Glaziers install glass in windows, skylights, storefronts, and display cases, or on surfaces such as building fronts, interior walls, ceilings, and table tops. They sometimes also manufacture, install, remove, transport, and recycle glass products. This publication highlights common risk factors for glaziers and suggests ways to prevent an illness or injury due to glazier work.

Risk Factors

There are a number of risk factors in the glazier industry that account for most injuries, which include:

- Cuts.
- Abrasions.
- Punctures.
- Muscle strains.
- Slips, trips, and falls.
- Eye injuries.
- Caught-in or crushed by injuries.
- Bone fractures.

Additional risk factors associated with glazier work include:

- Handling agents that cause allergic-contact dermatitis or hives.
- Using epoxy, isocyanate or formaldehyde-resin adhesives, finishes, or sealants.
- Using harmful solvents, which can also be present in glues, inks, coatings, or degreasers.

The best way to prevent an illness or injury from glass handling and transporting is to ensure that all glaziers are informed of the potential hazards and are trained to understand the company’s policies for safe work practices. The safety training should also include recommended personal protective equipment and the proper use and care of power tools, chemicals, ladders, and other equipment or vehicles.

Many of the glazes, color additives, fluxes, and material mixes contain hazardous substances such as lead, mercury, arsenic, solvents, and heavy materials. Some raw materials may contain silica, asbestos, or other harmful substances. Check with an Industrial Hygienist to find out what respirators or other protective measures should be used when handling these substances.

Personal Protective Equipment

Personal protective equipment (PPE) may vary by jobsite and task, but should include sturdy:

- Gloves to protect against cuts, punctures, burns, and injuries from solvents.
- Wrist guards, gauntlets, and long sleeves to protect the wrists and arms against sharp or broken glass edges.
- Safety glasses to protect eyes against sharp or broken glass edges.
- Safety boots/footwear to protect the foot from falling objects, punctures, or equipment.
- Kneepads to protect and cushion the knees when kneeling on hard surfaces.
- Hard hats to protect the head when potential head hazards exist.
- Fall protection to protect against severe and fatal injuries when working at heights.
- Coveralls or an apron to protect your clothes and skin from chemicals or sharp edges.
- Respirators, if recommended, to protect your lungs from inhaling hazardous substances.

Ergonomic Work Practices

- Prevent repetitive motion injuries by periodically changing positions, motions, or hand grips.
- Rotate tasks throughout the day to use different muscle groups and reduce fatigue.
- Check the load you plan to carry. Get help if the load is too big or bulky for one person.
• Use proper lifting techniques.
  • Keep your back straight, don’t twist when lifting, lowering, or carrying a load.
  • Bend your knees when lifting or lowering a load.
  • Keep the load close to your body.
  • Minimize lifting and carrying by using mechanical lifting devices such as carts, hand trucks, pallet lifters, or forklifts to move materials around.
  • Practice “team lifting” with heavy or awkward loads. Choose a team leader and communicate all actions among the team members. Try and use workers of approximately the same height so that weight is evenly distributed.
  • Elevate glass and working material off the ground and onto a tailgate, table, or other comfortably raised surface height on which to work.
  • Use adjustable tables and seating to get your work at the optimal height to prevent back injuries due to bending or knee injuries due to kneeling.
  • Adjust your workstation so you can maintain a neutral posture and a straight back.
  • Keep your work and often-used items close to you to avoid reaching.
  • Use mechanical caulking guns, when possible.

• Correctly use and maintain vacuum cups.

• Practice good housekeeping.
  • Sweep up debris, broken product, and spilled materials.
  • If you sweep up sharp materials, handle them only with a plastic dust pan.
  • To prevent slips, trips, and falls, clean up spills of liquids and dry materials immediately.

• Dispose of glass scraps properly.
  • Place scraps in labeled, puncture-resistant containers.
  • Ensure scraps fit completely inside containers.

• Avoid drugs (even prescription) and alcohol use when handling glass.

Tips to Avoid Injury
• Pay attention! Carelessness is a major cause of injury.
• Slow down. Take your time to do the job safely.
• Think the job through before you begin a task.
• Lift only what you can safely control. Get help with heavy loads from another worker or a mechanical lift device.
• Inspect power tools before use. Make sure all cutting edges are clean and sharp and that safety guards are in place. Check that power and extension cords are in good condition.
• Inspect ladders before use. Assure all parts are in good repair. Clean ladder steps and bottoms of footwear and secure the ladder in place before climbing.
• Use recommended personal protective equipment.
• Use recommended fall protection devices when working at heights such as elevated platforms or scaffolds.

Safety Checklist
You can prevent injuries when glazing. Take responsibility for working safely. Read the statements below and make sure they apply to you:
• I think about what I am doing at work.
• I do not take shortcuts.
• I use and properly care for the recommended personal protective equipment for the job.
• I inspect all tools and equipment before use to assure they are in good working condition and that safety guards are in place.
• I inspect my jobsite for potential hazards every day.
• I correct or report unsafe work conditions to my supervisor.
• I always put safety first.

This product was developed for you by State Fund, your partner in loss prevention. We recognize that your loss prevention efforts can affect the frequency and severity of illnesses and injuries in your work environment. Our experience shows that with informed planning and education, workplace injuries and illnesses can be reduced or eliminated. We are committed to the belief that a safe workplace can increase worker productivity and lower your workers' compensation costs. The safety and well-being of our insured employers and their employees is the primary concern of State Fund. We know you will find this information helpful in educating and encouraging your employees to establish and maintain a safe working environment.