

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

**GLENN BURTON, JR.,
Plaintiff,**

v.

Case No. 07-CV-0303

**AMERICAN CYANAMID CO, et al.,
Defendants;**

**RAVON OWENS,
Plaintiff,**

v.

Case No. 07-CV-0441

**AMERICAN CYANAMID CO, et al.,
Defendants;**

**CESAR SIFUENTES,
Plaintiff,**

v.

Case No. 10-CV-0075

**AMERICAN CYANAMID CO, et al.,
Defendants.**

DECISION AND ORDER

Glenn Burton, Ravon Owens, and Cesar Sifuentes brought negligence and strict liability claims against six former manufacturers of white lead carbonate pigment (WLC). The plaintiffs alleged that they suffered injuries when, as young children, they ingested WLC that had been applied to the walls of their homes as a component of paint. Because they could not identify the manufacturers of the specific WLC that harmed them, the plaintiffs proceeded under the risk contribution theory of liability, which was extended to WLC cases by the Wisconsin Supreme Court in *Thomas ex rel. Gramling v Mallett*, 285 Wis.2d 236 (2005).

I consolidated the three cases for trial. At the close of trial, the jury returned verdicts in favor of each of the plaintiffs and against three of the named defendants: Sherwin-

Williams, DuPont, and Armstrong Containers. The jury awarded each plaintiff two million dollars in damages, and the three liable defendants agreed to allocate this sum among themselves rather than litigate allocation in a second phase of trial.

Sherwin-Williams has filed two motions for judgment as a matter of law pursuant to Fed. R. Civ. P. 50. It argues that judgment as a matter of law is proper because the evidence at trial did not provide the jury with a legally sufficient basis for its verdicts against Sherwin-Williams. For the reasons discussed below, I will deny both motions.

I. BACKGROUND FACTS

Because I discuss the facts in detail in the course of my analysis, in this section I will present only those facts necessary to give context to the analysis.

WLC is a fine white powder that was historically used as a pigment in paint. During the first half of the twentieth century, Sherwin-Williams sold WLC in three forms for use in residential paint: as raw powder; as a paste called “white lead in oil” (WLO) made by mixing WLC with linseed oil; and as a component of ready-mixed paint. The first two forms—raw WLC powder and WLO—were commonly sold to tradesmen called “master painters” who would mix the WLC or WLO with other ingredients according to their own proprietary formulas to make paint, which they would then apply to their customers’ homes. Ready-mixed paints were sold both to master painters and directly to consumers. Sherwin Williams manufactured WLC between 1910 and 1947. Tr. 5075. It sold white lead in oil between 1910 and 1969. It sold ready-mix paints that contained WLC between 1890 and 1969. Tr. 4955.

Over the course of the twentieth century, the medical community came to understand that the residential use of paint containing lead was associated with childhood

lead exposure. The date when American medical experts first understood and publicized the risk of lead paint to children—particularly the risk that the paint might deteriorate and be ingested in the form of dust—was at issue in this trial; plaintiffs’ position is that the risk was known as early as the nineteen-teens or before. In 1955, Sherwin-Williams began including warning labels on products that contained lead stating: “Contains lead or other compounds. Harmful if eaten. Do not apply on toys, furniture or interior surfaces which might be chewed by children.” Tr. 5055-56. Federal regulations limited and then banned the use of lead pigment in residential paint beginning in the 1970s.

The medical community’s understanding of the risks associated with even low-level exposures to lead has also evolved over time. In the early twentieth century, lead poisoning was recognized by severe symptoms including seizure and coma. As blood testing techniques became more refined, doctors began recognizing effects of lead and recommending treatment at lower levels of exposure. Relatedly, the blood lead level (BLL) identified in Wisconsin law as constituting “lead poisoning” has moved steadily downward since the mid-twentieth century. Wisconsin law now defines lead poisoning as a blood lead level of 5 µg/dL (micrograms of lead per deciliter of blood).

Each of the three plaintiffs was diagnosed with elevated BLLs as a young child. Plaintiff Glenn Burton’s was diagnosed when he was around two years old; his highest recorded BLL was 31 µg/dL. Plaintiff Caesar Sifuentes was diagnosed when he was around two years old; his highest recorded BLL was 48 µg/dL. Ravon Owens was diagnosed as a toddler; his peak recorded BLL was 53 µg/dL, and his levels remained elevated for many years. At the time their elevated BLLs were diagnosed, both Mr. Sifuentes and Mr. Owens received chelation therapy, an inpatient medical procedure that

clears lead from the blood. Paint containing WLC was found in each of the three plaintiffs' homes, and each plaintiff claims that the WLC pigment was the primary cause of his lead exposure. Each also claims that he suffered neurological impairment resulting from the lead exposure.

