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C.L. "Butch" Otter Governor

To:

All Idaho Prosecutors and Criminal Defense Attorneys

From:

Matthew Gamette, ISP Forensic Services Laboratory System Director

Subject:

FBI Short Tandem Repeat Allele Table Amendments

Date:

May 29, 2015

For distribution to all prosecutors and criminal defense attorneys in Idaho:

The Federal Bureau of Investigation (FBI) Laboratory has recently issued a bulletin to National DNA Index System (NDIS) participating laboratories advising them that it had identified errors in the FBI Short Tandem Repeat (STR) population database published in 1999 and 2001, and has subsequently provided amended data correcting these errors. The allele frequencies cited in these publications have been used by many forensic laboratories throughout the country for calculating DNA match statistics since 1999. The Idaho State Police Forensic Services (ISPFS) Laboratory is one of the many laboratories that had utilized the published data for reporting DNA match estimation statistics since beginning STR DNA typing in 2001. The original data was published in the peer reviewed Journal of Forensic Sciences 1999;44(6):1277-1286.

The FBI has recently expanded the number of CODIS core loci from 13 to 24. In order to establish allele distributions for these additional loci, the samples from the original population study were reanalyzed by the FBI using the new STR typing kits that are commercially available to forensic laboratories. The errors were discovered during a concordance check of the new versus originally published data. The errors were determined to be due to clerical mistakes during transcription and to limitations of the older technology and software. Empirical studies conducted by the FBI, as well as at least two additional laboratories, have shown that the difference in probabilities calculated with the original data compared to that of the amended data is nominal. An erratum notice will be published as a Letter to the Editor in the July 2015 issue of the Journal of Forensic Sciences which will contain the data showing the minimal effect of these errors.

The ISPFS Laboratory is taking immediate steps to address the problems identified. The original FBI allele frequencies are no longer being utilized by ISPFS for the calculation of DNA statistics. The program currently employed by ISPFS for statistical calculations cannot be updated with the amended allele frequencies; however, the laboratory had already planned to transition to another commonly used program as part of its upcoming validation of the expanded core loci. The laboratory will now make this transition immediately and will begin utilizing current allele frequencies. DNA reports requiring statistical calculations are being held by the ISPFS laboratory pending the software transition and will include data from the new frequency tables. It is anticipated that the transition will be completed in a timely manner and will have minimal impact on any pending reports. For any questions regarding the notification received from the FBI, impact on previous DNA cases worked by the ISPFS Laboratory, or the steps being taken by our laboratory, please contact Biology/DNA Supervisor Darren Wright at (208) 884-7170 or darren.wright@isp.idaho.gov

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