

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

LORINZO MURPHY

CIVIL ACTION

VERSUS

No. 13-1031

BP EXPLORATION & PRODUCTION
INC., ET AL.

SECTION I

ORDER & REASONS

Before the Court is a motion¹ *in limine* to exclude the opinions of plaintiff's medical causation expert, Dr. Jerald Cook ("Cook"), filed by defendants, BP Exploration & Production, Inc., BP America Production Company, and BP p.l.c. (collectively, "BP"). BP has also filed a motion² for summary judgment, contending that if the Court grants BP's motion *in limine*, then summary judgment will also be warranted because plaintiff, Lorinzo Murphy ("Murphy"), will lack necessary expert testimony. Murphy opposes³ both motions. For the following reasons, the Court grants BP's motion *in limine* and BP's motion for summary judgment.⁴

¹ R. Doc. No. 27 (motion *in limine*); R. Doc. No. 43 (reply memorandum).

² R. Doc. No. 28.

³ R. Doc. No. 38 (opposition to motion *in limine*); R. Doc. No. 46 (sur-reply memorandum with respect to motion *in limine*); R. Doc. No. 37 (opposition to motion for summary judgment).

⁴ This opinion is nearly identical to this Court's opinion resolving a similar motion *in limine* and a motion for summary judgment in *Novelozo v. BP Exploration & Production, Inc., et al.*, Civil Action No. 13-1033. The plaintiff in *Novelozo* also retained Cook to serve as an expert witness, and the motions in both cases were submitted contemporaneously. In each case, the parties' arguments identified the same issues, and Cook's opinions suffered from the same infirmities.

I. BACKGROUND

The instant action is a “B3” case arising out of the 2010 Deepwater Horizon oil spill in the Gulf of Mexico.⁵ B3 cases involve “claims for personal injury and wrongful death due to exposure to oil and/or other chemicals used during the oil spill response (e.g., dispersant).” *See In re Oil Spill by Oil Rig “Deepwater Horizon” in Gulf of Mexico, on Apr. 20, 2010*, No. MDL 2179, 2021 WL 6053613, at *10 (E.D. La. Apr. 1, 2021) (Barbier, J.). During the course of the MDL proceedings, Judge Barbier approved the Deepwater Horizon Medical Benefits Class Action Settlement Agreement, which included a Back-End Litigation Option (“BELO”) permitting certain class members to sue BP for later-manifested physical conditions. *Id.* at *2. The B3 plaintiffs, by contrast, either opted out of the class action settlement agreement or were excluded from its class definition. *Id.* at *10 n.3. In any event, “B3 plaintiffs must prove that the legal cause of the claimed injury or illness is exposure to oil or other chemicals used during the response.”⁶

Murphy alleges that from June through August of 2010 he did oil clean-up work on beaches in Florida following the Deepwater Horizon oil spill.⁷ According to Murphy, he was exposed to both oil and dispersants.⁸ Murphy also alleges that, as a result of this exposure, he suffers from, among other things, respiratory problems,

⁵ R. Doc. No. 9 (“Severing 780 Cases in the B3 Pleading Bundle and Re-allotting Them Among the District Judges of the Eastern District of Louisiana”) (Barbier, J.).

⁶ R. Doc. No. 9, at 53 (“Case Management Order for the B3 Bundle”) (Barbier, J.); *see id.* at 54 (noting that “proving causation will be a key hurdle for the B3 plaintiffs.”).

⁷ R. Doc. No. 1, at 8.

⁸ *Id.* at 5.

vision problems, headaches, and sinus problems.⁹ Murphy filed the instant civil action, seeking a bench trial with respect to his claims of negligence under general maritime law.¹⁰

Murphy relies on Cook, a retired Navy physician with a master's degree in environmental toxicology, to provide a medical causation analysis supporting Murphy's claim that his exposure to oil and dispersants caused his health problems.¹¹ Cook is board certified in occupational medicine, public health, and general preventive medicine. Cook is also a fellow of the American College of Occupational and Environmental Medicine.¹²

Cook reviewed Murphy's medical records, employment records, claim documents, other records, and two additional expert reports.¹³ With respect to the chemicals that Murphy encountered during his clean-up work, Cook "primarily relied on the exposure assessment conducted by Rachael Jones, Ph.D., CIH."¹⁴ Based on Jones' exposure report, Cook noted that "Murphy was exposed to volatile organic compounds, polycyclic aromatic hydrocarbons, elevated fine particulate matter (PM2.5), crude oil or oily water, sand, and indirectly exposed to dispersants."¹⁵

⁹ *Id.* at 7.

¹⁰ R. Doc. No. 1, at 10–15; R. Doc. No. 24 (scheduling order), at 3 (noting, after a conference with counsel, that the matter is set for trial "before the District Judge **without** a jury.") (emphasis in original).

