

Appendix 14: Recovery from low back pain

Study	Inception time	Recovery rates
Bakker et al., 2007 ⁽¹⁾	< 6 wk	<ul style="list-style-type: none"> • 40% fully recovered by 12 wk and did not experience a recurrence within 6 mo
Basinski et al., 2022 ⁽²⁾	< 3 mo	<ul style="list-style-type: none"> • 70.1% suffered from back pain after 3 months
Bousema et al., 2007 ⁽³⁾	4–7 wk	<ul style="list-style-type: none"> • After 1 yr, 32% had no back pain complaints
Carey et al., 1995 ⁽⁴⁾ ; Sundararajan et al., 1998 ⁽⁵⁾	< 10 wk	<ul style="list-style-type: none"> • 95% functionally recovered (a return to a functional status similar to that before the onset of low back pain) by 6 mo • 69% considered themselves completely better at 6 mo
Carey et al., 2000 ⁽⁶⁾	12–22 weeks	<ul style="list-style-type: none"> • 33% had no functionally limiting symptoms after 18 mo • 16% had no back symptoms after 18 mo
Costa et al., 2009 ⁽⁷⁾	12 weeks	<ul style="list-style-type: none"> • Only 11% of patients had not returned to work in their previous capacity at the onset of chronicity and, of those 46%, had returned to work by 12 mo • The cumulative probability of being pain-free, maintained for one mon, was 35% at 9 mo and 42% at 12 mo after onset • The cumulative probability of having no disability, maintained for one mo, was 39% at 9 mo and 47% at 12 mo after onset • The cumulative probability of being completely recovered (pain-free, no disability and returned to prior work status maintained for one mo) was 35% at 9 mo and 41% at 12 mo after onset of chronic pain
Coste et al., 1994 ⁽⁸⁾	< 72 h	<ul style="list-style-type: none"> • 90% (95%CI 84%–96%) of patients recovered within the first 2 wk • 98% (95%CI 95%–100%) of patients recovered after 3 mo • 40% of patients lost no time from work and return to work was slower than recovery from back pain
Coste et al., 2004 ⁽⁹⁾	< 72 h	<ul style="list-style-type: none"> • 87% (95%CI 79%–95%) had recovered in 30 d • 95% (95%CI 91%–100%) had recovered in 3 mo
Elfering et al., 2014 ⁽¹⁰⁾ ; Melloh et al., 2011 ⁽¹¹⁾ ; Melloh et al., 2012 ⁽¹²⁾ ; Melloh et al., 2013 ⁽¹³⁾ ; Melloh et al., 2013 ⁽¹⁴⁾ ; Melloh et al., 2013 ⁽¹⁵⁾ ; Melloh et al., 2013 ⁽¹⁶⁾ ; Melloh et al., 2015 ⁽¹⁷⁾ ; Melloh et al., 2015 ⁽¹⁸⁾	< 12 wk	<ul style="list-style-type: none"> • 74% were considered to have non-persistent LBP at 6 mo • 26% were considered to have persistent LBP at 6 mo
Epping-Jordan et al., 1998 ⁽¹⁹⁾ ; Shaw et al., 2007 ⁽²⁰⁾ ; Wahlgren et al., 1997 ⁽²¹⁾ ; Williams et al., 1998 ⁽²²⁾	6–10 wk	<ul style="list-style-type: none"> • 54% improved by 6 mo • 67% improved by 12 mo
Ferguson et al., 2000 ⁽²³⁾ ; Ferguson et al., 2001 ⁽²⁴⁾	< 4 wk	<ul style="list-style-type: none"> • 68% of patients were not impaired according to functional performance, and 80% were not impaired in terms of pain by 14 to 18 wk
Grotle et al., 2005 ⁽²⁵⁾ ; Grotle et al., 2007 ⁽²⁶⁾	< 3 wk	<ul style="list-style-type: none"> • 76% had recovered (RMDQ < 4) after both 4 wk and 3 mo • 83% of patients had recovered fully from their disability after 1 yr (RMDQ < 4)

