



**WESTERN ONTARIO**  
**ROTATOR CUFF INDEX**  
**(WORC)<sup>©</sup>**

**A disease-specific quality of life measurement tool for patients  
with rotator cuff disease**

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## INSTRUCTIONS TO PATIENTS

In the following questionnaire you will be asked to answer questions in the following format and you should give your answer by putting a slash "/" on the horizontal line.

### NOTE:

1. If you put a slash "/" at the left end of the line i.e.



then you are indicating that you have no pain.

2. If you put your slash "/" at the right end of the line i.e.



then you are indicating that your pain is extreme.

3. Please note:

a) that the further to the right you put your slash "/", the **more** you experience that symptom.

b) that the further to the left you put your slash "/" , the **less** you experience that symptom.

**c) please do not place your slash "/" outside the end markers**

You are asked to indicate on this questionnaire, the amount of a symptom you have experienced in the past week as related to your problematic shoulder. If you are unsure about the shoulder that is involved or you have any other questions, please ask before filling out the questionnaire.

If for some reason you do not understand a question, please refer to the explanations that can be found at the end of the questionnaire. You can then place your slash "/" on the horizontal line at the appropriate place. **If an item does not pertain to you or you have not experienced it in the past week, please make your "best guess" as to which response would be the most accurate**

**Section A: Physical Symptoms**  
**INSTRUCTIONS TO PATIENTS**

The following questions concern the physical symptoms you have experienced due to your shoulder problem. In all cases, please enter the amount of the symptom you have experienced in the last week. (Please mark your answers with a slash "/")

1. How much sharp pain do you experience in your shoulder?

no pain |-----| extreme pain

2. How much constant, nagging pain do you experience in your shoulder?

no pain |-----| extreme pain

3. How much weakness do you experience in your shoulder?

no weakness |-----| extreme weakness

4. How much stiffness or lack of range of motion do you experience in your shoulder?

no stiffness |-----| extreme stiffness

5. How much are you bothered by clicking, grinding or crunching in your shoulder?

none |-----| extreme

6. How much discomfort do you experience in the muscles of your neck because of your shoulder?

no discomfort |-----| extreme discomfort

**SECTION B: Sports/Recreation**  
**INSTRUCTIONS TO PATIENTS**

**The following section concerns how your shoulder problem has affected your sports or recreational activities in the past week. For each question, please mark your answers with a slash "/" . )**

7. How much has your shoulder affected your fitness level?

not affected |-----| extremely affected

8. How much difficulty do you experience doing push-ups or other strenuous shoulder exercises because of your shoulder?

no difficulty |-----| extreme difficulty

9. How much has your shoulder affected your ability to throw hard or far?

not affected |-----| extremely affected

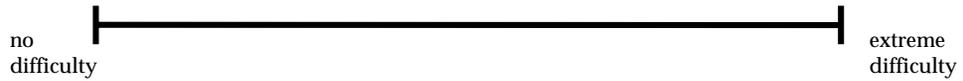
10. How much difficulty do you have with someone or something coming in contact with your affected shoulder?

no fear |-----| extremely fearful

**SECTION C: Work**  
**INSTRUCTIONS TO PATIENTS**

The following section concerns the amount that your shoulder problem has affected your work around or outside of the home. Please indicate the appropriate amount for the past week with a slash "/".

11. How much difficulty do you experience in daily activities about the house or yard?



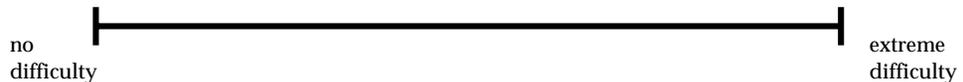
12. How much difficulty do you experience working above your shoulder?



13. How much do you use your uninvolved arm to compensate for your injured one?



14. How much difficulty do you experience lifting heavy objects at or below shoulder level?



**SECTION D: Lifestyle  
INSTRUCTIONS TO PATIENTS**

**The following section concerns the amount that your shoulder problem has affected or changed your lifestyle. Again , please indicate the appropriate amount for the past week with a slash "/".**

15. How much difficulty do you have sleeping because of your shoulder?

no difficulty  extreme difficulty

16. How much difficulty have you experienced with styling your hair because of your shoulder?

no difficulty  extreme difficulty

17. How much difficulty do you have “roughhousing or horsing around” with family or friends?

no difficulty  extreme difficulty

18. How much difficulty do you have dressing or undressing?

no difficulty  extreme difficulty

**SECTION E: Emotions**  
**INSTRUCTIONS TO PATIENTS**

The following questions relate to how you have felt in the past week with regard to your shoulder problem. Please indicate your answer with a slash "/".