II. STANDARD

I may enter judgment against a party who has been fully heard on an issue in a jury trial if “there is no legally sufficient evidentiary basis for a reasonable jury to find for the party on that issue.” Fed. R. Civ. P. 50(a); *Reeves v. Sanderson Plumbing Prods.*, 530 U.S. 133, 149-51 (2000). “Judgment as a matter of law is proper only if a reasonable person could not find that the evidence supports a decision for a party on each essential element of the case, viewing the evidence in the light most favorable to the nonmovant” and making all reasonable inferences permitted by the evidence. *Campbell v. Peters*, 256 F.3d 695, 699 (7th Cir. 2001) (citations omitted); *Susan Wakeen Doll Co., Inc. v. Ashton Drake Galleries*, 272 F.3d 441, 449 (7th Cir. 2001). In rendering this decision, I may not weigh the evidence or make credibility determinations. *Martinez v. City of Chicago*, 900 F.3d 838, 844 (7th Cir. 2018). Although I am to review the entire record, I “must disregard all evidence favorable to the moving party that the jury [was] not required to believe.” *Reeves*, 530 U.S. at 150-51.

III. DISCUSSION

Sherwin-Williams makes several arguments in support of its motions for judgment as a matter of law: (1) there was insufficient evidence that Sherwin-Williams breached its

duty of ordinary care; (2) due process shields Sherwin-Williams from plaintiffs' strict liability claims; (3) there was insufficient evidence that Sherwin-Williams' WLC was defective; (4) there was insufficient evidence that Sherwin-Williams' WLC reached the consumer without substantial change; (5) the "sophisticated user" doctrine shielded Sherwin-Williams from liability; (6) there was insufficient evidence that plaintiffs had suffered an injury as a result of their lead exposure; (7) there was insufficient evidence that Sherwin-Williams' products or conduct were cause-in-fact of plaintiffs' lead exposure; and (8) there was insufficient evidence to support the jury's award of \$2 million in damages to each plaintiff. I will address these arguments in turn.

A. Negligence

Sherwin Williams argues that plaintiffs did not present evidence sufficient to support a legally cognizable theory of negligence. It argues that Wisconsin law does not recognize a claim of negligence based only on manufacture and sale of a product known to be dangerous, and that the plaintiffs' claim that the defendants should not have made or sold WLC for use in paint amounts to a claim of negligent product design which was foreclosed by the Wisconsin Supreme Court in *Godoy ex rel. Gramling v. E.I duPont de Nemours and Co.*, 319 Wis.2d 91, 110-115 (2009). Sherwin-Williams is wrong on both points.

Under *Thomas*, a plaintiff seeking to recover on a negligence claim must show that the defendant's conduct breached a legally recognized duty of care that it owed to the plaintiff. Under Wisconsin law, "everyone owes to the world at large the duty of refraining from those acts that may unreasonably threaten the safety of others." *Brenner v. Amerisure Mutual Insurance Company*, 374 Wis.2d 578, 588 (2017) (quoting *Behrendt v.*

Gulf Underwriters Ins. Co., 318 Wis.2d 622, 635 (2009). “What is within the duty of ordinary care depends on the circumstances under which the claimed duty arises.” *Id.* (quoting *Hoida, Inc. v. M&I Midstate Bank*, 291 Wis.2d 283, 307 (2006)).

Manufacturers are subject to the duty of ordinary care. The Wisconsin pattern jury instructions illustrate this point:

The duty of a manufacturer or supplier of a product is to exercise ordinary care to insure that the product will not create an unreasonable risk of injury or damage to the user or owner when used in its intended or foreseeable manner. This duty must be “approached from the standpoint of the standard of care to be exercised by the reasonably prudent person in the shoes of the defendant manufacturer or supplier.” A manufacturer, **among other requirements**, is required to exercise ordinary care in the manufacture of its product in the following respects: (1) safe design of the product so that it will be fit for its intended or foreseeable purpose; (2) construction of the product so that the materials and workmanship furnished will render the product safe for its intended or foreseeable use; (3) adequate inspections and tests to determine the extent of defects both as to materials and workmanship; (4) adequate warnings of danger in the use of the product and adequate instructions as to the proper use of the product which is dangerous when used as intended.

