#### Gait:

None = no symptoms present

Questionable = unclear if symptom present

Mild = mild reduced pendular arm movement, normal step length

Moderate = moderately reduced pendular arm movement, stiff posture, reduced step length

Severe = no pendular arm movement, markedly reduced step length/shuffling gait, difficulties with turning, notable stooped posture

#### Akathisia:

None = no symptoms present

Questionable = unclear if symptom present

Mild = restless movements of one extremity, some increase in position changes but able to remain seated through duration of encounter

Moderate = frequent movement of one or more extremity, very frequent position changes, may be asking to get up and walk, but able to remain seated through duration of encounter

Severe = near constant movement of more than one extremity, (e.g. bouncing both legs), truncal rocking. Unable to remain seated for the duration of the encounter.

#### Dystonia:

None = no symptoms present.

Questionable = unclear if symptom present

Mild = visible muscle contraction which patient is able to correct with minimal impact on posture. Patient does not appear to be in any distress.

Moderate = notable and sustained muscle contraction which patient can correct, but has to do so repeatedly, with impact on posture. Patient appears to be in some distress.

Severe = notable and sustained muscle contraction which patient is not able to fully correct, with substantial/sustained impact on posture. Patient is notably distressed.

#### Dyskinesia:

None = no symptoms present.

Questionable = unclear if symptom present

Mild = infrequently present movements, which patient is able to suppress for extended periods of time

Moderate = frequently persisting movements, which patient is only briefly able to suppress

Severe = continuously present movements, which pt. is not able to completely suppress, even for brief periods of time.

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