

**Online Table 2; Summary of studies included in the review**

*Studies reporting duration of work absence*

<b>Author (years)</b>	<b>Country</b>	<b>Setting</b>	<b>Participants</b>	<b>Data source for work absence</b>	<b>Follow-up</b>	<b>Reported results: duration of work absence</b>	<b>Risk of study participation bias (QUIPS tool)</b>
<b>Samples identified from work absence databases</b>							
Hashemi et al (1998) [19]	USA	Workers compensation insurance database	148917 compensable low back pain claims	Register	1 year (1996)	Median length of disability (number of days lost from work) 61 days	Low
Nyiendo et al (1991) [30]	USA	Workers compensation insurance database	201 with disabling compensable low back pain >3 workdays	Register	Over a period of 2.5 years	Chiropractic claimants: mean 41.1 days (SD 83.5) Medical claimants: mean 39 days (SD 75)	Moderate
Rossignol et al (1992) [22]	Canada	Workers compensation insurance database	2342 workers compensation claims for spinal injury (defined as musculoskeletal complaints related to the entire spine (cervical, thoracic, lumbar and sacral)) in Quebec 1981	Register	4 years	Initial episode: median 11 days 1 <sup>st</sup> recurrence: median 13 days 2 <sup>nd</sup> recurrence: median 14 days 3 <sup>rd</sup> recurrence: median 15 days 4 <sup>th</sup> recurrence: median 17.5 days	Moderate
Shinohara et al (1998)	Japan	Workers compensation	177 with organic low back pain and	Register	5 years	Organic: mean 3.7 months ( $\pm$ 0.7)	High

[32]		insurance database	176 with nonspecific low back pain			Non-specific: mean 1.2 months ( $\pm 0.4$ )	
Soriano et al (2002) [23]	Argentina	Insurance database	330 patients consulting for acute low back pain while at work or while travelling to/from work	Register	6 months	Median work absence: 7 days (0-422 days)	Moderate
Vallfors et al (1985) [34]	Sweden	Insurance database	50 people with low back pain who had not been absent from work in the past year	Register	1 year	Mean 10.5 days for those with objective findings Mean 7 days for those without objective findings (i.e. normal movement ability, no signs of neurologic involvement)	High
*Watson et al (1998) [35]	UK	Social security database	2291 claims with specific and non-specific low back pain	Register	3 years	1 <sup>st</sup> absence: mean 20.73 days (SD 38.9) 2 <sup>nd</sup> absence: mean 36.8 (SD 61.4)	Moderate
<b>Population sample</b>							
*Biering-Sorensen et al (1984) [18]	Denmark	Population sample	357 (193 men, 164 women) with low back pain	Self-report	1 year	Median days off work Men: 12 days Women: 7 days	Low
<b>Samples identified from healthcare settings</b>							
*Henschke et al (2008) [20]	Australia	Primary care clinics	770 with low back pain for <2 weeks preceded by no low back pain for	Self-report	1 year	Median 14 days	Low

			at least 1 month, 291 reported changing their working status				
Lanier et al (1988) [28]	USA	Primary care	104 patients consulting their family physician with low back pain	Self-report	3 months	Mean: 6.6 days manual labourers Mean: 3.6 days professional or technical workers	Moderate
Valat et al (2000) [33]	France	Primary care	2487 working with an episode of acute low back pain with or without radiation in the lower limbs, referred for the first time (symptoms developing for no more than a week)	Self-report	42 days ( $\pm$ 15) after initial visit	Mean: 9 ( $\pm$ 7) days	Low
*Vingard et al (2002) [26]	Sweden	Primary care Occupational physicians Hospital physicians Physiotherapists Chiropractors Alternative therapists	791 patients with new episode of low back pain, not having sought care during the preceding 6 months	Self-report	last 12 months of 24 month follow up	Median: 24 days (3- 365) women Median: 14 days (2- 365) men	Moderate
<b>Samples identified from workplace settings</b>							
**Hiebert et	USA	Utility company	240 workers	Register	1 year	Median: 14 days	Low

