



NATIONAL COMMISSION ON FORENSIC SCIENCE

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Recommendations to the Attorney General Regarding Use of the Term “Reasonable Scientific Certainty”

Subcommittee
<i>Reporting and Testimony</i>
Status
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Overview

Forensic discipline conclusions are often testified to as being held “to a reasonable degree of scientific certainty” or “to a reasonable degree of [discipline] certainty.” These terms have no scientific meaning and may mislead factfinders about the level of objectivity involved in the analysis, its scientific reliability and limitations, and the ability of the analysis to reach an individualized conclusion. Forensic scientists, medical professionals and other scientists do not routinely express opinions or conclusions “to a reasonable scientific certainty” outside of the courts. Neither the *Daubert* nor *Frye* test of scientific admissibility requires its use, and consideration of caselaw from around the country confirms that use of the phrase is not required by law and is primarily a relic of custom and practice. There are additional problems with this phrase, including:

- There is no common definition within science disciplines as to what threshold establishes “reasonable” certainty. Therefore, whether couched as “scientific certainty” or “[discipline] certainty,” the term is idiosyncratic to the witness.
- The term invites confusion when presented with testimony expressed in probabilistic terms. How is a lay person, without either scientific or legal training, to understand an expert’s “reasonable scientific certainty” that evidence is “probably” or possibly linked to a particular source?

Recommendations

The National Commission on Forensic Science recommends that the Attorney General take the following actions:

Recommendation #1: The Attorney General should direct all attorneys appearing on behalf of the Department of Justice (a) to forego use of these phrases when presenting forensic discipline testimony unless directly required by judicial authority as a condition of admissibility for the witness’ opinion or conclusion, and (b) to assert the legal position that such terminology is not required and is indeed misleading.

Because the Government is the primary proponent of forensic discipline testimony in criminal prosecutions and because of its duty to seek justice, Government attorneys should eschew usage of this phrasing and appropriately challenge any suggestion to a trial court that such language be used when forensic discipline testimony is presented. Science should be used in the courtroom to clarify and elucidate rather than obscure.

Recommendation #2: The Attorney General should direct all forensic science service providers and forensic science medical providers employed by Department of Justice not to use such language in reports or couch their testimony in such terms unless directed to do so by judicial authority.

Although the impetus for this terminology came from courts and lawyers, forensic scientists and medical examiners in some instances have come to embrace its use. Adopting this recommendation will provide further support for the abandonment of this terminology and spur discussion and development of appropriate and clearer phrasing.

Recommendation #3: The Attorney General should, in collaboration with NIST, direct the OSACs to develop appropriate language that may be used by experts when reporting or testifying about results or findings based on observations of evidence and data derived from evidence.

The scientific community, through the OSAC structure, may be best positioned to propose language that conveys the nature of the examination itself, including an expression of the uncertainty in the measurement or in the data, the bases for any opinion (the underlying information, studies, observations) and the limitations relating to the results of the examination.

Adopting this recommendation will help develop language based on and supported by scientific data and principles that can be useful to judges and juries.