¹¹ R. Doc. No. 27-3, at 1–2.

¹² *Id.*

¹³ *Id.* at 4.

¹⁴ *Id.* at 7. Dr. Rachael Jones ("Jones") produced a report: *Exposures of Mr. Lorinzo Murphy*.

¹⁵ R. Doc. No. 27-3, at 8–9.

On November 29, 2021, Cook conducted a phone interview with Murphy.¹⁶ As part of this interview, Murphy described his oil clean-up work and the health symptoms he has experienced.¹⁷ Cook did not perform a physical examination, medical assessment, or discuss a treatment plan.¹⁸

Cook's report is organized into several sections. The first outlines his qualifications, which BP does not challenge.¹⁹ The next sections identify materials that Cook reviewed to formulate his opinion. Next, Cook's report describes the methodology he used in connection with his general causation analysis related to the following diseases: chronic rhinosinusitis, respiratory illness, and dry eye and conjunctivitis. Cook then details a specific causation analysis with respect to Murphy and those diseases.²⁰

In the context of his general causation analysis, Cook performed a "literature review of peer-reviewed studies," where his sources were "selected based on the quality of the study and study design."²¹ According to Cook, "the hierarchy of clinical evidence shows that systematic reviews and meta-analyses are the most reliable in predicting clinical outcomes because they are designed to include the most relevant collection of available studies."²²

¹⁶ *Id.* at 4.

¹⁷ *Id.* at 4–6.

¹⁸ *Id.*

¹⁹ R. Doc. No. 27-1, at 8.

²⁰ *See, e.g.*, R. Doc. No. 27-3, at 1.

²¹ *Id.* at 14.

²² *Id.* at 14–15.

In connection with his literature review, Cook consulted the Bradford Hill factors, which environmental toxicologists employ for causation analysis.²³ The Bradford Hill factors include: (1) temporal relationship; (2) strength of the association; (3) dose-response relationship; (4) replication of the findings; (5) biological plausibility; (6) consideration of alternative explanations; (7) cessation of exposure; (8) specificity of the association; and (9) consistency with other knowledge.²⁴ Cook explains that “[d]rawing causal inferences after finding an association and considering these factors requires judgment and analysis to determine if a cause-and-effect relationship exists or not.”²⁵

In terms of general causation, Cook’s report concluded that “exposure to volatile organic compounds, polycyclic aromatic hydrocarbons, elevated fine particulate matter (PM2.5), and crude oil or oily water can result in chronic rhinosinusitis, respiratory illness, and dry eye and chronic conjunctivitis[.]”²⁶ Ultimately, Cook opined that “[i]t is within a reasonable degree of medical certainty that” Murphy’s exposures while performing oil spill clean-up work “are a significant,

²³ *Id.* “Sir Bradford Hill was a world-renowned epidemiologist who articulated a nine-factor set of guidelines in his seminal methodological article on causality inferences.” *Jones v. Novartis Pharm. Corp.*, 234 F. Supp. 3d 1244, 1267 (N.D. Ala. 2017) (internal citations and quotations omitted).

²⁴ R. Doc. No. 27-3, at 16.

²⁵ *Id.* at 15.

²⁶ *Id.* at 34.

contributing cause” of “his chronic symptoms of frontal headaches, eye irritation, blurred vision, cough, and shortness of breath.”²⁷

II. STANDARDS OF LAW

A. Motion *in Limine*

As an initial matter, the Fifth Circuit has “noted that the importance of the trial court’s gatekeeper role is significantly diminished in bench trials, as in this instance, because, there being no jury, there is no risk of tainting the trial by exposing a jury to unreliable evidence.” *Whitehouse Hotel Ltd. P’ship v. C.I.R.*, 615 F.3d 321, 330 (5th Cir. 2010) (citing *Gibbs v. Gibbs*, 210 F.3d 491, 500 (5th Cir. 2000)). Courts have taken this point into consideration when denying *Daubert* motions filed before bench trials. *See, e.g., Trevelyn Enters., L.L.C. v. SeaBrook Marine, L.L.C.*, No. 18-11375, 2021 WL 65689, at *2 (E.D. La. Jan. 7, 2021) (Lemmon, J.). But, “[a]lthough the ‘gate-keeper’ role may be diminished, the Court is still required to perform its gate-keeping function.” *United States v. E.R.R. LLC*, No. 19-2340, 2020 WL 2769881, at *3 (E.D. La. May 28, 2020) (Fallon, J.) (citing *Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748 (7th Cir. 2010)).

