

# Low Back Pain

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## Low Back Pain in Construction Workers

I am currently involved in research into low back pain (LBP) in construction workers. This is for the purpose of designing education and training aimed at helping to prevent injury in trainees entering the workplace.

I have written an extensive review on the subject. The following excerpt from this review details interesting facts regarding the prevalence of LBP both in the general population, and in construction. I have highlighted some of the more concerning statistics. From this you will see just how extensive the problem is.

### Epidemiology of LBP

#### LBP in the General Population

The lifetime prevalence of LBP is consistently reported as being 80%<sup>5,17,19</sup>. It affects around 10% of the world's population at any point in time<sup>18</sup>. LBP is **the most common reason for activity limitation in those under 45 years of age**<sup>5,6,13</sup>. It is the **primary health problem affecting quality of life**<sup>6</sup>. 13% of all sick days in the UK, and 19% in Sweden, were due to LBP<sup>8</sup>. The incidence of LBP continues to rise<sup>5,15</sup>. Over the past 10 years in the US, **while the percentage of disability has decreased for circulatory disorders (11.8% to 9.6%) and respiratory conditions (3.6% to 3.1%) it has increased for MSK injuries (20.6% to 25.4%), particularly LBP**<sup>20</sup>. Currently, LBP is the **third most frequent cause of disability behind arthritis and heart disease**<sup>5</sup>. In the US 20%, and in Europe 40% of the population will suffer from LBP over the course of a year<sup>5</sup>. Of all MSK injuries, 20% were to the low back<sup>4</sup>. Also, 20%<sup>10</sup> to 25%<sup>12</sup> of all work-

related, and 33%<sup>10</sup> to 40%<sup>12</sup> of all compensable injuries were to the low back. It was the **second most common reason to visit a doctor**, the fifth most frequent reason for hospital admission, and the third most common reason to require surgery<sup>17</sup>. In Australia in 1994, LBP cost the economy an estimated \$400 million, with a workers compensation bill of \$300 million<sup>5</sup>. In the US the corresponding cost was \$15 to \$30 billion<sup>5</sup>. Two per cent of the US workforce is compensated each year due to LBI<sup>8</sup>.

#### LBP in Construction

While the lifetime incidence of LBP is reported at 80% for the general population, **it was reported as 90% in construction**<sup>16</sup>. In US construction in 1999, the incidence of LBI was said to be **50% higher than for all other industries**<sup>1</sup>. In US manual handling jobs, **80% of work injuries were to the low back**<sup>5,11</sup>. In injury surveys, 70% of workers reported LBP<sup>1</sup>, **60% to 66% had suffered from LBP in the previous 12 months**<sup>6,7</sup>, and **over 30% had experienced LBP during the previous week**<sup>7</sup>. LBI accounted for 29% of all injuries in highway construction<sup>3</sup> and 25% across all industries<sup>6</sup>. In **apprentice workers, 54.4% reported injuries to the lower back, for which 16.8% had consulted a physician**, and 7.3% had missed work days during the previous year<sup>14</sup>. 23% of older workers required a physician visit for their LBP<sup>1</sup>. In the US in the 1980's, 25% of all compensatory injuries were to the low back<sup>2</sup>. It was the main reason for work

absenteeism <sup>6</sup> and the **most common reason for early retirement** <sup>7,8</sup>.

For general construction related injuries, 82% of those surveyed had suffered at least one MSK injury, and the **incidence of lost workdays from non-fatal injuries was highest for construction** <sup>7</sup>. Construction accounted for 10 of the top 25 sectors requiring interventions for MSK injuries <sup>1</sup>. In Sweden, 72% of sick leave of over 4 weeks duration was due to MSK injury, with 54% due to LBI. MSK injuries in construction were 41.5 per 1000 workers, compared to 35.4 for other industries <sup>9</sup>. **In apprentice construction workers, 76.8% reported MSK symptoms** <sup>14</sup>.

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