

Wheelchair-Stroller: A Solution to Infant Transportation for Wheelchair Users

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In the past, wheelchair-using parents have had to use slings, frontal harnesses, and other crude solutions to move their young children around. However, the Wheelchair-Stroller, a proprietary invention, is designed to easily adapt to most wheelchairs to allow wheelchair-using parents to safely, effectively, and independently transport infants. The Wheelchair-Stroller was born from the desire of a paraplegic mother to have the means to easily move around her infant son. The device is constructed of CREFORM 28 mm steel tubing, mesh netting for storage, pipe insulation to soften the ride for the baby, and 8" diameter caster wheels. The Wheelchair-Stroller attaches to wheelchairs using dual-ended quick releases. The frame allows for many different models and brands of car seats to be used as carriages. On top of this, the device is lightweight and requires minimal exertion for users. The Wheelchair-Stroller has the potential to revolutionize mobility and the relationships between wheelchair-using parents and their children. Research inquiries explored throughout the project included the most effective stroller design to construct and attach to a wheelchair, the most effective material to use for the construction of the Wheelchair-Stroller, and the most effective connection mechanism to be used for the Wheelchair-Stroller. The device underwent extensive validation testing before it was presented to the end-user.