

WASHINGTON STATE PATROL

Changes to Sexual Assault Kit Processing in the Lab

May 2021

D
N
A

INTRODUCTION

In order to meet the increased demand for testing of sexual assault kits (SAKs) and adopt the latest practices in use in crime labs nationwide, the WSP Crime Lab began updating our testing approach to screen SAKs collected from female survivors.

Adoption of this new method, referred to as "Y-screening," began in the Fall of 2020 and is now in place statewide. Since this is a new approach, we're here to help answer your questions.

THE PROCESS

As the name implies, Y-screening involves testing a small portion of each core SAK swab for the presence of male (Y) DNA. It is a quick, 2 hour process and provides results the scientist needs to assess which sample(s) will progress through the full DNA analysis process. If sufficient male DNA is detected, further testing will then occur as normal to develop a DNA profile for the case.

Y-screening is as sensitive as our downstream DNA typing methods, allowing scientists to make data-driven decisions about subsequent testing.

This Y-screening process is utilized with SAK's collected from female survivors and a male perpetrator is suspected.

SOME FACTS

Y-screening is more sensitive than body fluid testing, may detect male DNA present from non-body fluid sources, and increases our ability to screen more samples upfront that would benefit from further DNA testing.

This new method applies only to SAK swabs. Other items like clothing, bedding, tissues, etc. will be screened/tested using methods we've always used.

This new method is suitable on robotic instruments, which will increase our testing capacity and quality, and shorten the wait time for results.

Conventional body fluid testing for semen and saliva may still be performed on samples taken forward to develop a DNA profile. These tests may be requested for the judicial process or to help inform labwork.

This approach is recommended by the National Institute of Justice (NIJ), as well as the Scientific Working Group on DNA Analysis Methods (SWGDM).