Lessons Learned
Needlestick Injury in the Laboratory

What Happened?
While working in a laboratory, a postdoctoral associate was centrifuging human plasma and used a needle and syringe to transfer isolated purified proteins from a centrifuge tube. While transferring the material, he **accidentally stuck himself with the needle on his index finger**.

After the exposure, he immediately washed out the wound and went to the New York Presbyterian Emergency Department for the treatment and evaluation of potential bloodborne pathogen exposure.

Why Did This Happen?
- The postdoctoral associate used a sharp device to transfer fluids while working with potentially infectious materials.
- **Sharps-related injuries are some of the most common causes of exposures in the laboratory.** Injuries from needles, scalpel blades and glass pipettes injuries pose a potential threat to an individual's health due to the nature of the materials being worked with, e.g., blood, microorganisms, or recombinant DNA.

Lessons Learned
- When working with potentially infectious materials, the use of sharps should be eliminated, where possible, to prevent exposures.
- **There are safer ways to transfer fluids that do not require the use of a needle.** Had the postdoc associate used non-sharp devices such as sterile plastic transfer pipettes, a pipettor with a plastic tip, or blunt-tip safety needles instead of a needle and syringe; the needle-stick would have been prevented.
- If a project involves the use of sharps, an **engineered safety device** should be chosen. A [list of safety devices](#) is available online, and if needed, EHS is available to provide assistance.
- Projects using needles or sharps must ensure **proper disposal immediately after use in a sharps container**, preferably within arms' reach. **Over-filling sharps containers must be avoided**, as this has led to injuries.
- In the event of an exposure in the laboratory; **follow the Exposure and Spill Response Guide posted within the lab**, get help as needed, decontaminate affected areas, seek medical assistance and report the incident.
- In the event of an exposure to blood or bodily fluids, such as a splash or spray to the eyes, nose, mouth, or a skin puncture; **immediately cleanse the exposed area with copious amounts of water for at least 3 minutes** at the nearest sink or eyewash station.
- Additional information on accidental exposures can be found in the [WCM Bloodborne Pathogen Exposure Control Plan](#).