

Assessment Tools - Practical

RULA – Rapid Upper Limb Assessment

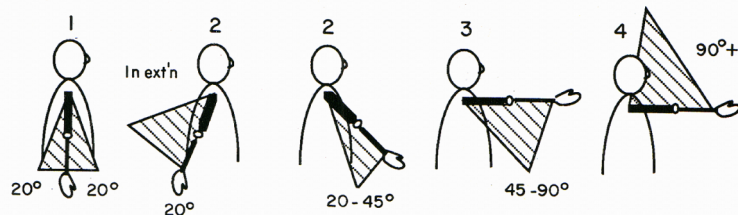
A tool for assessing the risk of upper limb disorders.

Upper arms

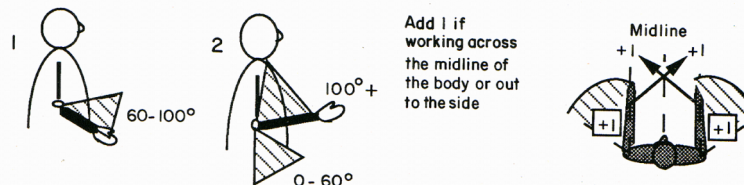
Add 1 if shoulder is raised

Add 1 if upper arm is abducted

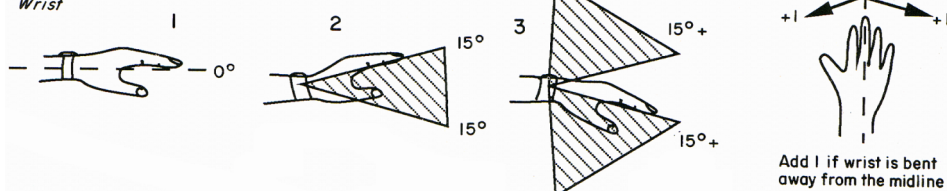
Subtract 1 if leaning or supporting the weight of the arm



Lower arms



Wrist



Wrist twist

1 Mainly in mid-range of twist

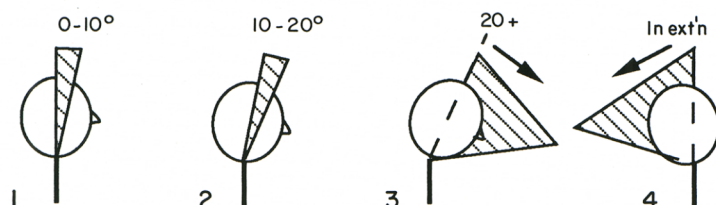
2 At or near the end of twisting range

RULA: a survey method for the investigation of work-related upper limb disorders

Neck

Add 1 if the neck is twisting

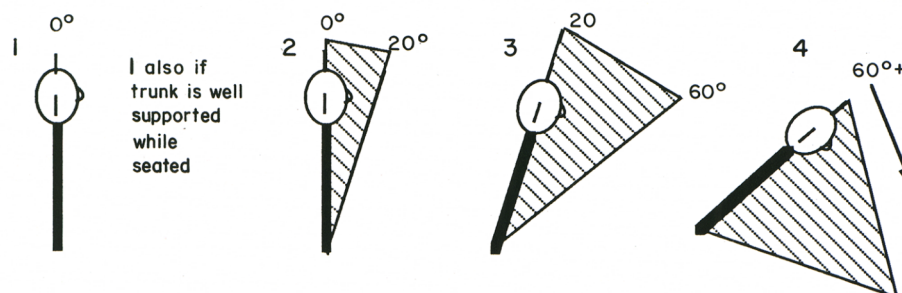
Add 1 if neck is side-bending



Trunk

Add 1 if trunk is twisting

Add 1 if trunk is side-bending



Legs

1 if legs and feet are well supported and in an evenly balanced posture

2 if not

Table 1 Table A into which the individual posture scores for the upper limbs are entered to find posture score A