WIS JI-CIVIL 3200—Products Liability: Law Note For Trial Judges (emphasis supplied; citation omitted). As the emphasized language makes clear, the four enumerated duties in the jury instruction do not represent the entire range of obligations imposed on a manufacturer under the general rubric of ordinary care. If the unreasonable risk of injury associated with a product cannot be adequately addressed through improved design, construction, inspections or warnings, the manufacturer remains under an obligation to take other, reasonable actions to ensure that the product does not cause unreasonable harm. “The duty of ordinary care under the circumstances is determined by what would

be reasonable given the facts and circumstances of the particular claim at hand.” *Hoida*, 291 Wis.2d at 308.

In the present case, the defendants owed a duty to exercise ordinary care in manufacturing and marketing WLC. The plaintiffs claim that it was foreseeable to the defendants that WLC incorporated into paint and applied to the walls of homes might be ingested by children and cause injury. At trial plaintiffs presented voluminous evidence that WLC manufacturers were or should have been aware of the risks to children associated with the use of WLC in paint, beginning in the early 20th century. Some representative examples of this evidence follow:

- Between 1904 and 1909, articles were published in the Australian medical literature documenting cases of children suffering seizures, comas, and death after ingesting flakes of lead paint from the verandas of their families’ homes, and dust from lead paint on the interior walls of the homes. Tr. 858-863.
- In 1914, a Washington researcher delivered an address to an association of master house painters warning that gradual disintegration of paint made of WLC and turpentine would “result in the formation of dried particles of white lead dust,” and that “[t]he presence of such dust in the atmosphere of a room is very dangerous to the health of the inmates.” Tr. 899-900.
- In 1917, an article published in an American medical journal discussed the Australian findings and also described American children suffering seizures and comas after chewing lead paint from woodwork in their homes. Tr. 902-904.

- In 1943, an article in the American Journal of Diseases of Children reported that children who had survived acute lead poisoning exhibited decreased cognitive function. Tr. 932-936.
- In 1972, Congress passed legislation limiting the allowable percentage of lead in paint for residential use. In 1978, the federal government banned consumer uses of lead-containing paint. Tr. 1208.

The jury's negligence verdict indicates its conclusion that the risk to children associated with WLC in paint was foreseeable to Sherwin-Williams, such that Sherwin-Williams was obligated to exercise reasonable care under the circumstances to ensure that its product would not cause such injury. The question for the court is what sorts of conduct the duty of ordinary care required.

Rulings by this and other courts established that certain sorts of conduct were *not* required under the duty of ordinary care to which the defendants were subject. For example, I previously held that the defendants' duty of ordinary care did not obligate them to provide direct warnings to the plaintiffs or their families, because the risk of childhood lead exposure from paint was widely known at the time of the plaintiffs' exposure. No. 07-CV-0303, ECF # 1070 at 14-15. *Id.* Similarly, the Wisconsin Supreme Court in *Godoy* held that the defendants' duty of ordinary care did not obligate them to redesign WLC so as to not contain lead, because that would be impossible. *Godoy v. E.I duPont de Nemours and Co.*, 319 Wis.2d 91, 115 (2009). But that circumstances made it unreasonable to expect those specified sorts of conduct from the defendants does not absolve the defendants of their duty of ordinary care. Where a manufactured product (e.g., WLC) carries a foreseeable risk of harm (being ingested by children and poisoning

them) when used for one purpose (residential paint) but not when used for other purposes (industrial paint, plastics, etc), and where the risk associated with that use is rooted in an inherent characteristic of the product (containing lead) that can't be remediated by redesigning the product or improving the manufacturing process, the duty of ordinary care may obligate manufacturers and marketers of that product to act reasonably to ensure that the product not be used for the purpose that carries the risk of harm.¹

Judge Learned Hand's famous formula, $B < PL$ (where B is the burden of precautions, L is the loss if there is an accident that the precautions might have prevented, and P is the probability of an accident if the precautions are not taken), provides a useful tool for clarifying the requirements of "reasonableness under the circumstances." *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir.1947); *Villanova v. Abrams*, 972 F.2d 792, 796 (7th Cir. 1992). Based on this formula, legally sufficient evidence to support the jury's finding of negligence would mean evidence from which the jury could reasonably conclude that the burden on Sherwin-Williams of ceasing to manufacture and market WLC for use in residential paint was outweighed by the likelihood that children might ingest it if used in residential paint and the severity of the injury such ingestion might cause. This conclusion must be based on information available to Sherwin Williams at the time it was manufacturing and/or marketing WLC, which evidence indicates was between 1910 and 1969.

