NEW YORK COURT OF APPEALS ROUNDUP:

EXPERT EVIDENCE ON TOXIC TORT CAUSATION

ROY L. REARDON AND MARY ELIZABETH MCGARRY*
SIMPSON THACHER & BARTLETT LLP

NOVEMBER 3, 2006

One of the more vexing issues in tort litigation is determining whether an adequate scientific foundation exists for an expert opinion for it to be admitted into evidence.

'Parker v. Mobil Oil'

The Court confronted this question in the context of a toxic tort injury in *Parker v. Mobil Oil Corp.* There, in an opinion by Judge Carmen Beauchamp Ciparick for a unanimous Court (Judge Eugene F. Pigott, Jr. taking no part), the Court, while reaffirming the requirement that a causal link to an injury must be established by expert evidence founded on reliable science, held that the level of exposure to a toxin need not be established with mathematical precision. The Court also reaffirmed the viability in New York of the *Frye* test for determining the admissibility of novel scientific evidence (*Frye v. United States,* 293 F 1013 (D.C. Cir. 1923)), although *Frye* was not central to the Court's ruling.

The case involved a claim that the plaintiff had been exposed to benzene in gasoline that caused him to develop acute myelogenous leukemia (AML). The exposure had allegedly taken place at several full-service stations by which he was employed for 17 years, through inhalation of gasoline fumes and by his skin coming in direct contact with gasoline during the course of his work. There was no dispute in the case that benzene is a known carcinogen.

The defendants moved to preclude the plaintiff's expert evidence on the issue of medical causation, urging that it was scientifically unreliable. The defendants also made a motion for summary judgment, supported by the affidavits of two experts. One expert, an epidemiologist, while recognizing that service station employees exposed to large amounts of benzene (as opposed to gasoline, which contains only a small percentage of benzene) had an increased risk of AML, concluded that the level of exposure to gasoline by service station workers, such as plaintiff was below the level to cause leukemia. The expert relied upon various published studies to support his position.

---

* **Roy L. Reardon** *and* **Mary Elizabeth McGarry** *are partners at Simpson Thacher & Bartlett LLP.*

The defendants also offered the affidavit of a toxicologist who said that in the absence of proof by plaintiff of the amount of benzene to which he had been exposed and the amount of benzene required to cause AML, causation could not be established.

The plaintiff produced affidavits of two experts. One was a board-certified physician in the field of occupational medicine and also an epidemiologist. He reviewed the circumstances of plaintiff's exposure to gasoline while working at the service station but did not attempt to quantify the level of plaintiff's exposure to benzene, and relied upon several studies linking benzene to leukemia. He concluded that it was unlikely that the plaintiff would have contracted AML without his exposure to benzene and that, with a reasonable degree of medical certainty, the exposure suffered by the plaintiff caused him to contract AML. Plaintiff also submitted a report of an expert in toxicology and epidemiology. This expert also was unable to quantify the actual amount of the exposure to benzene experienced by the plaintiff during the course of his employment. He did, however, provide an additional component to causation in the form of plaintiff's greater susceptibility to contracting AML due to prior radiation treatments he had received, which were reflected in his medical history.

The trial court, which was not requested by either side to conduct a *Frye* hearing, stated the issues were whether a causal relationship between exposure to benzene in gasoline and AML is generally accepted in the scientific community and whether the plaintiff's experts had used generally accepted principles and methodologies in arriving at their conclusions. Although the trial court recognized that the plaintiff's experts did not rely upon studies linking AML to exposure to benzene in gasoline and did not quantify plaintiff's exposure, it determined that the experts had followed generally accepted principles and methodologies, and credited their opinions.

The Appellate Division, Second Department, reversed and dismissed the complaint on the basis that, even if plaintiff's experts had established a threshold level of exposure to benzene in gasoline that could cause AML, neither expert had quantified plaintiff's exposure to establish that it exceeded such threshold. Therefore, the court ruled, plaintiff's experts' conclusions as to the amount of plaintiff's exposure or whether it caused AML were "speculative."

Exactly Quantifying Exposure Rejected

The Court affirmed the order of the Appellate Division. In doing so, however, it specifically rejected the Appellate Division's requirement that the amount of plaintiff's exposure to benzene had to be "quantified exactly." The Court nevertheless held that the Appellate Division had properly precluded the proof offered by plaintiff's experts as insufficient to defeat defendants' motion for summary judgment. No epidemiologic study had been produced to support a finding of an increased risk of AML as a result of exposure to gasoline, and plaintiff's experts had failed to show that plaintiff's exposure to benzene in gasoline had caused his AML.

The Court noted that amicus briefs had been filed urging it to adopt the test for admission of scientific evidence now in use in federal courts under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 US 579 (1993), or some portions thereof. The parties to the case did not advance such

arguments, however, and acknowledged that "*Frye* is the current standard in New York." Unlike *Daubert*, the *Frye* test focuses on whether novel methodologies or discoveries have attained general acceptance within the relevant scientific community, rather than the soundness of the science as determined by a court. In any event, the Court stated, "[t]here is no particular novel methodology at issue for which the Court need to determine whether there is general acceptance. Thus, the inquiry here is more akin to whether there is an appropriate foundation for the experts' opinions, rather than whether the opinions are admissible under *Frye*."

'Insurmountable Standards'

Recognizing the danger in permitting unreliable or speculative information, characterized by the Court as "junk science," to go to the jury, presented by a well-credentialed expert, the Court at the same time expressed concern at setting "insurmountable standards" that would deprive plaintiffs of their day in court, and stressed the need to find a balance between the two extremes. In toxic tort cases, in particular, it is often impossible to pinpoint the exact level of a plaintiff's exposure, the Court observed. While the Court suggested several ways in which a plaintiff can prove causation through expert testimony without evidence as to the precise level of exposure to a toxin, it cautioned that such methods will continue to require proof that they are found to be "generally accepted as reliable in the scientific community."