al (2003) [21]			visiting medical department at utility company for nonspecific low back pain with lost work time			employees with restrictions Median: 15 days employees without restrictions	
Jensen et al (2010) [27]	Denmark	Health and elderly care workers	1724 female healthcare workers with low back pain $\geq 1$ day during the previous 1 year	Self-report	1 year	Mean: 21.2 days (0-365)	Low
McEllingott et al (1989) [29]	USA	Industrial plant	280 with work-related back injuries & 740 with non-work related back injuries both incurring costs due to time off work	Register	1 year	Mean: 5.2 days (work related) Mean: 5.1 days (non-work related)	Moderate
Peek-Asa et al (2004) [31]	USA	Retail	2152 with acute low back injuries, occurrence at work, verified by physician	Register	5 years	Mean: 5.6 days age <45 Mean: 9 days age 45-54 Mean: 8.5 days Age 55+	Moderate
**Steenstra et al (2005) [24]	The Netherlands	Hospital employees	615 who reported sick leave due to non-specific low back pain for more than 1 day over a 2-year period	Self-report	6 months	Median: 5 days (IQR 2-12)	Low
**Troup et al	UK	Collieries	802 participants	Self report	1 year and 2	Mean: 7.01 weeks (1-	High

(1981) [25]		Glass industry Motor company	interviewed and examined in medical centres after episodes of back pain, on return to work after sickness absence. Or in cases not absent from work after completion of treatment, or after reporting a back injury sustained at work.		years	68 weeks) Median: 28 days (4.06 weeks)	
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*Studies reporting occurrence of work absence*

Author (years)	Country	Setting	Participants	Data source for work absence	Follow-up	Reported results: proportion with work absence	Risk of study participation bias (QUIPS tool)
<b>Samples identified from work absence databases</b>							
*Holtermenn et al (2010) [36]	Denmark	National compensation database	676 employees with low back pain	Register	Over 2 years	142/676 (21.0%)	Moderate
*Watson et al (1998) [35]	UK	Social security database	2291 claims with specific and non-specific low back pain	Register	Over 3 years	144/2291 (6.28%)	Moderate
<b>Population samples</b>							

*Biering-Sorensen et al (1984) [18]	Denmark	Population sample	357 (193 men, 164 women) with low back pain	Self-report	Over 1 year	Men 15% (29/193) Women 14% (23/163)	Low
*Demmelmaier et al (2010) [37]	Sweden	Population sample	313 reporting non-specific back pain	Self-report	Over 12 months	58/313= 18.5%	Moderate
*Nyman et al (2007) [38]	Sweden	Population sample	120 with low back pain and 271 with neck shoulder disorder Working at least 50%	Register	Over a period of 5 years	50/120 (42%)	Moderate
<b>Samples identified from healthcare settings</b>							
*Grotle et al (2007) [39]	Norway	Primary care	112 with acute low back pain of <3 weeks duration and no previous treatment for low back pain	Self-report	1 month 3 months 6 months 9 months 12 months	12/106 (11%) 10/110 (9%) 7/109 (8%) 7/109 (8%) 9/103 (9%)	Low
*Henschke et al (2008) [20]	Australia	Primary care clinics	770 with low back pain for < 2 weeks preceded by no low back pain for at least 1 month	Self-report	6 weeks 3 months 12 months	17/770 (2.2%) 12/770 (1.6%) 12/770 (1.6%)	Low
*Kovacs et al (2007) [61]	Spain	Primary care and outpatient clinics	165 workers consulting their physician for low back pain	Register	12 months (<60 days absence) 12 months (> 60 days absence)	46/165 (27.9%) 42/165 (25.4%)	Low
*Schlottz-Christensen et	Denmark	Primary care	503 consulting with back pain of	Self-report	1 month 6 month	15/503 (3%) 15/503 (3%)	Low