Federal Rule of Evidence 702 governs the admissibility of expert witness testimony. *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 588 (1993); *United States v. Hitt*, 473 F.3d 146, 148 (5th Cir. 2006). Rule 702 provides:

²⁷ *Id.* Cook’s conclusion does not specifically link Murphy’s symptoms to the illnesses that Cook considered, *i.e.* chronic rhinosinusitis, respiratory illness, and dry eye and conjunctivitis.

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:

- (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 has reliably applied the principles and methods to the facts of the case.

“To qualify as an expert, ‘the witness must have such knowledge or experience in [his] field or calling as to make it appear that his opinion or inference will probably aid the trier in his search for truth.’” *United States v. Hicks*, 389 F.3d 514, 524 (5th Cir. 2004) (quoting *United States v. Bourgeois*, 950 F.2d 980, 987 (5th Cir. 1992)).

Daubert “provides the analytical framework for determining whether expert testimony is admissible under Rule 702.” *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 243 (5th Cir. 2002). Both scientific and nonscientific expert testimony is subject to the *Daubert* framework, which requires a trial court to make a preliminary assessment to “determine whether the expert testimony is both reliable and relevant.” *Burleson v. Tex. Dep’t of Criminal Justice*, 393 F.3d 577, 584 (5th Cir. 2004); see *Kumho Tire*, 526 U.S. at 147.

A number of nonexclusive factors may be considered with respect to the reliability inquiry, including: (1) whether the technique has been tested, (2) whether the technique has been subjected to peer review and publication, (3) the technique's potential error rate, (4) the existence and maintenance of standards controlling the technique's operation, and (5) whether the technique is generally accepted in the

relevant scientific community. *Burleson*, 393 F.3d at 584. The reliability inquiry must remain flexible, however, as “not every *Daubert* factor will be applicable in every situation; and a court has discretion to consider other factors it deems relevant.” *Guy v. Crown Equip. Corp.*, 394 F.3d 320, 325 (5th Cir. 2004); see *Runnels v. Tex. Children’s Hosp. Select Plan*, 167 F. App’x 377, 381 (5th Cir. 2006) (“[A] trial judge has ‘considerable leeway’ in determining ‘how to test an expert’s reliability.’” (quoting *Kumho Tire*, 526 U.S. at 152)). “Both the determination of reliability itself and the factors taken into account are left to the discretion of the district court consistent with its gatekeeping function under [Rule] 702.” *Munoz v. Orr*, 200 F.3d 291, 301 (5th Cir. 2000).

As for determining relevancy, the proposed testimony must be relevant “not simply in the way all testimony must be relevant [under Rules 401 and 402], but also in the sense that the expert’s proposed opinion would assist the trier of fact to understand or determine a fact in issue.” *Bocanegra v. Vicmar Servs., Inc.*, 320 F.3d 581, 584 (5th Cir. 2003). “There is no more certain test for determining when experts may be used than the common sense inquiry whether the untrained layman would be qualified to determine intelligently and to the best degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute.” *Vogler v. Blackmore*, 352 F.3d 150, 156 n.5 (5th Cir. 2003) (quoting Fed. R. Evid. 702, Advisory Committee Note).

“[W]hen expert testimony is challenged under Rule 702 and *Daubert*, the burden of proof rests with the party seeking to present the testimony.” *Kennedy v.*

Magnolia Marine Transp. Co., 189 F. Supp. 3d 610, 615 (E.D. La. 2016) (Africk, J.). The Court applies a preponderance of the evidence standard when performing its gatekeeping function under *Daubert*. See *Daubert*, 509 U.S. at 592 n.10. And the Court is not bound by the rules of evidence—except those rules concerning privileges—when doing so. See *id.*

B. Summary Judgment

Summary judgment is proper when, after reviewing the pleadings, the discovery and disclosure materials on file, and any affidavits, a court determines that there is no genuine dispute of material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). “[A] party seeking summary judgment always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). The party seeking summary judgment need not produce evidence negating the existence of a material fact; it need only point out the absence of evidence supporting the other party’s case. *Id.*; see also *Fontenot v. Upjohn Co.*, 780 F.2d 1190, 1195–96 (5th Cir. 1986) (“There is no sound reason why conclusory allegations should suffice to require a trial when there is no evidence to support them even if the movant lacks contrary evidence.”).

Once the party seeking summary judgment carries that burden, the nonmoving party must come forward with specific facts showing that there is a genuine dispute of material fact for trial. See *Matsushita Elec. Indus. v. Zenith Radio*

Corp., 475 U.S. 574, 587 (1986). The showing of a genuine issue is not satisfied by creating “some metaphysical doubt as to the material facts,’ by ‘conclusory allegations,’ by ‘unsubstantiated assertions,’ or by only a ‘scintilla’ of evidence.” *Little v. Liquid Air Corp.*, 37 F.3d 1069, 1075 (5th Cir. 1994) (citations omitted). Rather, a genuine issue of material fact exists when the “evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

“Although the substance or content of the evidence submitted to support or dispute a fact on summary judgment must be admissible . . . the material may be presented in a form that would not, in itself, be admissible at trial.” *Lee v. Offshore Logistical & Transp., L.L.C.*, 859 F.3d 353, 355 (5th Cir. 2017) (citations omitted). The party responding to the motion for summary judgment may not rest upon the pleadings but must identify specific facts that establish a genuine issue. *See Anderson*, 477 U.S. at 248. The nonmoving party’s evidence, however, “is to be believed, and all justifiable inferences are to be drawn in [the nonmoving party’s] favor.” *Id.* at 255.

