

# Are childcare workers putting their knees at risk by bending, kneeling, and squatting all day long as they care for little ones?



## What is the problem?

Childcare workers spend hours every day bending, kneeling, and squatting to care for kids, which might be putting their knees at risk for serious damage over time.

## How did the team study the question?

The researchers watched videos of 18 childcare workers caring for kids of different ages, carefully noting how often and how long the workers spent in various bent-knee positions throughout their workday.

## What did the team find?

The study found that childcare workers bend, kneel, and squat a lot more than what experts say is safe for knee health. Workers caring for babies, toddlers, and preschoolers all spent over an hour in knee-bending positions during just half a workday. They also bent and straightened their knees way more often than recommended – up to 159 times in about 3 hours. Tasks like structured activities, general playing, and feeding kids involved the most knee bending. These findings suggest childcare workers may be at higher risk for knee problems over time due to their job demands.

## How can this research be used?

Daycare owners and managers can use this information to make changes that protect workers' knee health. They could provide more adult-height furniture so workers don't have to squat as much, encourage staff to vary their positions throughout the day, or offer training on knee-friendly ways to interact with kids. Policymakers could use these findings to create safety guidelines for childcare centers. Healthcare providers might use this knowledge to better understand knee problems in childcare workers and develop prevention strategies. Overall, this study highlights the need to make childcare work safer for employees' joints, which could lead to healthier, happier workers and potentially better care for children.

## Cautions

This study had some limits to keep in mind. It only looked at childcare centers in one Canadian city, so the results might not apply everywhere. The researchers only watched workers for about half a day, not full shifts. They also couldn't always see clearly to measure exact knee angles in the videos. The study assumed all knee-bending positions were equally hard on the knees, which might not be true. Lastly, while the study shows childcare workers bend their knees a lot, it doesn't prove this directly causes knee problems over time. More research is needed to fully understand the long-term effects on knee health.

## Citation

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