



Lead, Serve, Support

January 29, 2019

Ergonomics... for Bus Drivers

Throughout the day, bus drivers perform a variety of tasks which can place stress on the back, shoulders, arms, hands, and wrists, while performing pre and post-trip inspections, clearing windows of snow and ice, washing the bus, and even driving.

Remember to THINK ERGONOMICS:

Start by adjusting the seat so it's comfortable

- ✓ The seat should be:
 - As high as you can comfortably set it to optimize your field of vision.
 - Forward and low enough to allow you to easily reach the pedals, steering wheel, and controls without leaning forward or stretching.
 - Adjusted to allow 2-3 fingers-width of space between the edge of the seat and back of your knees to avoid placing pressure on nerves behind your knees and/or interfering with blood flow to your lower extremities.
- ✓ If the back of the seat curves outward, adjust it so the height of the curve fits your low back.
- ✓ If the seat pan has an angle adjustment, tilt it forward slightly to help maintain curve of your low back reaching/leaning forward.
- ✓ Adjust the angle of the seat to maintain an upright posture and the lumbar curve of your spine.
 - Sitting at the correct angle helps provide better visibility, distributes weight more evenly, and relaxes the back muscles.
 - Recline or tilt the seat back approximately 110 degrees.
 - Try various seat angles until you find the one that feels comfortable for you.
- ✓ If there's a gap between your spine and the back of the seat, try placing a rolled-up towel or cushion there to provide lumbar support.



Conducting pre-trip inspections

- ✓ **Tire checks** - Bend your knees and squat down rather than bending at the waist to avoid placing stress on the low back.
- ✓ **Lifting/closing the deck lid** - Tall drivers can use the handle on the center of the lid to open/close it. Shorter drivers should step to the side of the bus where they can reach the lid to close it without over stretching.
- ✓ **Emergency door latches and hatches:**
 - Use both hands to release the latches
 - Use both arms to push open the hatch.
 - Don't over-stretch. If you're too short, you may need to use a step stool or step up, on a seat. Keep your body centered under the hatch/in the center of the aisle. Place one foot on the seat below the hatch and to the left of the aisle; place the other foot on the seat to the right aisle.



Cleaning windows, washing the bus, etc.

- ✓ Use **long-handled tools** when washing the windows or bus and removing snow or ice.
- ✓ Use a stable step-stool or step ladder if needed to extend your reach. Don't climb up onto the bumper or try standing on the edge of a tire.

Work Organization makes a BIG difference

- ✓ **Stretch regularly...**
 - At the start of the shift and throughout the day to increase circulation/ bloodflow and relieve muscle tension.
 - Flex/gently stretch muscles in your neck, back, upper and lower extremities, including your ankles and feet.
- ✓ When driving for long periods shift positions every 30 minutes by tilting your seat a notch or two back and forth.
- ✓ Periodically change position and relax your grip on the steering wheel.

Avoid **Twisting** when getting into/out of your seat.

Ask for Help and Use **Good Body Mechanics** when lifting students and assisting with their belongings.

Ergonomics... It's about **WORKING SMARTER, not harder, and staying in your COMFORT ZONE!**

Email safety@ncesd.org to request a free ergonomic assessment with a NCESD Loss Control Specialist.

SAFETY MATTERS