Regarding the burden on Sherwin Williams of ceasing to manufacture WLC for use in household paint, the jury heard evidence that there were many uses for WLC and WLO

¹ Obviously, the factual premises on which this claim rests must be proven, and a jury must weigh the severity of the foreseen harm against the cost to the manufacturer/marketer of the various means of limiting the product's use.

other than residential paint. For example, WLC was used in industrial paints, automotive paints, and on ships, bridges, railways and military equipment. ECF # 1732 at 13. From this, the jury could conclude that Sherwin-Williams would still have had a market for the WLC it manufactured even if it had stopped making WLC for use in residential paint. Regarding the burden on Sherwin-Williams of ceasing to *market* WLC in residential paint, the jury heard evidence that Sherwin-Williams had many lead-free residential paint formulas available and only sold residential paint that contained WLC because it wanted to reach additional customers. From this, the jury could conclude that though Sherwin-Williams might not have reached those customers if it had not sold residential paint containing WLC, it would still have had a wide product line of lead-free residential paints.

Regarding the likelihood and severity of injury: the jury heard evidence that, between 1904 and 1909, articles were published in the Australian medical literature documenting cases of children suffering seizures, comas, and death after ingesting flakes of lead paint from the verandas of their families' homes, and dust from lead paint on the interior walls of the homes. The jury also heard that, by 1916, articles had been published in American medical journals discussing the Australian findings, and that by the mid-1920s, articles had been published in the American medical literature referencing children suffering seizures and comas after chewing lead paint from woodwork in their homes. At trial, Sherwin-Williams tried to limit the impact of this evidence by presenting many arguments that were implicitly addressed to the probability ("P") component of the B<PL calculus. Sherwin-Williams argued that the Australian climate caused the paint to deteriorate in a way that increased the likelihood of ingestion by children, and that because the climate in the United States was less severe, it was reasonable for Sherwin-

Williams to believe that its paint was less likely than the Australian paint to deteriorate in a way that would lead to ingestion by children. Sherwin-Williams also argued that it was reasonable to expect that parents and caregivers would prevent children from gnawing on woodwork, making exposure by that mechanism rare.

However, these arguments do not reach the loss (“L”) component of B<PL. Again, the medical articles described children suffering catastrophic consequences from exposure to lead paint: seizures, comas, and death. Though the probability of children ingesting WLC from residential paint that was foreseeable to Sherwin-Williams based on the medical knowledge of the 1910s may have been low, the severity of the injury that could foreseeably result from such ingestion was very high. Weighed against the limited burden to Sherwin-Williams of ceasing to manufacture and market WLC for use in residential paint, the extreme severity of the foreseeable injury was sufficient to support the jury’s finding that Sherwin-Williams failed to act reasonably when it continued manufacturing and marketing WLC for residential use after the American medical community began discussing the Australian case studies.

Sherwin-Williams also argues that to allow a claim of negligence based on manufacture of a product known to be dangerous would be an expansion of state law improper for a federal court. The argument is a non-starter: as the Learned Hand analysis just demonstrated, the claim that Sherwin-Williams breached its duty of ordinary care by making and selling WLC when it was foreseeable that the WLC would cause harm to children is of a piece with the negligence canon. The duty and breach involved can be articulated using traditional negligence principles; there’s no need to develop new legal standards. By contrast, in *Insolia v. Philip Morris, Inc.*, 216 F.3d 596 (2000) (“*Insolia I*”),

the Seventh Circuit declined to recognize a novel tort claim of “intentional exposure to a hazardous substance,” reasoning that the claim could not be cleanly analogized to battery, nuisance, or other familiar claims and determining that the state court was the proper forum to test and define the parameters of such a novel claim. *Id.* at 607. Had the Seventh Circuit allowed the “intentional exposure” claim to proceed, it would have needed to “invent” the elements of the claim and the legal standards associated with those elements. *Id.* Not so, here; negligence is a well-known quantity.

