Fogging of Safety Glasses: Cause and Prevention

With the ongoing ramp-up of the University, research and other activities, it remains essential to follow guidelines on proper respiratory protection practices while on Columbia University campuses. Wearing a face covering is mandatory at all times. Face coverings worn in conjunction with glasses can lead to fogging. This Fact Sheet provides information on the reason behind glasses fogging, and methods to prevent this phenomenon. The information on this Fact Sheet is useful both for wearers of safety glasses and/or prescription eyewear.

What causes safety glasses to fog up when worn with a face covering?

The fog is a type of condensation that can form when the warm air from your breath escapes through the top of the face covering and touches the cool surface of the safety glasses’ lenses.

How can users prevent safety glasses from fogging up?

- **Fit Face Covering Appropriately:**
  - Ensure the face covering fits securely over the nose to minimize warm air escaping up towards the safety glasses.
  - Tying the face covering criss-cross or twisting the ear loops can provide a tighter fit.
  - Use the safety glasses to seal the top of the face covering by pulling the covering higher and positioning/resting glasses over the top of the face covering.

- **Dish Soap Detergent/Shaving Cream Methods:**
  - Wash glasses’ lenses with soapy water, shake off the excess liquid, and then either air dry or gently wipe dry with a soft cloth before wearing glasses again.
  - Use a single drop of dish soap detergent on both sides of glasses’ lenses, rub it in with your fingers, rinse off, and then either air dry or gently wipe dry with a soft cloth before wearing them again.
  - Apply shaving cream to both sides of glasses’ lenses and then with a soft cloth wipe it off before wearing glasses again.
  - Dish soaps or detergents marketed for “sensitive skin” often contain lotion(s), and are not recommended for this application.

- **Commercial Anti-Fogging Products:** Consider purchasing an anti-fog solution/wipe and spray/wipe the product on lenses prior to wearing glasses with a face covering.

- **Safety Goggles:** Consider wearing safety goggles. The adjustable elastic strap in safety goggles allows for a snug fit over and around the eyes and some offer ventilation and/or anti-fog coating to help maintain clarity of vision.