

### THE USE OF RAPID DNA TO END THE SEXUAL ASSAULT EPIDEMIC

## THE PROBLEM.

Sexual assaults or rapes continue to be recurring problems in communities around the world. In the United States, the process of investigating rape cases has been slow, in large part because of the difficulty in obtaining DNA results from Sexual Assault Evidence Kits or Sexual Assault Kits (SAKs). Today, hundreds of thousands of kits are backlogged across the country, and the testing of new kits can take weeks, months or years. For victims, this means justice delayed. For rapists, it means they are free to reoffend. With a staggering statistic of one in five U.S. women raped during their lifetime, it is clear that the current process is not working. Strong steps must be taken to end the rape epidemic in the U.S.

### THE SOLUTION.

The ANDE Rapid DNA Identification System is a new technology that generates a DNA identification from forensic samples in less than two hours. Although the processing steps and data interpretation in the Rapid DNA system are essentially identical to those utilized conventionally, the samples are processed, and the resulting data interpreted automatically. Until now, the lengthy time required to test rape kits has led to laboratory backlogs of samples for testing. With this new approach, the lab can generate results quickly, assisting investigations in real time, identifying suspects and exonerating the innocent.

### **HOW IT WORKS.**

If a victim presents at a hospital and agrees to a sexual assault exam, additional samples are taken for Rapid DNA testing while samples for conventional lab testing are also taken. The Rapid DNA samples can be tested immediately. In Kentucky, they are being tested in the crime lab within hours of receipt. DNA processing and data interpretation is automated and takes approximately two hours.

When a DNA ID — also referred to as a DNA fingerprint — is generated, it can be compared to those in criminal DNA databases. If a match is found, this may provide important information to law enforcement about the attacker. It may exonerate an innocent suspect. It may also connect other crimes to this attack.

Often, when the perpetrator is presented with evidence that their DNA ID tested positive at the scene, they plead out. This allows for earlier resolution to the case, including stopping serial offenders. It saves the painful and expensive process of litigating a case. And it brings answers to the victim, which is critical in the recovery process.

- On average, a rapist commits 12 crimes from the first offense to the time he is finally apprehended. Taking rapists off the street prevents more crimes.
- Nine in 10 victims are women.
- One in five women in America will experience a completed or attempted rape at some point in her life.
- Every 11 minutes, the victim is a child.



- Rape is the most expensive of all crimes, costlier to communities than burglaries or homicides.
- Today, only six in 1,000 rape kits less than 1 percent result in prosecution. Rapid DNA will help change this statistic.

# POINTS OF INTEREST.

Rapid DNA is a scientifically-proven technology that generates a DNA ID, also referred to as a DNA fingerprint. The DNA ID is based on the size of approximately 20 fragments of "junk DNA" and does not reveal information about an individual's appearance, medical or behavioral conditions. There is significantly more information on one's driver's license than on a DNA ID. This level of privacy removes human bias, delivering objective information to inform investigations. ANDE is the first and only Rapid DNA system to be granted FBI approval, received for the automated testing and interpretation of cheek swabs.

### KENTUCKY IS FIRST TO ADOPT RAPID DNA FOR SEXUAL ASSAULT INVESTIGATIONS.

The state of Kentucky has been running a pilot program for several months, using the ANDE Rapid DNA<sup>TM</sup> system to test samples from rape cases. It has proved invaluable in several cases where there is a match to DNA in a criminal database and to others in which a specific suspect was under consideration. This has convinced Kentucky officials to more broadly implement Rapid DNA testing.

Kentucky Governor Matt Bevin announced the state's commitment to use every means possible to reduce sexual assaults in Kentucky. The Kentucky State Police Forensics Laboratories rigorously managed the pilot to demonstrate the efficacy of the technology.

The science of DNA is undeniable. It will provide important facts about who was present at a crime. And, it will speak for victims who are unable to speak for themselves.