Upper arm	Lower arm	Wrist posture score							
		1		2		3		4	
		W. twist		W. twist		W. twist		W. twist	
		1	2	1	2	1	2	1	2
1	1	1	2	2	2	2	3	3	3
	2	2	2	2	2	3	3	3	3
	3	2	3	3	3	3	3	4	4
2	1	2	3	3	3	3	4	4	4
	2	3	3	3	3	3	4	4	4
	3	3	4	4	4	4	4	5	5
3	1	3	3	4	4	4	4	5	5
	2	3	4	4	4	4	4	5	5
	3	4	4	4	4	4	5	5	5
4	1	4	4	4	4	4	5	5	5
	2	4	4	4	4	4	5	5	5
	3	4	4	4	5	5	5	6	6
5	1	5	5	5	5	5	6	6	7
	2	5	6	6	6	6	7	7	7
	3	6	6	6	7	7	7	7	8
6	1	7	7	7	7	7	8	8	9
	2	8	8	8	8	8	9	9	9
	3	9	9	9	9	9	9	9	9

Table 2 Table B into which the individual posture scores for the neck, trunk and legs are entered to find posture score B

Neck posture score	Trunk posture score											
	1		2		3		4		5		6	
	Legs		Legs		Legs		Legs		Legs		Legs	
	1	2	1	2	1	2	1	2	1	2	1	2
1	1	3	2	3	3	4	5	5	6	6	7	7
2	2	3	2	3	4	5	5	5	6	7	7	7
3	3	3	3	4	4	5	5	6	6	7	7	7
4	5	5	5	6	6	7	7	7	7	7	8	8
5	7	7	7	7	7	8	8	8	8	8	8	8
6	8	8	8	8	8	8	8	9	9	9	9	9

Give a score of 1 if the posture is :

- mainly static, eg held for longer than 1 min
- repeated more than 4 times / min

Figure 4 The muscle use scores which are added to posture score A and B

0	1	2	3
● No resistance or less than 2 kg intermittent load or force	● 2- 10 kg intermittent load or force	● 2-10kg static load ● 2-10kg repeated load or force	● 10kg or more static load ● 10kg or more repeated loads or forces ● Shock or forces with a rapid build-up

Figure 5 The force or load score which is added to posture score A and B

Task : _____

A

Upperarm
Lower arm
Wrist
Wrist twist

Use Table A
Posture score A

--

+

Muscle

+

Force

=

Score C

Use Table C
Grand score

B

Neck
Trunk
Legs

Use Table B
Posture score B

--

+

Muscle

+

Force

=

Score D

Figure 3 The RULA scoring sheet

Task : _____

A

Upperarm
Lower arm
Wrist
Wrist twist

Use Table A
Posture score A

--

+

Muscle

+

Force

=

Score C

Use Table C
Grand score

B

Neck
Trunk
Legs

Use Table B
Posture score B

--

+

Muscle

+

Force

=

Score D

Figure 3 The RULA scoring sheet

Task : _____

A

Upper arm
Lower arm
Wrist
Wrist twist

Use Table A
Posture score A

+ Muscle + Force = Score C

B

Neck
Trunk
Legs

Use Table B
Posture score B

+ Muscle + Force = Score D

Use Table C
Grand score

Figure 3 The RULA scoring sheet

Task : _____

A

Upper arm
Lower arm
Wrist
Wrist twist

Use Table A
Posture score A

+ Muscle + Force = Score C

B

Neck
Trunk
Legs

Use Table B
Posture score B

+ Muscle + Force = Score D

Use Table C
Grand score

Figure 3 The RULA scoring sheet

		Score D (neck, trunk, leg)						
		1	2	3	4	5	6	7+
Score C (upper limb)	1	1	2	3	3	4	5	5
	2	2	2	3	4	4	5	5
	3	3	3	3	4	4	5	6
	4	3	3	3	4	5	6	6
	5	4	4	4	5	6	7	7
	6	4	4	5	6	6	7	7
	7	5	5	6	6	7	7	7
	8	5	5	6	7	7	7	7

Figure 6 Table C into which score C (posture score A plus the muscle use score and the force or load score) and score D (posture score B plus the muscle use score and the force or load score) are entered to find the grand score

This defines “action levels”

RULA Action Levels

Level 1 – A score of 1 or 2 indicates that posture is acceptable if it is not maintained or repeated for long periods.

Level 2 – A score of 3 or 4 indicates that further investigation is needed and changes may be required

Level 3 – A score of 5 or 6 indicates that investigation and changes are required soon

Level 4 – A score of 7 indicates that investigation and changes are required immediately