III. LAW & ANALYSIS

A. BP’s Motion *in Limine*

B3 plaintiffs have the burden of proving that “the legal cause of the claimed injury or illness is exposure to oil or other chemicals used during the response.” *In re Oil Spill by Oil Rig “Deepwater Horizon”*, 2021 WL 6053613, at *11; *accord Perkins*

v. BP Expl. & Prod., Inc., No. 17-4476, 2022 WL 972276, at *2 (E.D. La. Mar. 31, 2022) (Milazzo, J.).

“Courts use ‘a two-step process in examining the admissibility of causation evidence in toxic tort cases. First, the district court must determine whether there is *general causation*. Second, if it concludes that there is admissible general-causation evidence, the district court must determine whether there is admissible *specific-causation* evidence.’” *Seaman v. Seacor Marine, LLC*, 326 F. App’x 721, 722 (5th Cir. 2009) (quoting *Knight v. Kirby Inland Marine, Inc.*, 482 F.3d 347, 351 (5th Cir. 2007) (emphases added in *Seaman*)). “General causation is whether a substance is capable of causing a particular injury or condition in the general population, while specific causation is whether a substance caused a particular individual’s injury.” *Id.* (quoting *Knight*, 482 F.3d at 351).

With respect to general causation, “[s]cientific knowledge of the harmful level of exposure to a chemical, plus knowledge that the plaintiff was exposed to such quantities, are minimal facts necessary to sustain the plaintiffs’ burden in a toxic tort case.” *Id.* (quoting *Allen v. Penn. Eng’g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996)). “A plaintiff in such a case cannot expect lay fact-finders to understand medical causation; expert testimony is thus required to establish causation.” *Id.*

1. Cook’s General Causation Analysis

(a) Cook fails to verify Murphy’s illnesses:

BP first objects that Cook failed to perform a necessary threshold task in his

analysis: establishing or verifying Murphy’s diagnoses.²⁸ BP references the American Medical Association’s *Guide to the Evaluation of Disease and Injury Causation* (“AMA Guide”), which Cook maintains in his office as a “ready reference.”²⁹ According to the AMA Guide:

The first step is to establish or verify the diagnosis (i.e., determine what is wrong with the patient, or what does the patient have?). This step is accomplished by careful review of the available medical records and/or examination of the patient. [...] *Exposure becomes relevant only when the presence of disease or illness is established.*³⁰

BP also emphasizes³¹ that Cook’s report notes the importance of a person’s diagnosis: “There are multiple reasons why [Murphy] may be experiencing symptoms [...] A well-explained diagnosis may provide clues as to the etiology of his health problems.”³² When questioned in his deposition, Cook agreed that a symptom, as opposed to a “condition and/or disease,” are different things, and that “multiple diseases might produce similar symptoms.”³³

Cook’s report states that Murphy’s “clinical records available for review do not clearly identify causes of his chronic symptoms.”³⁴ Although Cook interviewed Murphy, Cook did not conduct a physical examination or medical assessment.³⁵ In

²⁸ R. Doc. No. 27-1, at 8.

²⁹ R. Doc. No. 50-1 (Cook deposition), at 64.

³⁰ R. Doc. No. 27-1, at 8 (quoting Melhorn, M.D., *et al.*, *AMA Guide to the Evaluation of Disease and Injury Causation*, (2d ed.) (attached to defendants’ motion as R. Doc. No. 27-5) at 578 (emphasis added)).

³¹ *Id.* at 9.

³² R. Doc. No. 27-3, at 33.

³³ R. Doc. No. 50-1, at 67.

³⁴ R. Doc. No. 27-3, at 33.

