

Preparing to Testify as a Physician Expert in Medical Device and Toxic Exposure Cases

A Guide for the Testifying Physician

DRAFT FOR DISCUSSION PURPOSES ONLY

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Introduction

This guide is intended to help you, as an expert witness, prepare to testify at a trial in federal court.

If you have been asked to give expert testimony, you should expect that the opposing attorney may challenge your opinions and, in some cases, your qualifications. This does not mean you have done anything wrong. Challenging your opinions and qualifications is the attorney's job, and it's a normal part of the process.

For our purposes, the important point is that these challenges, which are generally referred to as "Daubert challenges," tend to focus on a familiar set of issues. Judges reviewing and ruling on Daubert challenges commonly ask: Is the expert qualified to answer the particular question being presented? Is the expert's opinion based on valid data and a reliable methodology? Can the expert show the steps they took to go from the data to their ultimate conclusion? Has the expert given due consideration to reasonable alternative explanations? In short, can the expert "show their work"?

To see how judges handle these questions in practice, we reviewed and analyzed federal cases involving Daubert challenges to physician expert witnesses testifying in (1) medical device and (2) toxic exposure cases. In some of the cases we reviewed, the experts were permitted to testify without restriction. In some, the judge excluded the expert entirely. In other cases, the judge permitted the expert to testify on some subjects but not on others.

We distilled our analysis down to a series of practical dos and don'ts based on how federal judges ruled and the factors that they considered. It is not our purpose to try to make you an expert on Daubert case law or the Federal Rules of Evidence. But you should understand how a judge is likely to examine your work and your opinions, and make sure that you can "show your work" and show the judge that your opinion is reliable and defensible.

The Numbers

We reviewed federal Daubert/FRE 702 rulings against two physician disciplines: doctors testifying in medical device products-liability cases (hip and knee implants, IUDs, breast implants, surgical mesh) and doctors testifying on general or specific causation in toxic and environmental exposure cases (asbestos, benzene, lead, PFOA and similar chemical exposures).

Outcome	Medical Device (N=13)	Toxic/Environmental Exposure (N=35)	General Personal-Injury Baseline (N=59)
Admitted in full	6 (46%)	13 (37%)	33 (56%)

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Partially excluded	2 (15%)	9 (26%)	14 (24%)
Excluded entirely	5 (38%)	13 (37%)	12 (20%)

Both device and toxic-exposure causation testimony gets excluded at roughly double the general personal-injury baseline rate. Credentials alone do not explain the difference — every physician in every bucket was a real doctor with real qualifications. Read the medical-device figure as a real but modest sample (13 challenges) — directional, not definitive, inside a broader corpus we keep growing and re-verifying.

What To Do — Medical Device

Advice	Explanation
Examine the explanted device or surrounding tissue physically, if it's available	Physical examination is one of the strongest signals of a reliable opinion in this corpus — It gives the court something concrete against which to evaluate the causation conclusion. If the device or tissue is available, examine it yourself and document what you observed and how it connects to your causation conclusion, rather than relying on a surgeon's notes or another expert's observations as a substitute. If examination genuinely isn't possible, say so explicitly in the report and explain what you relied on instead.
Ground your opinion in a specific clinical study or literature review tied to this device and this injury mechanism	General medical knowledge about the condition isn't the same as literature that actually addresses this device causing this injury mechanism. Cite the specific studies that support your causal pathway, and be ready to explain in deposition why each one applies to these facts — "this is generally known in the field," with no identifiable source behind it, reads as assertion, not analysis.
Match your specific expertise to the specific causation question, not just the general condition	A general medical license or a related specialty doesn't automatically qualify you to opine on a narrow causation question — an OB/GYN opining on IUD perforation is on solid ground; a generalist opining on the same question outside their regular practice isn't. Before you accept the engagement, ask directly whether this specific causation question sits inside your regular clinical practice; if it doesn't, say so and let counsel find the right expert.

Advice	Explanation
If you're doing a differential diagnosis, write out each alternative cause you considered and specifically why you ruled it out	Courts want to see the ruling-in/ruling-out on the page, not just the conclusion. List every plausible alternative cause, and for each one state the specific fact or finding that let you rule it out. If asked in deposition why you didn't consider a particular alternative, you should be pointing to a line in your own report, not improvising an answer.
State plainly that your opinion meets the "more likely than not" (51%) probability standard, and make sure your analysis actually gets you there	Don't leave the probability standard implicit and hope the report is read generously — state clearly that your causation opinion meets the applicable 'more likely than not' standard, and make sure the analysis actually supports that conclusion. If your own data or reasoning only gets you to "possible" or "associated with," say so honestly rather than characterizing it as more — courts in this corpus have excluded opinions specifically because the expert's own testimony conceded the analysis fell short.

