

[1 slide 702]

## Rule 702. Testimony by Expert Witnesses

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert's opinion reflects a reliable application of the principles and methods to the facts of the case.

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The amendment continues the practice of the original Rule in referring to a qualified witness as an “expert.” This was done to provide continuity and to minimize change. The use of the term “expert” in the Rule does not, however, mean that a jury should actually be informed that a qualified witness is testifying as an “expert.” Indeed, there is much to be said for a practice that prohibits the use of the term “expert” by both the parties and the court at trial. Such a practice “ensures that trial courts do not inadvertently put their stamp of authority” on a witness's opinion, and protects against the jury's being “overwhelmed by the so-called ‘experts’”.

[SLIDE 3]

Instruction 2.215 SPECIALIZED OPINION TESTIMONY

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[FORMERLY EXPERT TESTIMONY]

In this case, [you will hear] [you heard] the testimony of [name of witness] who [will express] [expressed] opinions concerning [certain subjects; specify the subject(s), if possible]. If scientific, technical, or other specialized knowledge might assist the jury in understanding the evidence or in determining a fact in issue, a witness who possesses knowledge, skill, experience, training, or education may testify and state an opinion concerning such matters. You are not bound to accept this witness's opinion. If you find that the opinion is not based on sufficient education or experience, that the reasons supporting the opinion are not sound, or that the opinion is outweighed by other evidence, you may completely or partially disregard the opinion. You should consider this evidence with all the other evidence in the case and give it as much weight as you think it fairly deserves. [During the testimony of [an] expert witness[es] in this case, you have heard [an] [more than one] expert refer to information that was not otherwise introduced or admitted into evidence. This information is relevant only to explain what the expert[s] relied upon in forming his/her/their opinion[s]. You may not consider the expert's testimony to be evidence of the truth of that information. You may consider this information only for the purpose of evaluating the expert's opinion and not for any other purpose.]

[1 Criminal Jury Instructions for DC Instruction 2.215 \(2024\)](#)

[SLIDE DAUBERT QUESTIONS]

*Questions to assess reliability—whether a theory or technique is scientific knowledge that will assist the trier of fact?*

- Whether it can be (and has been) tested
- Whether the theory or technique has been subjected to peer review and publication
- What is the known or potential rate of error?
- Are there standards maintained which control the technique's operation?
- General acceptance can have some bearing: a reliability assessment permits identification of a relevant scientific community and determination of a particular degree of acceptance within that community.

[SLIDE 4 - TIMELINE]

- 1990s** Daubert, Kumho Tire, new FRE 702
- 2000** Joseph P. Bono affidavit. [US v. Curtis, 755 A.2d 1011 \(D.C. 2000\)](#)
- 2006** NATIONAL ACADEMY OF SCIENCES: Strengthening Forensic Science in the US report
- 2010** In Re O.W., 09-DEL 1977 (Ryan, J. April 2, 2010)
- 2016** PRESIDENT'S COUNCIL OF ADVISORS ON SCIENCE AND TECHNOLOGY: Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods
- 2019** US v. Tibbs, 2016 CF1 19431 (Edelman, J. Sept. 5, 2019)
- 2024** US v. Green, 2018 CF1 4356 (Okun, J. April 1, 2024).

[SLIDE 4A]

**2000**

Affidavit from Joseph P. Bono, the Director of the DEA Mid-Atlantic Laboratory “noted that tests and instruments that are properly used by qualified forensic chemists are incapable of producing a false positive.”

[US v. Curtis, 755 A.2d 1011, 1013 n.7 \(D.C. 2000\)](#)

**2006** NAS report

[SLIDE 4B]

2010

“At that hearing, Ms. H----- testified that there is a zero percent (0%) error rate associated with the combined three test procedures used here to identify the unknown, seized substance[.]”

While explaining that each of these tests used alone is presumptive, as distinct from confirmatory, [.] Ms. H----- nonetheless maintained their infallibility when used in concert. With the designation that these tests are merely presumptive, the DEA chemist acknowledged that there is some degree of inherent error calculable with respect to each of the tests when they are performed in isolation. That there is some distinct and additional degree of error calculable with respect to this analyst’s performance of each test is also without question.

[T]he assertion that the combination of the three tests in question used for the identification of marijuana is infallible, coupled with the claim by the DEA forensic chemist of her own zero percent (0%) error rate in conducting these tests, and her vague allusions to the existence of “different studies that have been introduced today and that are at my laboratory” supporting this claim, are sufficient to indicate a possible flaw in the testing procedures, thus warranting the government’s compliance with Respondent’s discovery request...

In Re O.W., 09-DEL 1977 (Ryan, J. April 2, 2010)

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**2016**      PRESIDENT'S COUNCIL OF ADVISORS ON SCIENCE  
AND TECHNOLOGY: Forensic Science in Criminal Courts:  
Ensuring Scientific Validity of Feature-Comparison Methods

**2019**      US v. Tibbs, 2016 CF1 19431 (Edelman, J. Sept. 5, 2019)

**2024**      US v. Green, 2018 CF1 4356 (Okun, J. April 1, 2024).



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**2019**

Based largely on the inability of the published studies in the field to establish an error rate, the absence of an objective standard for identification, and the lack of acceptance of the discipline's foundational validity outside of the community of firearms and toolmark examiners, the Court precluded the government from eliciting testimony identifying the recovered firearm as the source of the recovered cartridge casing. Instead, the Court ruled that the government's expert witness must limit his testimony to a conclusion that, based on his examination of the evidence and the consistency of the class characteristics and microscopic toolmarks, the firearm cannot be excluded as the source of the casing.

US v. Tibbs, 2016 CF1 19431 (Edelman, J. Sept. 5, 2019)

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2024

First, the Court will not permit the examiner to state that his conclusions are to a 100% certainty, to a reasonable degree of scientific certainty, or based on a comparison to all other firearms or toolmarks. Second, the examiner will have to qualify his opinion by stating that his conclusions are not based on a statistically derived or verified measure and that there is not a generally accepted statistical method for conveying the weight of an identification. Third, the examiner will have to qualify his opinion by making clear that his opinion is based on his subjective determination of sufficient agreement in individual characteristics or random imperfections. And finally, the examiner will have to qualify his opinion by testifying that the relevant cartridge casings are “consistent with” having been fired from the firearm at issue, not that they were fired from the firearm at issue, and not even, as the Government has proposed, that there is extremely strong support for the proposition that the casings were fired from the firearm at issue.

US v. Green, 2018 CF1 4356 (Okun, J. April 1, 2024).