al (1999) [40]			less than 14 days duration		12 months	10/503 (2%)	
*Vingard et al (2002) [26]	Sweden	Healthcare	791 patients with new episode low back pain, not having sought care during preceding 6 months	Self-report	Last 12 months of the 24 months follow up	Women: 44/449 (9.7%) Men: 35/342 (10.2%)	Moderate
*Wynne-Jones et al (2008) [41]	UK	Primary care	597 consulting their GP with low back pain	Self-report	1 year	17/253 (6.7%) (16.6%)	Moderate
<b>Samples identified from workplace settings</b>							
*Alexopoulos et al (2008) [42]	Greece	Ship building company	312 employees with back pain	Register	1 year	74/312 (23.7%)	Low
*Murtezani et al (2010) [43]	Republic of Kosovo	Energetic corporation	430 blue and 59 white collar workers with back pain	Self-report	1 year	Blue collar: 88/430 20.5% <7 days; 129/430 30% >7 days  White collar: 26/59 44.1% <7 days; 7/59 11.9% >7 days	Low
*Van den Heuvel et al (2004) [44]	The Netherlands	34 participating companies	629 observations in blue collar, white collar, and workers in care professions with back pain who had been employed in their current job	Register	3 years	113/629 (18%)	Moderate

			for at least 1 year and who were working more than 24 hours a week				
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*Studies reporting return to work*

Author (years)	Country	Setting	Participants	Data source for work absence	Follow-up time	Reported results: Proportion on sick leave returning to work	Risk of study participation bias (QUIPS tool)
<b>Samples identified from work absence databases</b>							
** Cote et al (2008) [45]	USA	Workers compensation database	1831 workers who filed a workers' compensation claim for back pain	Self-report	1 month 6 months 12 months	1194/1321 (90.4%) 780/810 (96.3%) 449/462 (97.1%)	Moderate
** Kapoor et al (2006) [46]	USA	Workers compensation database	300 workers seeking compensation and treatment for acute (<14 days since onset), non-specific low back pain	Register	1 month 3 months	156/275 (57%) 202/274 (74%)	Low
** Krause et al (1999) [47]	USA	Workers compensation database	850 workers with permanent or temporary disability ( at least 3 days) due to low	Register	1 month 12 months	507/850 (59.6%) 816/850 (96%)	Low



			back pain, non-traumatic injury, physician diagnosis (MD, osteopath or chiropractor)				
**Oleinick et al (1996) [48]	USA	Workers compensation database	8628 with disabling compensable low back pain >7 workdays (claims)	Register	8 weeks	6445/8628 (74.7%)	Low
**Steenstra et al (2010) [49]	Canada	Workers compensation database	442 with new, accepted or pending, work related back injury lost-time claim, absent from work at least 5 days within the first 14 days post-injury	Self-report	1 month 6 months	258/442 (58.4%) 233/442 (52.7%)	Low
**Tellnes et al (1989) [50]	Norway	National insurance database	493 with sickness certificates related to back pain	Register	1 month 1-6 months >6 months	324/493 (65.7%) 474/493 (96.1%) 487/493 (98.8%)	Low
<b>Samples identified from healthcare settings</b>							
**Coste et al (1994) [51]	France	Primary care	75 patients consulting their doctor for back pain	Self-report	1 month 90 days	58/75 (78%) 71/75 (95%)	Low
**Dionne et al (2007) [52]	Canada	Emergency departments and family medicine units	1007 consulting for back pain & absent ≥1 day due to back pain	Self-report	6 weeks 12 weeks 1 year 2 years	164/923 (17.80%) 467/907 (51.50%) 500/913 (54.80%) 489/864 (56.60%)	Low
**Eilat-	Israel	Military clinics	160 soldiers whose	Self-report	6 weeks	126/160 (78.8%)	Low

