

# CAUSALITY CHART

## CAUSALITY CHART

| <b><i>STEPS IN CAUSALITY DETERMINATION</i></b> |   |
|--|---|
| 1.   | <b>Establish diagnosis (or differential diagnosis if further testing required)</b>  |
| 2.   | <p><b>Define Injury or Exposure</b></p> <p>For Exposures include</p> <ul style="list-style-type: none"> <li>❖ Length of exposure</li> <li>❖ Level of exposure (actual lifting required, amount of repetitive motion, special tool use, etc.)</li> <li>❖ Comparison of workers' exposure to that of the normal population</li> </ul> |
| 3.   | <p><b>Discuss Intervening Factors</b></p> <p>Concurrent non-work-related injuries or disease processes, pre-existing impairment, or disease related activities outside of work, sports, hobbies, etc.</p>   |
| 4.   | <b>Explain any scientific evidence supporting a cause and effect relationship between the diagnosis and the exposure or injury</b>  |
| 5.   | <p><b>Assign a medical probability level to the case in question</b></p> <ul style="list-style-type: none"> <li>❖ Medically probable &gt;50% likely</li> <li>❖ Medically possible ≤ 50 likely</li> </ul>  |

## Summary Of NIOSH Reviews\*

Table 1. Evidence for casual relationship between physical work factors and MSDs

| Body part<br><i>Risk factor</i>        | Strong<br>Evidence<br>(+++) | Evidence<br>(++) | Insufficient<br>evidence<br>(+/0) | Evidence of<br>no effect<br>(-) |
|--|-----------------------------|------------------|-----------------------------------|---------------------------------|
| <b>Neck and Neck/Shoulder</b>          |                             |                  |                                   |                                 |
| <i>Repetition</i> _____                |                             | X                |                                   |                                 |
| <i>Force</i> _____                     |                             | X                |                                   |                                 |
| <i>Posture</i> _____                   | X                           |                  |                                   |                                 |
| <i>Vibration</i> _____                 |                             |                  | X                                 |                                 |
| <b>Shoulder</b>                        |                             |                  |                                   |                                 |
| <i>Posture</i> _____                   |                             | X                |                                   |                                 |
| <i>Force</i> _____                     |                             |                  | X                                 |                                 |
| <i>Repetition</i> _____                |                             | X                |                                   |                                 |
| <i>Vibration</i> _____                 |                             |                  | X                                 |                                 |
| <b>Elbow</b>                           |                             |                  |                                   |                                 |
| <i>Repetition</i> _____                |                             |                  | X                                 |                                 |
| <i>Force</i> _____                     |                             | X                |                                   |                                 |
| <i>Posture</i> _____                   |                             |                  | X                                 |                                 |
| <i>Combination</i> _____               | X                           |                  |                                   |                                 |
| <b>Hand/wrist</b>                      |                             |                  |                                   |                                 |
| Carpal tunnel syndrome                 |                             |                  |                                   |                                 |
| <i>Repetition</i> _____                |                             | X                |                                   |                                 |
| <i>Force</i> _____                     |                             | X                |                                   |                                 |
| <i>Posture</i> _____                   |                             |                  | X                                 |                                 |
| <i>Vibration</i> _____                 |                             | X                |                                   |                                 |
| <i>Combination</i> _____               | X                           |                  |                                   |                                 |
| Tendinitis                             |                             |                  |                                   |                                 |
| <i>Repetition</i> _____                |                             | X                |                                   |                                 |
| <i>Force</i> _____                     |                             | X                |                                   |                                 |
| <i>Posture</i> _____                   |                             | X                |                                   |                                 |
| <i>Combination</i> _____               | X                           |                  |                                   |                                 |
| Hand-arm vibration syndrome            |                             |                  |                                   |                                 |
| <i>Vibration</i> _____                 | X                           |                  |                                   |                                 |
| <b>Back</b>                            |                             |                  |                                   |                                 |
| <i>Lifting/forceful movement</i> _____ | X                           |                  |                                   |                                 |
| <i>Awkward posture</i> _____           |                             | X                |                                   |                                 |
| <i>Heavy physical work</i> _____       |                             | X                |                                   |                                 |
| <i>Whole body vibration</i> _____      | X                           |                  |                                   |                                 |
| <i>Static work posture</i> _____       |                             |                  | X                                 |                                 |

\*Musculoskeletal Disorders And Workplace Factors A Critical Review of Epidemiologic Evidence for Work-Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back Edited by: Bruce P. Bernard, M.D., M.P.H.; U.S. Department Of Health And Human Services; Public Health Service Centers for Disease Control and Prevention National Institute for Occupational Safety and Health, July 1997