Sherwin-Williams cites to a non-binding Western District of Wisconsin decision in support of its argument that a claim of negligence based on manufacture and sale of a foreseeably dangerous product represents an expansion of Wisconsin law. *Insolia v. Phillip Morris, Inc.*, 128 F.Supp.2d 1220, 1223 (W.D.Wis. 2000) (“*Insolia II*”). As I’ve just explained, the logic of this argument is singularly unpersuasive. Further, *Insolia II* can be distinguished from the present cases in a key way. In *Insolia II*, the court had ruled as a matter of law that the product at issue—cigarettes—was not unreasonably dangerous as would be necessary to give rise to strict product liability because the consuming public was aware of the dangers associated with cigarette smoking. 128 F.Supp.2d at 1222. The court thought it implausible that a defendant could be liable for unreasonably making and selling a product where the product itself was not unreasonably dangerous and defective. *Id.* at 1223. Here, however, the product *is* unreasonably dangerous and defective; the jury’s finding for plaintiffs on their strict liability claims indicates as much.² Unlike *Insolia II*, in the present case there is no logical tension between the unreasonableness of Sherwin-Williams’ conduct and the unreasonable dangerousness of its product.

² See my discussion of the product defect issue at § III.C., *infra*.

In sum, plaintiffs presented a legally cognizable theory of negligence with respect to Sherwin Williams, and the jury heard evidence sufficient to support a finding of negligence on that theory.

Sherwin-Williams also makes various arguments addressed to a “negligent promotion” claim. Plaintiffs have made clear that the conduct for which they seek to hold Sherwin-Williams liable is the making and selling of WLC, not the advertising or promotion of it. Thus, I need not address these arguments.

B. Due Process

Sherwin-Williams also moves for judgment as a matter of law on the plaintiffs’ strict liability claims. It argues, first, that to hold Sherwin-Williams strictly liable would violate its due process rights, because Wisconsin courts had not yet recognized the strict liability standard and the related concept of foreseeable misuse at the time Sherwin-Williams manufactured and marketed WLC. *See Dippel v. Sciano*, 155 N.W.2d 55, 63 (Wis. 1967) (adopting Restatement (Second) of Torts § 402(a)(1965); *Schuh v. Fox River Tractor Co.*, 218 N.W.2d 279, 285-87 (Wis. 1974) (recognizing the doctrine of foreseeable misuse). “There are indeed Due Process limits on the retroactive application of a judicial decision, but only if the judicial decision ‘is unexpected and indefensible by reference to the law which had been expressed prior to the conduct in issue.’” *Gibson v. American Cyanamid Co.*, 760 F.3d 600, 622 (7th Cir. 2014)(quoting *Rogers v. Tennessee*, 532 U.S 451, 457 (2001)). Sherwin-Williams presents no developed explanation of how the Wisconsin courts’ adoption of either the strict liability standard or the foreseeable misuse standard was “unexpected and indefensible” by reference to prior law. Therefore, I will not enter judgment for Sherwin-Williams on the basis of this argument.

C. Product Defect

Sherwin Williams argues that it is entitled to judgment on the plaintiffs' strict product liability claims because the plaintiffs did not adduce legally sufficient evidence that Sherwin-Williams' WLC was defective. Sherwin Williams argues that to establish that Sherwin-Williams' WLC was defective as a result of a failure to warn, the plaintiffs were obligated to present evidence of what warnings Sherwin-Williams should have given in order to render the WLC non-defective.³

At the time that the plaintiffs filed their lawsuits, the common law governing strict products liability in Wisconsin required plaintiffs to prove the following elements in order to establish a strict liability claim:

- (1) That the product was in defective condition when it left the possession or control of the seller or manufacturer;

³ Though it does not explicitly say so, Sherwin-Williams appears to be applying the Restatement (Third) of Torts' treatment of the strict product liability claim, which the Wisconsin Legislature codified in 2011 in Wis. Stat. § 895.047. This statute provides that, for purposes of a strict product liability claim, "[a] product is defective because of inadequate instructions or warnings only if the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the manufacturer and the omission of the instructions or warnings renders the product not reasonably safe." Wis. Stat. § 895.047(1)(a). This standard focuses on the manufacturer's conduct and requires the plaintiff to prove that the manufacturer did or should have foreseen the risk of harm associated with its product.

It is likely true that, if Wis. Stat. § 895.047 defined the substantive requirements of the present plaintiffs' strict liability claims, the plaintiffs would need to present evidence as to what "reasonable warnings or instructions" Sherwin-Williams might have provided that would have "reduced or avoided" the foreseeable harms caused by WLC. But § 895.047 does not govern these plaintiffs' claims. "The treatment of section[] ... 895.047 ... first appl[ies] to actions or special proceedings that are commenced on the effective date of this subsection." 2011 Wis. Act 2, § 45(5). These plaintiffs initiated their lawsuits in 2007 and 2010, and § 895.047 did not take effect until February 1, 2011. See *Nelson v. Johnson & Johnson*, 2019 WL 3082500 (E.D. Wis. July 15, 2019).