Gurcay et al., 2009 ⁽²⁷⁾	< 3 wk	<ul style="list-style-type: none"> • 27% recovered in the first wk • 31% recovered in the second wk • 23% recovered in the fourth wk • 10% recovered at the eighth wk • 1% recovered after 12 wk • 9% developed chronic low-back pain
Heneweer et al., 2007 ⁽²⁸⁾	< 12 wk	<ul style="list-style-type: none"> • 52% recovered in less than 4 wk • 55% recovered at 12 wk, of whom 76% did not report work absenteeism
Henschke et al., 2008 ⁽²⁹⁾	> 24 h to < 2 wk	<ul style="list-style-type: none"> • The cumulative probability of returning to work with pre-back pain work status and duties for those who reduced their work status at baseline because of low-back pain was 80% at 6 wk, 83% at 12 wk and 90% by 1 yr • The cumulative probability of having no disability was 55% at 6 wk, 73% by 12 wk and 83% by 1 yr • The cumulative probability of being pain free was 39% by 6 wk, 58% by 12 wk and 73% by 1 yr • The cumulative probability of being completely recovered was 39% by 6 wk, 57% by 12 wk and 72% by 1 y
Jenkins et al., 2022 ⁽³⁰⁾ ; Jenkins et al., 2023 ⁽³¹⁾	> 24 h to < 6 wk	<ul style="list-style-type: none"> • 52 (54%) had LBP present at 6 months, 44 (46%) did not
Karran et al., 2017 ⁽³²⁾ (subacute cohort)	< 12 wk	<ul style="list-style-type: none"> • 32% were considered recovered at 4 mo
Karran et al., 2017 ⁽³²⁾ (persistent cohort)	12 wk - 12 mo	<ul style="list-style-type: none"> • 12% were considered recovered at 4 mo
Klenerman et al., 1995 ⁽³³⁾	< 1 wk	<ul style="list-style-type: none"> • 21% were classified as having no pain at 12 mo • 28% were classified as having no intermittent pain at 12 mo • 93% were classified as not having constant pain at 12 mo
Klyne et al., 2018 ⁽³⁴⁾	< 2 wk	<ul style="list-style-type: none"> • at 3 mo 9% recovered, 80% partially recovered, 11% unrecovered • at 6 mo 16.5% recovered, 68% partially recovered, 15.5% unrecovered • at 9 mo 13% recovered, 76.5% partially recovered, 10.5% unrecovered • at 12 mo 14% recovered, 73% partially recovered, 13% unrecovered
Knoop et al., 2022 ⁽³⁵⁾	≤ 1 mo	<ul style="list-style-type: none"> • 47% were defined as 'LBP non-recovery' whereas 53% were defined as 'LBP recovery' at 3 months
Koleck et al., 2006 ⁽³⁶⁾	10–90 d	<ul style="list-style-type: none"> • 67% of patients were classified as improved after 1 yr • 67% were classified as not having chronic low-back pain after 1 yr
Machado et al., 2016 ⁽³⁷⁾ ; Pozzobon et al., 2019 ⁽³⁸⁾	< 1 wk	<ul style="list-style-type: none"> • 45% had pain persisting for at least 6 wk • 26% had no recovered by 3 mo • 12% still experienced low back pain at 12 mo
Medeiros et al., 2018 ⁽³⁹⁾	< 6 wk	<ul style="list-style-type: none"> • 56% recovered (GPE ≥ 3) at 6 wk • 45% recovered (GPE ≥ 3) at 6 mo
Mehling et al., 2011 ⁽⁴⁰⁾ ; Mehling et al., 2012 ⁽⁴¹⁾ ; Mehling et al., 2015 ⁽⁴²⁾ ; Mehling et al., 2015 ⁽⁴³⁾	< 30 d	<ul style="list-style-type: none"> • 13% (95% CI: 10-16) experienced persistent or recurrent pain at 6 mo • 19% (95% CI:15-22) experienced persistent or recurrent pain at 2 y
Muller et al., 2019 ⁽⁴⁴⁾	< 6 wk	<ul style="list-style-type: none"> • 25% developed chronic low back pain at 6 mo

Poiraudeau et al., 2006 ⁽⁴⁵⁾	4–12 wk	<ul style="list-style-type: none"> • 60% did not have persistent low-back pain at 3 mo • 59% did not use sick leave during the 3 mo period • 83% had returned to work at 3 mo
Schiottz-Christensen et al., 1999 ⁽⁴⁶⁾	<14 d	<ul style="list-style-type: none"> • 84% (95%CI 80%– 87%) of patients functionally recovered at 6 mo • 92% (95%CI 89%–94%) functionally recovered at 12 mo • 47% of patients completely recovered at 6 and 12 mo
Syedmeahdi et al., 2016 ⁽⁴⁷⁾	< 2 wk	<ul style="list-style-type: none"> • 57% reported low back pain for 3 mo or more
Sharpe et al., 2014 ⁽⁴⁸⁾	< 3 mo	<ul style="list-style-type: none"> • 22% were considered to have chronic pain at 3 mo • 21% were considered to have chronic pain at 6 mo
Shaw et al., 2011 ⁽⁴⁹⁾	< 14 d	<ul style="list-style-type: none"> • 52% had 'unresolved' pain at 1 mo • 38% had 'unresolved' pain at 3 mo
Soares Oliveira et al., 2021 ⁽⁵⁰⁾	< 6 wk	<ul style="list-style-type: none"> • 37% recovered (pain, disability, previous work capacity) at 6 wk • 56% recovered (pain, disability, previous work capacity) at 3 mo • 70% recovered (pain, disability, previous work capacity) at 12 mo
Starkweather et al., 2016 ^{(51)*}	< 4 wk	<ul style="list-style-type: none"> • 40% developed persistent low back pain
Bernier Carney et al., 2021 ^{(52)*}	< 4 wk	<ul style="list-style-type: none"> • 79 participants considered resolved (<2 on NRS) • 55 participants considered to have persistent unresolved pain at 24 wk • 83 participants 'undefined unresolved'
Tan et al., 2018 ⁽⁵³⁾	< 1 mo	<ul style="list-style-type: none"> • 82.5% attained at least a 2-point drop on the NPRS at 6 mo • 59.9% reported being pain-free 6 mo • 93.8% had an improved status at 6 mo
Valat et al., 2000 ⁽⁵⁴⁾	< 1 wk	<ul style="list-style-type: none"> • 61.3% had fully recovered at 7 wk
Zille Queiroz et al., 2017 ⁽⁵⁵⁾	< 6 wk	<ul style="list-style-type: none"> • 31.5% were considered recovered at 6 mo • 41% were considered recovered at 12 mo
<p>NPRS – Numerical Pain Rating Scale GPE – Global Perceived Effect Scale RMDQ – Roland Morris Disability Questionnaire</p> <p>*Note that Starkweather et al. 2016 (n= 48) is a sub-cohort of Bernier Carney et al. 2021 (n=217) but are reported here as separate cohorts.</p>		

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