Tsanani et al (2010) [53]			first visit to the clinic was for acute low back pain				
** Hadler et al (1995) [60]	USA	Primary care	1366 patients coping with episode of back pain for less than 10 weeks without seeking care from elsewhere	Self-report	2 weeks 4 weeks 8 weeks 12 weeks 24 weeks	1321/1366 (96.7%) 1340/1366 (98.1%) 1347/1366 (98.6%) 1354/1366 (99.1%) 1361/1366 (99.6%)	Moderate
** Infante-Rivard et al (1996) [54]	Canada	Health centres	305 workers with compensated low back pain	Self-report	112 days 270 days	153/305 (50%) 271/305 (88.7%)	Low
** Linton et al (1998) [55]	Sweden	Primary care	137 patients consulting family physician with acute low back or neck pain, 52 on sick leave	Self-report	Within 1 month	25/52 (48%)	Low
** Nordin et al (1997) [56]	USA	Primary and secondary care	557 episodes from 162 employees having lost-work episodes of non-specific low back pain, within 1 week of episode onset, initial visit at company occupational health clinic	Register	1 month	314/557 (56.4%)	Moderate
** Reis et al (1999) [57]	Israel	Primary care	178 patients who had the chief	Self-report	2 months	94/110 (85%)	Low

			complaint of a new episode of low back pain and were employed, 110 absent at baseline				
**Reiso et al (2003) [62]	Norway	Hospital outpatient clinic	190 patients with back pain certified as sick, with or without radiating pain	Self-report and register (for sick cert)	2 years	130/190 (68.4%)	Low
**Shaw et al (2009) [58]	USA	Occupational health clinics	568 with non-specific low back pain (<14 days), pain presumed to be work-related	Register	12 weeks	417/519 (80.3%)	Low
**Troup et al (1981) [25]	UK	Medical centre	802 participants interviewed and examined in medical centres after episodes of back pain, on return to work after sickness absence. Or in cases not absent from work after completion of treatment, or after reporting a back injury sustained at work	Self-report	1 year 2 years	280/503 (55.7%) 122/177 (68.9%)	High
<b>Samples identified from workplace settings</b>							
**Hiebert et	USA	Work medical	240 workers	Register	1 year	223/225 (99%)	Low

al (2003) [21]		department (utility company)	visiting medical dept at utility company for nonspecific low back pain with lost work time				
**Nordin et al (2002) [59]	USA	Utility company and a public transportation authority (occupational health clinics within these organisations)	1652 (utility) episodes and 730 (transport) episodes Employees having lost-work episode of non-specific low back pain, visit at company occupational health clinic	Register	1 month 12 months  1 month 12 months	Utility company: 998/1652 (60%) 1637/1652 (99.1%)  Transport: 325/730 (44.5%) 700/730 (95.9%)	Low
**Steenstra et al (2005) [24]	The Netherlands	Health care workers	615 who reported sick leave due to non-specific low back pain for more than 1 day over a 2 year period	Self-report	4 weeks 13 weeks	547//615 (88.9%) 584/615 (95%)	Low

\* Studies included in the work absence meta-analysis

\*\* Studies included in the return to work meta-analysis

All other studies provided data on duration of absence but were not included in the meta-analyses

Only 4 studies provided information on duration of work absence at the time of the study inception; Steenstra *et al* (2010) [49]– At 1<sup>st</sup> interview participants had a mean of 18.8 (SD6.43) days missed due to injury. Hadler *et al* (1995) [60] – In the 30 days prior to the baseline interview insured patients had 3.2 days of absence compared to 2.6 days of absence in uninsured patients. Linton *et al* (1998) [55]– Of the sample 62% reported no days absence over the previous 12 months, 18% reported 1-30 days absence over the past 12 months and 20% reported  $\geq 30$  days absence over the past 12 months. Note that 12 months covers the period of follow-up (6 months) plus the period before

entry into the study (6 months). Nordin *et al* (2002) [59] - Duration of absence was <28 days in 60% of participants employed in a utility company and 45% in participants employed in a transportation authority.