- (2) That it was unreasonably dangerous to the user or consumer;
- (3) That the defect was a cause of the plaintiff's injuries or damages;
- (4) That the seller or manufacturer engaged in the business of selling or manufacturing such product; and
- (5) That the product was one which the seller or manufacturer expected to and did reach the user or consumer without substantial change in the condition it was in when the seller or manufacturer sold it.

See Dippel v. Sciano, 37 Wis.2d 443, 460 (1967); *Haase v. Badger Mining Corp.*, 274 Wis.2d 143, 154-55 (2004); *Thomas ex rel. Gramling v Mallett*, 285 Wis.2d 236, 320-21 (2005); Restatement (Second) of Torts § 402A.

Under the common law governing these cases, the Restatement (Second) of Torts' "consumer contemplation" test determines both whether a product was defective and whether it was unreasonably dangerous. *Green v. Smith & Nephew AHP, Inc.*, 245 Wis.2d 772, 823 (2001). Per this test, a product is defective if, at the time it leaves the seller's hands, it is "in a condition not contemplated by the ultimate consumer." *Id.* at 797. A defective product is unreasonably dangerous where it is "dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics." *Id.* However, a manufacturer might, in some circumstances, prevent a product from being rendered unreasonably dangerous by issuing appropriate warnings or directions for use. *Id.* at 829.

In short, under the applicable law, plaintiffs were not required to prove that reasonable warnings would have reduced the foreseeable harms associated with Sherwin-Williams' WLC in order to establish that Sherwin-Williams' WLC was defective.

They needed only to show that the WLC was in a condition not contemplated by the ultimate consumer. To this end, they presented evidence that WLC is toxic, and that when it is incorporated into residential paint, it has the propensity to be released as the paint deteriorates and mix with household dust, where it is easily ingested by children. The jury also heard testimony from Sherwin-Williams' expert historian and others that between 1900 and 1950, residential paint consumers did not contemplate that WLC in paint might mix with household dust and poison children. That evidence is sufficient to support a jury finding of product defect under the consumer contemplation test, spanning the 1910-1950 period. The same evidence, together with evidence of the potential severity of lead poisoning, is sufficient to support the jury's finding that Sherwin-Williams' WLC was unreasonably dangerous for that entire period.

Since plaintiffs made that showing, the burden was on Sherwin-Williams to show that its warnings were sufficient to render the WLC not unreasonably dangerous. See *Green*, 245 Wis. at 829; see also *Schuh v. Fox River Tractor Co.*, 63 Wis.2d 728, 737 (1974) ("In the absence of a warning to the contrary, the jury could well conclude that the machine was unreasonably dangerous and defective in design."). Plaintiffs had no obligation to present evidence of what warnings Sherwin-Williams ought to have given to render the product not unreasonably dangerous.

D. Substantial Change

Next, Sherwin-Williams argues that plaintiffs did not present sufficient evidence that Sherwin-Williams' WLC and WLC products reached consumers or users without substantial change, which is an element of their strict liability claims. Sherwin-Williams

argues that the WLC was changed when it was mixed with other materials to formulate paint.

Under applicable Wisconsin law, “[m]anufacturers or sellers cannot be held strictly liable if the condition of the product substantially changes in a way that is material to the accident after the product leaves their control. . . . [A] substantial and material change [is] a change in the design, function or character of the product linked to the accident.” *Haase*, 274 Wis.2d at 155-56 (quoting *Glassey v. Continental Insurance Company*, 176 Wis.2d 587, 600 (1993)). The purpose of the substantial change requirement “is to protect a manufacturer from liability when the dangerously defective aspect of the product was altered or introduced after the product left the manufacturer’s control.” *Godoy*, 319 Wis.2d at 119. “Often, the issue of whether there was a substantial and material change is a fact-intensive inquiry.” *Id.*

Here, plaintiffs presented evidence from which the jury could find that WLC was dangerously defective because of its toxicity and its powder form, which allowed it to mix with household dust and be ingested by children. Sherwin-Williams argues that its WLC was mixed with other ingredients in order to make usable paints, and that sometimes the paint-making process involved further grinding of the WLC. The jury could reasonably have found that these changes were not material, since the WLC was already toxic and in powder form before it underwent these changes.