19. How much frustration do you feel because of your shoulder?

no frustration |-----| extreme frustration

20. How "down in the dumps" or depressed do you feel because of your shoulder?

none |-----| extreme

21. How worried or concerned are you about the effect of your shoulder on your occupation?

not at all |-----| extremely concerned

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**THANK YOU FOR COMPLETING THE QUESTIONNAIRE**

## **An Explanation of the Meaning of the Questions in the Western Ontario Rotator Cuff Index WORC**

### Section A: Physical Symptoms

#### Question 1.

Refers to pain in your shoulder that is quick and sudden or that you might refer to as a catching type of pain.

#### Question 2.

Refers to the dull background ache that always seems to be there as opposed to the sharp pain that is referred to in question 1.

#### Questions 3.

Refers to a lack of strength to carry out a movement.

#### Question 4.

Refers to the feeling of the joint not wanting to move. This is often experienced in the morning upon rising, after exercise or after a period of inactivity. It could also refer to not having full movement of your shoulder in all or any direction(s).

#### Question 5.

Refers to any of these sounds or feelings that you experience in your shoulder with any type of movement.

#### Question 6.

Refers to the amount of tension, pain or spasm that you experience in the muscles of your neck that seems to be caused by your shoulder problem.

### Section B: Sports/Recreation

#### Question 7.

Refers to the fitness level you maintained before your shoulder became a problem. Include a decrease in muscle tone or strength level, cardiovascular fitness or strength level.

#### Question 8

Refers to any overhead activity requiring you to use some force in its execution. If you do not throw a ball, please consider any other activity such as spiking in volleyball, throwing a stick to your dog, swimming the front crawl, serving in tennis, etc.

#### Question 9.

Please consider whenever you have been afraid or wary of someone or something hitting or coming into contact with your affected shoulder such as in a sport, a crowded room, an elevator or someone slapping your shoulder in a greeting .

#### Question 10.

Refers to any exercise requiring you to put force on your shoulder such as push-ups, bench press etc.

### Section C: Work

#### Question 11.

This refers to activities such as raking, shoveling, vacuuming, dusting, weeding, hoeing and washing windows or floors etc.

#### Question 12.

Refers to any activity requiring you to raise your arms above shoulder level ie. putting dishes in a cupboard, reaching for an object, painting a ceiling or painting above shoulder level etc.

## **Explanation of Questions cont.**

### Question 13.

Refers to if you now use your other arm for any activity or work where you would ordinarily have done it with the arm on the problematic side. If your other shoulder is also symptomatic from Rotator Cuff Disease or some other disease, then consider how you would answer the question if that shoulder was normal.

### Question 14.

This does not refer to lifting above your head but to lifting any heavy objects below shoulder level e.g. a bag of groceries, case of pop, suitcase, equipment at work, books, etc.

## Section D: Lifestyle

### Question 15.

Refers to having to change your sleeping position, waking up during the night, trouble getting to sleep or waking up feeling unrested.

### Question 16.

Refers to anything that you would do to your hair such as combing, brushing or washing that requires you to reach up with your problematic arm.

### Question 17.

Refers to any type of rough or vigorous play activity that you would normally engage in with your family or friends.

### Question 18.

Refers to reaching behind to do up or undo a zipper or button(s), do up or undo a bra, pulling on or removing a sweater or top over your head, or tucking in a shirt or top.

## Section E: Emotions

### Question 19.

Refers to the frustration you feel because of your inability to do things you used to do or that you want to do but can't.

### Question 20.

Down-in-the-dumps or depressed is self-explanatory

### Question 21.

Refers to worrying about your shoulder getting worse instead of better or staying the same and being concerned about what effect that will have on your occupation or work (consider work inside or outside the home).

SCORING OF THE WESTERN ONTARIO ROTATOR CUFF (WORC) INDEX

1. Measure the distance from the left side of the line and calculate the score out of 100 (recorded to the nearest 0.5 mm.). Write it into the space provided for that question.
2. You can calculate a total score for each domain (Physical Symptoms/600; Sports and Recreation/400; Work/400 and Lifestyle/400; Emotions/400) or the total score for the domains can be summed for an aggregate score out of 2100.
3. Some find it more meaningful to report scores out of 100 i.e. a percentage of normal score. Since the worst possible score is 2100, the aggregate score is subtracted from 2100 and divided by 21. e.g. if your patient's total aggregate score = 1625; then the percentage score would be  $\frac{2100 - 1625}{21} = 22.6\%$

The same applies for each domain.

physical symptoms	sports/recreation	work	lifestyle
PS 1 _____. PS 2 _____. PS 3 _____. PS 4 _____. PS 5 _____. PS 6 _____.  TOTAL _____.  	S 7 _____. S 8 _____. S 9 _____. S 10 _____. TOTAL _____.  	W11 _____. W12 _____. W13 _____. W14 _____. TOTAL _____.  	L 15 _____. L 16 _____. L 17 _____. L 18 _____. TOTAL _____.  

emotions	summary
E 19 _____. E 20 _____. E 21 _____. TOTAL _____.  	PS _____. S _____. W _____. L _____. E _____. TOTAL: _____.  