³⁵ *Id.* at 4.

his deposition, Cook agreed that his ability to verify Murphy’s diagnoses was “compromised” and not “well-established.”³⁶ Further, Cook testified that he was “unable to perform step 1 [of the AMA Guide] to [his] satisfaction,” and that he had to rely on “the very limited information,” available.³⁷ In response to BP’s argument, Murphy concedes that “[f]or the most part, [his] symptoms of chronic frontal headaches, eye irritation, blurred vision, cough and shortness of breath do not have a clinical diagnosis in the medical records.”³⁸

Expert testimony “must be reliable at each and every step or else it is inadmissible.” *Knight*, 482 F.3d at 355. The Court’s review of the relevant section of the AMA Guide—which BP included in the record—demonstrates that the AMA’s framework is a published technique with explicit standards controlling its operation. *Burleson*, 393 F.3d at 584 (discussing the nonexclusive factors for the reliability inquiry). But Cook’s inability to perform step one of the AMA Guide’s framework “to [his] satisfaction” is concerning because “[e]xposure becomes relevant *only when the presence of disease or illness is established*.”³⁹ Cook’s failure to establish Murphy’s potential diseases reveals that Cook has not “reliably applied the principles and methods to the facts of this case.” Fed. R. Evid. 702(d).

This deficiency is particularly concerning because “the fundamental question underlying [Cook’s] testimony,” as well as the Court’s ruling on BP’s *Daubert* motion,

³⁶ R. Doc. No. 50-1, at 66.

³⁷ *Id.* at 67.

³⁸ R. Doc. No. 38, at 7.

³⁹ 27-5, at 3 (emphasis added).

is “whether the chemicals that [Murphy was] exposed to and the type of exposures [Murphy] experienced cause [Murphy’s illnesses].” *Knight*, 482 F.3d at 352. Without verifying Murphy’s diagnoses, Cook has not sufficiently explained how any particular study can provide “a reliable basis for the opinion that the types of chemicals [Murphy was] exposed to could cause [his] particular injury in the general population.” *Id.* at 353. This lack of verification weighs against admitting Cook’s opinions.

(b) *Cook does not follow a sequential process for his analysis:*

With respect to general causation, the Fifth Circuit has explained that “the most useful and conclusive type of evidence [...] is epidemiological studies.” *Allen*, 102 F.3d at 197. “When, as here, a review of epidemiological studies forms the basis of an expert opinion, the essential first step requires the expert to identify an association noted in the literature between exposure to the toxic agent and a particular disease or adverse effect.” *In re Deepwater Horizon BELO Cases*, No. 19-963, 2020 WL 6689212, at *10 (N.D. Fla.) (Rodgers, J.) (citing the Federal Judicial Center’s *Reference Manual on Scientific Evidence*, at 566 (3d ed. 2011) (hereinafter, *Federal Reference Manual*)).⁴⁰

“The second step requires a determination by the expert of whether the identified association ‘reflects a true cause-effect relationship’ between exposure to

⁴⁰ Judge Rodgers’ opinion addressed a group of BELO plaintiffs who were selected for a bellwether process that began with resolving the issue of general causation. 2020 WL 6689212, at *1. Judge Rodgers concluded that the expert’s opinion in that case fell “woefully short,” of the *Daubert* standard, *id.* at *12, and the Eleventh Circuit affirmed, describing Judge Rodgers’ analysis as “well-reasoned.” *In re Deepwater Horizon BELO Cases*, No. 20-14544, 2022 WL 104243 (11th Cir. 2022) (per curiam).

the substance at issue and the disease.” *Id.* (quoting *Federal Reference Manual* at 597). “To make this determination, scientists consider other criteria indicative of causation, such as the widely recognized Bradford Hill factors.” *Id.* The *Federal Reference Manual* emphasizes that “these guidelines [for evaluating causation] are employed only *after* a study finds an association to determine whether the association reflects a true causal relationship.” *Federal Reference Manual*, at 598-99 (emphasis in original).

According to BP, “[t]hat is not how [Cook] went about his general causation analysis.”⁴¹ BP argues that “Cook testified that he reviews epidemiology during his Bradford Hill analysis rather than beforehand.”⁴² Indeed, BP’s concern is well-founded because, at his deposition, Cook testified that “[he] did not specify a sequential process.”⁴³ Cook conceded that he did not document a positive association in his report before proceeding to a causation analysis.⁴⁴ Further, Cook stated that he “did not follow a -- a cookbook or recipe,” and that he did not think that he “described [his] method well enough for any peer to review it.”⁴⁵

“[T]he party seeking to have the district court admit expert testimony must demonstrate that the expert’s findings and conclusions are based on the scientific method, and, therefore, are reliable.” *Moore v. Ashland Chemical, Inc.*, 151 F.3d 269, 276 (5th Cir. 1998). “This requires some objective, independent validation of the

⁴¹ R. Doc. No. 27-1, at 11.

⁴² *Id.* (emphasis in original).

⁴³ R. Doc. No. 50-1, at 22.

⁴⁴ *Id.* at 22–23.