E. Sophisticated User Defense

Sherwin-Williams argues that the “sophisticated user” defense shields it from plaintiffs’ strict liability claims. The sophisticated user defense originates in the Restatement (Second) of Torts § 388, which “addresses the duty of a manufacturer to

warn in negligence actions” and provides that “manufacturers are under a duty to warn only if the manufacturer has no reason to believe that the user will realize the item’s dangerous condition.” *Strasser v. Transtech Mobile Fleet Service, Inc.*, 236 Wis.2d 435, 460 (2000), quoting Restatement (Second) of Torts § 388(b). Section 388 has been applied to shield manufacturers from liability for negligent failure to warn where the manufacturer has reason to believe that a user has the knowledge necessary to realize the dangerous condition of the product. *Mohr v. St. Paul Fire & Marine Ins. Co.*, 269 Wis. 2d 302, 318 (Wis.App.2003). Sherwin-Williams argues that the defense should shield it from the plaintiff’s strict liability claims, to the extent that Sherwin-Williams sold its WLC products to master painters who allegedly had specialized knowledge about the risks or lead.

This argument fails, because the “sophisticated user” defense applies only to negligence claims. As the *Mohr* court explained, § 388(b)’s sophisticated user defense is “simply an expression of the general negligence principle that what is reasonable depends on the circumstances.” *Id.* at 319. Likely for this reason, Wisconsin courts have been careful to limit the application of § 388 to negligence claims and not strict liability claims. See, e.g., *id.* at 330 (declining to apply sophisticated consumer doctrine to strict product liability claim); *Haase v. Badger Mining Corp.*, 266 Wis.2d 970, 987 (Wis.App. 2003)(discussing sophisticated user defense in the context of negligence claim, but not strict liability claim); *Westphal v. E.I. du Pont de Nemours & Co., Inc.*, 192 Wis.2d 347, 365 (Wis.App. 1995)(“Section 388 governs a product manufacturer’s duty to warn in negligence actions...”). See also *Bergfeld v. Unimin Corp.*, 319 F.3d 350, 353 (8th Cir. 2003)(“Section 388 is a rule of negligence, not one of strict liability.”).

F. Injury

Sherwin-Williams next argues that it is entitled to judgment in each case because none of the plaintiffs presented evidence sufficient to support the jury's conclusion that the plaintiff had suffered an injury. This argument fails. Each plaintiff claimed that he had suffered injury to his brain cells resulting in cognitive impairment. In support of this claim, each plaintiff testified that he struggled with various cognitive processes such as reading or verbal processing. Plaintiffs also presented expert testimony from a neuropsychologist, Dr. Idit Trope, who testified that she had performed a battery of cognitive tests on the plaintiffs and had identified functional deficits in certain areas indicative of brain damage. Taken together, the plaintiffs' testimony and Dr. Trope's testimony are a sufficient basis for the jury's finding that each plaintiff is injured.

Sherwin-Williams revives its *Daubert* challenge to the reliability of Trope's opinion, arguing that the variation in the plaintiffs' cognitive test scores is "normal" and insufficient to demonstrate brain injury. In support of that argument, it cites its own neuropsychiatrist expert, David Schretlen, who testified to that opinion at trial. Whether neuropsychiatric test results reveal normal variation or injury is a conclusion, and *Daubert* challenges are properly addressed not to conclusions but to facts and methods. It was proper for the jury to resolve the battle of experts as to whether the neuropsychiatric test results indicated normal variation or injury.⁴

⁴ The "injury" sections of Sherwin-Williams' briefs include additional arguments regarding the reliability of plaintiffs' experts' testimony; these arguments are misplaced, because the challenged testimony isn't addressed to the existence of an injury but to other elements of the plaintiffs' claims, such as causation and damages. Though they do not affect my analysis of the "injury" question, I will briefly address these additional arguments in hopes of clarifying the relationship between the evidence and the elements of plaintiffs' claims.

