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Seventh Circuit Rejects the “Cumulative Exposure” Opinion as an Inadmissible Repackaging of the Unsound “Each and Every Exposure” Opinion

By Knight S. Anderson – November 9, 2017

On August 31, 2017, in [*Krik v. Exxon Mobil Corp.*](#), No. 15-3112 (7th Cir. Aug. 2017), the U.S. Court of Appeals for the Seventh Circuit rejected a “cumulative exposure” opinion in an asbestos case as an inadmissible repackaging of the unsound, unscientific, and inadmissible “each and every exposure” opinion, affirming the decision of a federal district court in the Northern District of Illinois. The appellate court held that an expert’s “cumulative exposure” opinion was no different than an “each and every exposure” opinion and was similarly inadmissible. *Krik*, slip op. at 5.

Before trial, the defendants filed motions to preclude any of the plaintiff’s experts from testifying based on any form of the “each and every exposure” theory of causation, based on *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and Federal Rule of Evidence 702. Known by many names, including the “any exposure” theory, the “single fiber” theory, and the “no safe level of exposure” theory, these theories and the opinions based on them “posit that any exposure to asbestos fibers whatsoever, regardless of the amount of fibers or length of exposure constitutes an underlying cause of injury to the exposed individual.” *Krik*, slip op. at 3.

It Is the Dose That Makes the Poison

The district court had observed that asbestos-related diseases are dosage dependent and that the risk depends on the length of time of exposure and the amount of exposure and noted that “to determine whether any exposure constitutes a substantial contributing factor, therefore, one would have to understand the timing and amount of exposure.” *Id.* at 7. “But rather than testifying that the particular dose of asbestos to which [the plaintiff] had been exposed was a substantial contributing factor to his illness, . . . Dr. Frank’s theory was based on a premise that each and every exposure to asbestos . . . no matter how *de minimis*” is causative. *Id.* at 7–8. According to Dr. Frank, even one minute of exposure would be a substantial contributing factor. The pretrial judge, Judge Lee, excluded the “every exposure” opinion.

Judge Lee had concluded “the ‘any exposure’ theory ignored fundamental principles of toxicology that illnesses like cancer are dose dependent.” *Id.* at 8.

Moreover, the experts, as Judge Lee described, had not presented any individualized analysis of the level of asbestos exposure, had provided only generalized citations to scientific literature with no indication that they were authorities upon which the experts would rely, did not identify any peer-reviewed scientific journal adopting this theory, did not cite any medical studies or discuss an error rate.

Id.

Sleight of Hand Is Not Scientific

However, at trial, in an effort to circumvent that order, the plaintiffs tried to repackage, requalify, and reoffer the same opinion as a “cumulative exposure” opinion, arguing that it was different and therefore not precluded. The trial judge, Judge Shah, concluded that Dr. Frank’s testimony was still “not tied to the specific quantum of exposure attributable to the defendants, but was instead based on his medical and scientific opinion that every exposure is a substantial contributing factor to the cumulative exposure that causes cancer.” Judge Shah found that the “cumulative exposure” opinion was the same as the “each and every exposure” opinion that Judge Lee had previously excluded.

Judge Shah repeated Judge Lee’s finding, stating that “[t]o find a defendant liable, plaintiff must prove causation attributable to that defendant. It would be misleading and confusing for an expert to opine—particularly using the legal terminology of ‘substantial contributing factor’—that the plaintiff’s cancer was caused by defendants when the foundation for the opinion was that every exposure (without regard to dosage) contributes to cause cancer.” *Id.* at 9. “In other words, causation requires that an expert connect the nature of the asbestos exposure and pair it with a *Daubert*-approved methodology that can be used to determine whether such an exposure was a substantial cause of the defendant’s injury.” *Id.* at 9–10.

The Seventh Circuit Embraced the District Court Opinions

On appeal, the plaintiff argued that “Judge Shah made an errant factual determination that the cumulative exposure theory was the same as the ‘each and every exposure’ theory that Judge Lee had barred.” *Id.* at 5. The Seventh Circuit analyzed whether the “cumulative exposure” theory was sufficiently similar to the “each and every exposure” theory and reviewed the propriety of excluding Dr. Frank’s testimony.

The Supreme Court has interpreted Rule 702 with a flexible standard that boils down to two over-arching requirements for expert witness testimony. The expert testimony must be “ground[ed] in the methods and procedures of science” and must “assist the trier of fact to understand or determine a fact in issue.” . . . *Daubert* requires the district court to act as an evidentiary gatekeeper, ensuring that an expert’s testimony rests on a reliable foundation and is relevant to the task at hand. To do this, a trial judge must make a preliminary assessment that the testimony’s underlying reasoning or methodology is scientifically valid and properly applied to the facts at issue.

Id. at 6 (internal citations omitted).

The appellate court explained:

To summarize, the principle behind the “each and every exposure” theory and the cumulative exposure theory is the same—that it is impossible to determine which particular exposure to carcinogens, if any, caused an illness. In other words, just like “each and every exposure,” the cumulative exposure theory does not rely upon any particular dose of exposure to asbestos, but rather all exposures contribute to a cumulative dose. The ultimate burden of proof on the element of causation, however, remains with the plaintiff.

Id. at 13.

An Opinion That Fails to Assess Dose Fails

Ultimately, the Seventh Circuit agreed that the “cumulative exposure theory was no different from the ‘each and every exposure’ theory in all relevant ways.” *Id.* at 10. Taking the same unscientific and inadmissible “each and every exposure” opinion and repackaging it with a different name, but with the same bases and without any information about the actual exposure, such as dose, duration, intensity, frequency, regularity, and proximity, does not come close to overcoming the methodological shortcoming and failures from which that opinion suffers and which make it unscientific and inadmissible. The Seventh Circuit concluded that “[the plaintiff’s] proffered expert testimony on causation did not meet the standards required under Federal Rule 702 and *Daubert*.” *Id.* at 24. Further, allowing such opinions requires a defendant to disprove a plaintiff’s claims and “[r]equiring a defendant to exclude a potential cause of the illness, therefore, improperly shifts the burden to the defendants to disprove causation and nullifies the requirements of the ‘substantial factor’ test.” *Id.* at 14.

Defendants have argued for years, and many courts have now found, as the district court in *Krik* so simply noted, an opinion that each and every exposure or that the cumulative exposure is a substantial contributing factor to the development of a disease “is not an acceptable approach for a causation expert to take.” *Id.* at 13.

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