⁴⁵ R. Doc. No. 27-6, at 8–9.

expert's methodology." *Id.* "The expert's assurances that he has utilized generally accepted scientific methodology is insufficient." *Id.*

Cook's failure to follow a methodology that has "objective, independent validation," is concerning to the Court. *Id.* Murphy attempts to justify Cook's methodology by arguing that "the existence of epidemiology that supports an association is what is important, not the order that the analysis is done."⁴⁶ But even Cook's report notes that "[d]rawing causal inferences *after finding an association* and considering [the Bradford Hill] factors requires judgment and analysis to determine if a cause-and-effect relationship exists or not."⁴⁷ Cook's deposition testimony reveals that Cook did not identify the required association in the epistemological literature before proceeding to the Bradford Hill analysis. In light of that testimony, Murphy has failed to demonstrate that Cook's methodology is "generally accepted in the relevant scientific community." *Burleson*, 393 F.3d at 584. This deficiency weighs against admitting Cook's opinions.

(c) *Cook fails to establish the relevancy of studies that he consulted:*

Next, BP protests that Cook's report relies on studies unrelated to the Deepwater Horizon spill and that Cook fails to explain why those other studies are relevant here.⁴⁸ Specifically, BP notes that Cook's report "cites studies from the 2003 Tasman Spirit tanker spill in Pakistan, from the 1996 Sea Empress tanker spill in

⁴⁶ R. Doc. No. 38, at 9.

⁴⁷ R. Doc. No. 27-3, at 15 (emphasis added).

⁴⁸ R. Doc. No. 27-1, at 12.

the United Kingdom, and from the 2002 Prestige tanker spill off the coast of Spain.”⁴⁹ BP maintains that in referencing these other incidents, Cook does not “explain how the products spilled in those places compared to the weathered oil from the Deepwater Horizon spill, or how the workers’ exposures were similar or different.”⁵⁰

“[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). “A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.” *Id.*

With respect to Judge Rodgers’ exclusion of medical causation evidence offered by Dr. Patricia Williams, the Eleventh Circuit noted with approval Judge Rodgers’ “well-reasoned” observations that Williams referenced studies of oil spills that “occurred close to shore and involved fresh crude oil, whereas the Deepwater Horizon spill occurred approximately 125 miles offshore of Florida, and exposed cleanup workers on Florida beaches to weathered oil.” 2022 WL 104243, at *2. Essentially, there was “no evidence” that the conditions present in the cases before Judge Rodgers “were somehow comparable to the conditions present in the[] studies [cited by Dr. Williams].” *Id.* at *3.

Cook’s report suffers from this very same flaw. Cook mentions the reported findings concerning the Tasman Spirit, the Sea Empress, and the Prestige oil spills.⁵¹

⁴⁹ *Id.* at 12–13.

⁵⁰ *Id.* at 13.

⁵¹ R. Doc. No. 27-3, at 25, 26, 39.

But Cook fails to adequately explain any similarity between those studies and the Deepwater Horizon spill,⁵² even though Cook acknowledges that “weathered crude oil differs from the specific chemicals of fresh crude oil.”⁵³ In short, Cook’s opinions are connected to these studies merely by his *ipse dixit*, and “there is simply too great an analytical gap between the data and the opinion proffered.” *Joiner*, 522 U.S. at 146.⁵⁴

(d) Cook fails to identify a harmful dose:

BP also contends that Cook’s general causation opinions should be excluded because they fail to identify a harmful dose of exposure to any chemical.⁵⁵ The Court agrees.

As previously stated, a causation expert must identify “the harmful level of a

⁵² *Id.*

⁵³ *Id.* at 20.

⁵⁴ In his opposition memorandum, Murphy stresses that Cook also relied “on the results [sic] peer reviewed scientific studies coming from the GuLF STUDY[.]” *See* R. Doc. No. 38, at 10. Cook’s generalized summary of the GuLF Study is unreliable because Cook merely restates the study’s hypothesis without any evaluation of the study’s findings. R. Doc. No. 27-3, at 17 (“The researchers set out *with the hypothesis* that exposure to constituents of oil, dispersants, and oil-dispersant mixtures, as well as to spill-related stress by workers engaged in clean-up of the Deepwater Horizon oil spill, *are associated with adverse health effects*, particularly those associated with respiratory, neurological, hematologic, and psychological or mental health.” (emphasis added)). Cook appears to conclude that the GuLF Study and another study by Alexander “consistently demonstrate a cause-and-effect relationship between exposure to these oil products and subsequent adverse health effects.” *Id.* But Cook does not specify the particular “adverse health effects” that the studies found. Similarly, Cook includes this discussion in the portion of his report dedicated to “strength of the association.” But Cook performs no actual analysis regarding the strength of the association, such as with a statistical confidence interval—one of the tools that Cook mentions to measure such strength. On balance, Cook’s conclusion lacks supporting reasoning.