What To Do — Toxic Exposure

Advice	Explanation
Validate your dose or exposure calculation against actual measured exposure data	Purely assumption-based dose calculations were a recurring vulnerability in the toxic-exposure rulings we reviewed. Before you finalize a number, check it against real measured exposure data for this substance, this pathway, and — where possible — this specific plaintiff's actual circumstances. If measured data genuinely doesn't exist, say so explicitly and explain the basis for your estimate rather than presenting an assumption as measured fact.
Use a recognized, peer-validated exposure model where one exists for this substance and pathway	Building your own calculation from scratch, when an established, peer-validated model already exists for this substance and pathway, invites the obvious cross-examination question: why didn't you use the accepted method? Use the recognized model as your starting point, and if you deviate from it, explain exactly why in the report.
Do your own differential-diagnosis ruling-in/ruling-out work	Your causation opinion is only as strong as its own foundation — if you adopt another expert's differential-diagnosis work wholesale, especially one whose opinion is itself vulnerable or already under challenge, a successful attack on that foundation can take yours down with it. Do your own ruling-in/ruling-out analysis, even if it reaches the same conclusion as a co-expert's.

Advice	Explanation
Identify the specific substance or fiber type precisely, and establish the hazardous exposure level for that specific substance	“Asbestos” or a broad chemical family isn’t precise enough when the case turns on a specific fiber type or substance with its own hazard profile. Name the specific substance at issue, cite the hazardous exposure level established for it, and be explicit about how the plaintiff’s exposure compares — that specificity gives the court a concrete basis to evaluate the opinion.
Never rest a causation opinion on “every exposure, no matter how small, contributed”	This theory doesn’t get evaluated case by case. Courts have repeatedly rejected this theory as an insufficient basis for specific causation. If your opinion relies on it, even in part, expect it to draw serious scrutiny. If a causation opinion rests on it, the court may reject the specific-causation opinion without needing to rely on the remaining case-specific analysis

The Mistakes That Get You Excluded

Medical Device

Problem	Explanation	Example from this corpus
Never examining the actual device	Courts want to see the bridge between the underlying data and the causation conclusion — when a report jumps straight from an observation to a conclusion with no visible analysis connecting them, it becomes highly vulnerable regardless of how experienced the doctor is.	In a single metal-on-metal hip implant ruling with five co-experts, all evaluating the same device and the same alleged injury mechanism (metallosis), the split came down to exactly this: the experts who physically examined the explanted device and surrounding tissue were admitted; the one who didn’t — and had a documented gap between data and conclusion — was excluded. Same ruling, same device, same facts.
Opining outside the specific causation question	Being a licensed, practicing physician qualifies a doctor to treat patients — it doesn’t automatically qualify that doctor to opine on a narrow causation question outside their regular practice.	A part-time internist testifying on autoimmune disease causation, with no methodology, no literature review, and no analysis beyond a chart summary, was excluded on exactly this ground.
Rushing the report and missing the probability standard	No amount of credentialing rescues a report the expert’s own testimony concedes wasn’t done to the standard it claims to meet.	An excluded rheumatologist’s own testimony conceded the causation report had been completed in roughly two hours — and fell below the “more likely than not” (51%) standard the opinion was supposed to meet.

Toxic Exposure

Problem	Explanation	Example from this corpus
Arguing “every exposure counts”	Courts in the rulings we reviewed rejected this theory categorically the moment it appeared, not case by case. It’s not actually the most common toxic-exposure failure in this corpus, though (see the next two rows) — but if a causation opinion rests on it, the opinion was excluded before the court even reached the case-specific facts.	One expert’s opinion was excluded from specific causation on exactly this theory — he was left able to testify only on general causation and diagnosis.
Building a dose calculation on assumptions, not measured data	Courts require proof that a harmful level of the substance exists <i>and</i> proof that this specific patient was exposed to that level — general causation isn’t enough without evidence of this patient’s exposure. (An exact numerical minimum dose is not always required: the Fifth Circuit rejected “some kind of exactitude in minimum dangerous dosage” in <i>Ruffin v. BP Exploration & Production, Inc.</i> , No. 23-30854 (5th Cir. May 27, 2026).)	One excluded benzene-exposure opinion extrapolated a dose calculation from assumptions that were never checked against actual measured exposure data.
Adopting a co-expert’s already-rejected foundation	A causation opinion is only as strong as the foundation it’s built on, and that foundation has to be the expert’s own analysis.	Two experts were excluded together because their causation opinions relied entirely on a co-expert’s asbestos-contamination finding that had itself already been rejected.
Identifying the substance imprecisely	“The chemical family” isn’t precise enough when the case turns on a specific substance.	One asbestos-exposure opinion was excluded in part for failing to distinguish between fiber types and establish a hazardous exposure level for the specific fiber actually at issue in the case, rather than asbestos generally.

Prepared by LawSnap Research from a live, coded federal Daubert/FRE 702 corpus. Figures current as of 2026-09-01, corrected 2026-09-03. A companion guide covering this same data, written for the attorneys who retain or challenge experts in these disciplines, is available separately.