Frye v. United States

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**Abstract:**

Courts in the United States may employ various standards to determine the admissibility of novel scientific evidence. From 1923 to 1993, the dominant standard for determining admissibility of such evidence at both state and federal levels was the general acceptance test. This standard stems from the seminal case Frye v. United States, in which a federal appeals court held that expert testimony was admissible only if the scientific principle, theory, or discovery on which it was based was “sufficiently established to have gained general acceptance in the particular field in which it belongs.” This standard, known as the Frye standard or general acceptance standard, has frequently been cited in federal and state cases as a test of admissibility of expert scientific testimony, and it became general practice in most courts for almost three-quarters of a century.

**Date:** Ruling issued on December 3, 1923

**Court:** Court of Appeals for the District of Columbia

**Significance:** This appellate ruling held that polygraph results are inadmissible in court. The appeals court also introduced a new standard for the admissibility of new or novel scientific evidence in court, which came to be known as the general acceptance standard.

Courts in the United States may employ various standards to determine the admissibility of novel scientific evidence. From 1923 to 1993, the dominant standard for determining admissibility of such evidence at both state and federal levels was the general acceptance test. This standard stems from the seminal case *Frye v. United States*, in which a federal appeals court held that expert testimony was admissible only if the scientific principle, theory, or discovery on which it was based was “sufficiently established to have gained general acceptance in the particular field in which it belongs.” This standard, known as the *Frye* standard or general acceptance standard, has frequently been cited in federal and state cases as a test of admissibility of expert scientific testimony, and it became general practice in most courts for almost three-quarters of a century.

Modern computerized polygraph EPOS-7: a sensor unit with a PC by DENKernel (Own work) [Public domain], via Wikimedia Commons

**Background of the Case and *Frye* Requirements**

*Frye* concerned the admissibility of a systolic pressure deception test, a precursor of the [polygraph](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2288960896%22&sl=ll), in a murder case. The Court of Appeals for the District of Columbia considered an appeal based on the failure of the trial court to admit the deception test. Specifically, the trial court precluded the defendant, James Alphonzo Frye, from introducing expert testimony concerning the deception test as well as evidence about his truthfulness through the test. In a unanimous decision, the appeals court concluded that the deception test had not yet gained sufficient general acceptance among physiological and psychological authorities to justify its admission into evidence and upheld Frye’s murder conviction. Hence, under the *Frye* standard, it is not sufficient that a sole expert, or even several experts, testify to the validity of a particular scientific technique or device. Rather, *Frye* imposes a unique hurdle—that is, the technique or device must be generally accepted by the relevant scientific community.

The *Frye* standard conditions the admissibility of expert testimony in court on acceptance of other scientists within the field, although unanimity is not required. In order to meet the *Frye* standard, novel scientific evidence—which includes techniques, procedures, and principles—must be interpreted by a court as generally accepted by a meaningful segment of the relevant scientific community. In practice, the relevant scientific community often includes professional organizations or a sufficient number of individual experts within a specific field.

**Issues in Forensic Science**

Since the ruling in *Frye v. United States* in 1923, the *Frye* standard has been applied to numerous [forensic science](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289250460%22&sl=ll) techniques in both criminal and civil cases, including [DNA (deoxyribonucleic acid) analysis](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289312121%22&sl=ll), human leukocyte antigen (HLA) paternity testing, voiceprint analysis, bite-mark comparison, use of truth serum, use of hypnosis, [hair analysis](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289312204%22&sl=ll), fingerprint analysis, serological electrophoresis, neutron activation [blood analysis](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2287321191%22&sl=ll), breath tests for blood alcohol, sudden infant death syndrome (SIDS) probability analysis, and analysis of pesticide toxicity and [carcinogens](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289474020%22&sl=ll). The *Frye* standard has also been applied to expert testimony in such areas of social science research as the sociology of racial bias, [drug trafficking](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289551269%22&sl=ll) practices, eyewitness reliability, rape trauma syndrome, battered woman syndrome, and profile evidence.

With the advent of new scientific techniques and discoveries, the *Frye* standard has generated criticism concerning whether it is flexible enough to adapt to novel scientific evidence for which general acceptance has yet to be achieved. In 1993, in the case *[Daubert v. Merrell Dow Pharmaceuticals](https://eds-a-ebscohost-com.lopes.idm.oclc.org/eds/detail/detail?sid=e7642f25-f8c5-466a-b13d-d33a7e02d6d8@sdc-v-sessmgr03&vid=2&db=ers&ss=AN+%2289312108%22&sl=ll" \o "Daubert v. Merrell Dow Pharmaceuticals)*, the U.S. Supreme court rejected *Frye* and modified the standard for the admissibility of expert testimony in federal courts. In *Daubert*, the Court held that Congress intended for the Federal Rules of Evidence, specifically Rule 702, to supersede *Frye*; Rule 702 allows the introduction of scientific, technical, or other specialized knowledge by a qualified expert if such knowledge “will assist the trier of fact to understand the evidence or to determine a fact in issue.” According to the highest court, *Frye’s* general acceptance test was to be only one indicator of reliability. Despite the federal court’s shift in position, the *Frye* standard remains the standard for admission of scientific evidence in a number of state jurisdictions.

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