⁵⁵ R. Doc. No. 27-1, at 14.

exposure to a chemical.” *Allen*, 102 F.3d at 198-199. The Fifth Circuit states that this detail is one of the “minimal facts necessary to sustain the plaintiff’s burden in a toxic tort case.” *Id.* at 199. *See also McGill v. BP Expl. & Prod., Inc.*, 830 F. App’x 430, 433 (5th Cir. 2020) (affirming the exclusion of an expert’s opinions when “[n]one [of the studies on which the expert relied] provide conclusive findings on what exposure level of Corexit is hazardous to humans.”).

BP has repeatedly emphasized Cook’s failure to specify a harmful dose of any chemical to which Murphy was allegedly exposed.⁵⁶ Murphy asserts that BP’s argument is “wrong,” and points to a portion of a report, authored by Jones, upon which Cook relied.⁵⁷ However, the referenced portion of Jones’ report in no way establishes a harmful level of a chemical. Specifically, Jones’ report lists that Murphy was exposed to volatile organic compounds, polycyclic aromatic hydrocarbons, particulate matter, crude oil, oily water, sand, and dispersants.⁵⁸ While Jones’ report does provide statistical approximations of the amounts of these various substances to which Murphy was exposed, Jones in no way quantifies the level at which these substances are unsafe or harmful to humans.⁵⁹

⁵⁶ R. Doc. No. 27, at 1 (“Cook’s general causation opinions fail to identify the harmful level of exposure to weathered oil needed to cause the plaintiff’s alleged conditions.”); R. Doc. No. 27-1, at 14–15; R. Doc. No. 43, at 2 (“Murphy’s opposition never addresses [Cook’s] failure to identify a harmful level of toxic exposure capable of causing Murphy’s injuries. [...] Cook does not mention a causal dose of a toxicant anywhere in his report.”).

⁵⁷ R. Doc. No. 38, at 4.

⁵⁸ R. Doc. No. 38-1, at 23–24.

⁵⁹ *Id.* “Yet, Dr. Prellop makes no connection between Ferox and *bladder* cancer specifically. And, she provides no clue regarding what would be a harmful level of

In that section of his report related to the third Bradford Hill factor, “dose response relationship,” Cook notes that “[t]here is a toxicology maxim that the dose determines the poison.”⁶⁰ Even though Cook cites to a study of “BP Gulf Oil Spill Disaster response workers,” and Cook mentions the risk of exposure to fine particulate matter and volatile compounds, he provides no analysis or discussion of the level of these chemicals that would “determine[] the poison,” even though this section of his report is dedicated to the issue of a dose response relationship.⁶¹ Cook’s deposition testimony likewise confirms that he was unable “to identify the dose of these toxic chemicals that were necessary to cause any of the health effects,” discussed in Cook’s report.⁶² This failure weighs heavily in favor of exclusion.

(e) Murphy presents other evidence outside Cook’s report:

Murphy attempts to buttress Cook’s opinions by referencing several other items of evidence, including materials that Murphy acquired *after* Cook produced his report, such as a “general causation report” authored by Jones,⁶³ and Exhibits 3 and

Ferox exposure.” *Seaman*, 326 F. App’x at 722 (citations omitted) (emphasis in original).

⁶⁰ R. Doc. No. 27-3, at 17.

⁶¹ *Cf. id.* at 9 (noting that “aromatic compounds have known toxicity” yet failing to state the known level of toxicity).

⁶² R. Doc. No. 50-1, at 45–46.

⁶³ R. Doc. No. 38, at 10. Although Murphy characterizes this document as a “general causation report,” it is instead a report detailing occupational exposures among workers that participated in the Deepwater Horizon oil spill clean-up activities. *See* R. Doc. No. 38-3, at 1. Specifically, in the pages that Murphy references, the report details the nature and extent of workers’ exposures to certain types of chemicals in prior oil spill incidents. *Id.* at 17–24. While Jones—who has a PhD degree, but is not a medical doctor—summarizes the findings of a number of studies, she does not provide a general causation opinion. *Id.*

4 to Murphy's sur-reply memorandum.⁶⁴ But as Murphy concedes in his sur-reply memorandum, Cook does not rely on these documents to support his causal opinion, and Murphy states that he does not seek to amend or supplement his expert reports.⁶⁵ The Court cannot review these items of evidence and form its own expert opinion that was not offered by a party. *Seaman*, 326 F. App'x at 722 ("A plaintiff in such a case cannot expect lay fact-finders to understand medical causation; expert testimony is thus required to establish causation.").

