Supplementary material
Amendments from the study protocol

Because of recruitment challenges and the Covid-19 pandemic, several amendments were conducted compared to the study protocol (18). Firstly, implementation of new logistic software at several warehouses and building of new warehouse terminals during data collection resulted in fewer retail chains having the resources to participate. Secondly, the Covid-19 pandemic from 2020-2022 complicated the participation in the project due to the risk of infection and higher demands for supply for several retail chains. Thirdly, inflation and lack of employees at several warehouses characterized the period post Covid-19. Because of these factors, we recruited warehouse sites other than those described in the initial protocol (18) while also including construction workers with lifting tasks. Yet, the sample size was smaller than initially intended and with fewer company records (18), because not all warehouses were able to provide company records. Above-mentioned amendments resulted in a publication plan different from that outlined in the protocol article resulting in a 1-year extension of the project period.
Supplementary figures

**Supplementary Figure 1.** Association between consecutive workdays and low-back pain intensity (absolute estimates) after work (A) and the following morning (B) in the fully adjusted model (NRS 0-10).

*Statistically significant different from 0 workdays (reference). b Statistically significant different from 1 and 2 workdays.*
Supplementary Figure 2. Association between consecutive workdays and change in low-back pain intensity (delta estimates) after work (A) and the following morning (B) in the fully adjusted model (NRS 0-10).

\[a\] Statistically significant different from 0 workdays (reference). \[b\] Statistically significant different from 1 and 2 workdays.
**Supplementary Figure 3.** Association between consecutive days off from work and low-back pain intensity (absolute estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (NRS 0-10).

![Supplementary Figure 3](image)

-Statistically significant different from 0 days off from work (reference).
-Statistically significant different from 1 day off from work.
-Tendency toward a statistically significant difference from 1 day off from work (p=0.0701).

"Statistically significant different from 0 days off from work (reference)."  
"Statistically significant different from 1 day off from work."  
"Tendency toward a statistically significant difference from 1 day off from work (p=0.0701)."
Supplementary Figure 4. Association between consecutive days off from work and change in low-back pain intensity (delta estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (NRS 0-10).

Statistically significant different from 0 days off from work (reference). *Statistically significant different from 1 day off from work. "Tendency toward a statistically significant difference from 1 day off from work (p=0.0701).
Supplementary Figure 5. Association between consecutive workdays and bodily fatigue (absolute estimates) after work (A) and the following morning (B) in the fully adjusted model (NRS - Fatigue 0-10).

\[ \text{Body Fatigue (0-10)} \]

\[ \begin{array}{ccc}
\text{Consecutive workdays} & 0 & 1 & 2 & 3 \\
\hline
\text{Body Fatigue (0-10)} & 2 & 4 & 4 & 4 \\
\text{Statistical Notes} & a & a & b & a \\
\end{array} \]

\[ \begin{array}{ccc}
\text{Consecutive workdays} & 0 & 1 & 2 & 3 \\
\hline
\text{Body Fatigue (0-10)} & 2 & 4 & 4 & 4 \\
\text{Statistical Notes} & a & a & a & a \\
\end{array} \]

\[ ^a \text{Statistically significant different from 0 workdays (reference).} \]
\[ ^b \text{Tendency toward a statistically significant difference from 3 consecutive workdays (p=0.0968).} \]
Supplementary Figure 6. Association between consecutive workdays and change in bodily fatigue (delta estimates) after work (A) and the following morning (B) in the fully adjusted model (NRS – Fatigue 0-10).

\[\text{Change in bodily fatigue (delta estimates)}\]

\[\text{Consecutive workdays}\]

\[\text{a Statistically significant different from 0 workdays (reference). b Tendency toward a statistically significant difference from 3 consecutive workdays (p=0.0968).}\]
Supplementary Figure 7. Association between consecutive days off from work and bodily fatigue (absolute estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (NRS - Fatigue 0-10).

\[ \text{Statistically significant different from 0 days off from work (reference).} \]
Supplementary Figure 8. Association between consecutive days off from work and change in bodily fatigue (delta estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (NRS - Fatigue 0-10).

Statistically significant different from 0 days off from work (reference).
**Supplementary Figure 9.** Association between consecutive workdays and mental stress (absolute estimates) after work (A) and the following morning (B) in the fully adjusted model (scale 0-10).

A

B

*Statistically significant different from 0 workdays (reference).*
**Supplementary Figure 10.** Association between consecutive workdays and change in mental stress (delta estimates) after work (A) and the following morning (B) in the fully adjusted model (scale 0-10).

A

B

*Statistically significant different from 0 workdays (reference).*
**Supplementary Figure 11.** Association between consecutive days off from work and mental stress (absolute estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (scale 0-10).

b Statistically significant different from 0 days off from work (reference).
Supplementary Figure 12. Association between consecutive days off from work and change in mental stress (delta estimates) at the time points ‘after the workday’ (A) and ‘the following morning’ (B) in the fully adjusted model (scale 0-10).

Statistically significant different from 0 days off from work (reference).