The Do’s and Don’ts Of TSU Sampling

Do:

- Sample calves as soon as possible for the earliest results
- Wipe off any excess dirt with water and towel
- Position cutter approximately 1 inch from the edge of the ear, avoiding veins
- Squeeze handles together in on swift, fluid, motion with enough force to pierce the ear
- Check to ensure sample is present and submerged in buffer and that excess hair isn’t protruding from the top
- Remove cutter by pulling handles apart
- Store samples in dark, temperature controlled room for up to 12 months
- For long term storage (over 12 months), place samples in deep freezer without auto-defrost capability

Don’t:

- Sample “wet” calves – the placenta and fluid could cause a failed sample
- Use chemicals to clean off the ear – bleach degrades DNA
- Position cutter over any tattoo ink (bangs vaccine, etc.)
- Squeeze handles together with excess force (shouldn’t take as much as ear tagging) that would damage the TSU
- Place TSU in box without ensuring sample is present
- Use plyers to remove cutter
- Place samples in direct sunlight or heat
- Store samples in auto-defrost freezers – such as the one in your kitchen
1. Remove a TSU punch from the packaging. Punches should be assembled as one piece; if they have come apart, reassemble. Align the groove of the punch with the chamber at the base of the applicator.

2. Rotate the black chamber to lock the punch into the device. Carefully squeeze the applicator handles together, guiding the punch tip into place if necessary. When the gun bolt rests flush against the red plastic clip, release the handle.

3. Remove the red plastic clip by pulling it outward. Be careful as the metal cutter above the clip is very sharp. Ensure the applicator is loaded with an unused green punch (if the red plunger is visible, the punch is used and should be replaced with one that is unused).

4. Slide the applicator over the animal’s ear and position the metal cutter one inch from the edge of the ear, making sure to avoid any obvious veins or ridges. Squeeze handles together to take a sample and then release to free the ear. Try to do this in one swift, fluid motion.

5. Reopen the chamber and remove the punch from the applicator. Check that sampling has been successful (red plunger is visible, sample is in fluid in punch). Remove the used cutter from the applicator by pulling the handles apart. Discard carefully as the cutter is very sharp.

Extract sample from this area