Overall, an "expert must 'employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.'" *Wells v. SmithKline Beecham Corp.*, 601 F.3d 375, 378 (5th Cir. 2010) (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). Such rigor is not evident on this record. After reviewing Cook's expert report, his deposition testimony, and the authorities provided by the parties, the Court determines, based on the various shortcomings identified above, that Murphy has failed to meet his burden to prove by a preponderance of the evidence that Cook's report is reliable with respect to his general causation analysis. On the contrary, Cook's opinions are not the product of reliable principles and methods, and Cook has not reliably applied his principles and

⁶⁴ R. Doc. Nos. 46-3 & 46-4. Exhibit 3 is a document consisting of 25 pages, and Murphy maintains that it "shows BP's knowledge of the analytes found in crude oil and the associated health effects, as the Court will see when it reviews Exhibit 3." See R. Doc. No. 46, at 4. But Murphy does not specify the "health effects," he claims are associated with the analytes found in crude oil, and he does not direct the Court's attention to any specific page of the exhibit. *United States v. Del Carpio Frescas*, 932 F.3d 324, 331 (5th Cir. 2019) ("Judges are not like pigs, hunting for truffles buried in the record.") (quotation marks and citation omitted).

⁶⁵ R. Doc. No. 46, at 3.

methods to the facts of this case. Fed. R. Evid. 702(c), (d).⁶⁶

B. BP Motion for Summary Judgment

Having determined that Cook's opinions should be excluded, the Court now turns to BP's motion for summary judgment. After reviewing the parties' arguments, the Court concludes that summary judgment must be granted.

BP specifies that "Murphy's only expert offering an opinion regarding medical causation is [Cook.]"⁶⁷ Further, BP argues that without Cook's opinions, all of Murphy's claims will lack necessary expert support to meet his burden of proof with respect to causation.⁶⁸

Murphy does not dispute that Cook is his only expert for medical causation.⁶⁹ Murphy's opposition to BP's motion for summary judgment rests entirely on his opposition to BP's motion *in limine*.⁷⁰ Murphy advances no other arguments in

⁶⁶ Because Murphy has not demonstrated that Cook's opinions are admissible, the Court need not reach the issue of specific causation. "Evidence concerning specific causation in toxic tort cases is admissible only as a follow-up to admissible general-causation evidence. [...] if [the court] concludes that there is admissible general-causation evidence, the district court must determine whether there is admissible specific-causation evidence." *Johnson v. Arkema, Inc.*, 685 F.3d 452, 468 (5th Cir. 2012) (quoting *Knight*, 482 F.3d at 351).

⁶⁷ R. Doc. No. 28-3, at 1.

⁶⁸ R. Doc. No. 28-1, at 4–6.

⁶⁹ R. Doc. No. 37-1, at 1; *see also* E.D. La. Local Civil Rule 56.2 ("All material facts in the moving party's statement will be deemed admitted, for purposes of the motion, unless controverted in the opponent's statement.").

⁷⁰ R. Doc. No. 37, at 1 ("Defendants' motion [for summary judgment] is premised on the Court granting [the] motion to exclude [Murphy's] causation expert, [Cook]. [Murphy has] opposed that motion [*in limine*] and if [Murphy] prevails, this motion for summary judgment must fail in that regard.").

opposition to summary judgment, nor does he point to any other evidence in the record to oppose summary judgment.⁷¹

Because Murphy lacks expert testimony with respect to the issue of general causation, Murphy has failed to present a genuine issue of material fact with respect to his claims that his injuries were caused by exposure to oil and dispersants. BP is therefore entitled to summary judgment. *McGill*, 2020 WL 6038677, at *3 (affirming summary judgment against a Deepwater Horizon plaintiff in a BELO case after plaintiff's medical causation expert was excluded for failing to satisfy Fed. R. Civ. P. 702 and *Daubert*); *Johnson v. BP Exploration & Prod., Inc.*, No. 19-10090, 2020 WL 6742799, at *2 (E.D. La. Nov. 17, 2020) (Barbier, J.) (granting summary judgment against a plaintiff in a BELO civil action where the plaintiff lacked an expert opinion).

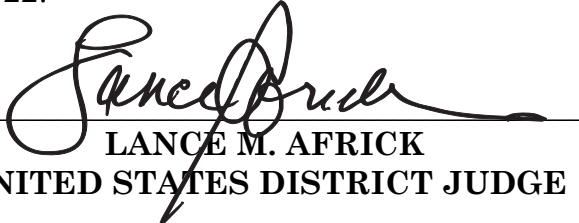
IV. CONCLUSION

For all the foregoing reasons,

IT IS ORDERED that BP's motion *in limine* to exclude the causation testimony of Dr. Jerald Cook is **GRANTED**.

IT IS FURTHER ORDERED that BP's motion for summary judgment is **GRANTED**. Murphy's claims are **DISMISSED WITH PREJUDICE**.

New Orleans, Louisiana, May 9, 2022.



LANCE M. AFRICK
UNITED STATES DISTRICT JUDGE

⁷¹ *Id.*