Sherwin-Williams challenges the reliability of Dr. Trope's opinion that "plaintiffs have brain damage from lead ingestion" on grounds that she tested the plaintiffs years after their exposure to lead, and she did not account for scientific evidence that the brain-damaging effects of lead diminish over time. ECF # 1735 at 16. There may indeed be some evidence that the effects of lead ease with time, but that does not affect the reliability of Trope's opinions as material to the elements of plaintiffs' case. It doesn't affect the reliability of her opinion as to the *existence* of an injury at the time she conducted the tests. Nor does it affect the reliability of her opinion that lead exposure was a *cause* of the injury she found, which was based on the premise that the variation in the plaintiffs' neuropsychiatric test results was consistent with the variations in neuropsychiatric test results generally associated with lead exposure. Perhaps Sherwin-Williams means to suggest that, since the effect of lead had likely diminished, some other intervening factor in the time since the lead exposure occurred must have caused the variations Trope identified, and Trope failed to account for that factor. But there are gaps in that logic: first, the effects of lead might have deteriorated without disappearing entirely; second, Sherwin-Williams doesn't identify any particular intervening factor that might have caused the variations in cognitive performance that Dr. Trope testified are consistent with lead exposure; third, even if other factors contributed to the variations Dr. Trope identified, plaintiffs needed only to prove that lead exposure was a substantial factor in causing their brain injuries, and not the exclusive cause.

Sherwin-Williams also argues that Dr. Trope cannot "isolate the effect" of lead on plaintiffs' test results because she does not have access to maternal IQ or benchmark IQ. I take Sherwin-Williams to mean that Trope cannot opine as to "how much" injury the plaintiffs lead exposure caused, because she does not have a basis to estimate what the plaintiffs' cognitive ability would have been had they not been injured. Trope did not opine as to "how much" injury was caused by lead, nor did she need to. She opined that the plaintiffs had injured brains because their tests revealed variations in cognitive performance that would likely only occur in injured brains (the "injury" element of the claim), and that lead exposure was a cause of the injuries to plaintiffs' brains because the variations in plaintiffs' cognitive performance were consistent with the variations in cognitive performance associated with lead exposure (the "specific causation" element of the claim). Dr. Trope did not need access to maternal or benchmark IQ information to reach either of her opinions.

Finally, Sherwin-Williams challenges the reliability of the opinion of plaintiffs' expert Dr. Besunder that each plaintiff's lead exposure likely caused at least a 10-point drop in IQ. Sherwin-Williams characterizes this testimony as addressed to the "injury" element of plaintiffs' claims. As I explained above, plaintiffs' testimony regarding their cognitive difficulties and Dr. Trope's testimony regarding plaintiffs' neuropsychological tests were sufficient evidence to support the jury's conclusion that the plaintiffs have injured brains. Besunder's testimony is not a necessary foundation of the injury element of plaintiffs' claims. Rather, the testimony addresses the quantitative question "how much" plaintiffs were injured by lead, which puts it in the realm of damages.

Dr. Besunder testified that epidemiological evidence (population studies) shows a correlation between BLLs in the range of 25 to 30 µg/dL and IQ drops of approximately

ten points, and that since each plaintiff's peak BLL had exceeded 30 µg/dL, each plaintiff had likely experienced at least a 10-point IQ drop. Sherwin-Williams takes issue with Dr. Besunder's reliance on population studies to draw conclusions about individual plaintiffs; it argues that medical professionals do not use population studies to diagnose individual patients, and since Dr. Besunder's opinion rests on such studies, it is unreliable. In support of this argument, Sherwin-Williams cites *Doe v. United States*, 976 F.2d 1071 (7th Cir. 1992) for the principle that epidemiological studies are not a proper basis for determination of the cause of an individual's symptoms. I reject Sherwin-Williams argument for two reasons: first, I do not read *Doe* as stating a hard prohibition against the use of epidemiological evidence to draw conclusions about individuals in the litigation context; and second, I understand Besunder's testimony as addressed primarily to the question of damages, rather than that of causation.

First, *Doe* does not stand for the principle that epidemiological evidence is improper support for a medical expert's opinion or for a finding of fact about a specific plaintiff. In *Doe*, child plaintiffs alleged that they suffered psychological harm resulting from sexual abuse they experienced at a day care center. Plaintiffs' expert testified that the children's psychological symptoms were "consistent" with a history of sexual abuse, but declined to state for sure that the abuse had caused the symptoms, as opposed to other factors. *Id.* at 1086. Defendant's expert testified that it was unlikely the abuse had caused the children's psychological symptoms. After a bench trial, the district court—acting as factfinder—concluded that the plaintiffs had failed to adequately prove that the existing psychological symptoms were more probably than not a consequence of the abuse; therefore, it did not award the plaintiffs damages for future or permanent emotional injury. The plaintiffs appealed the limited damage award. The Seventh Circuit ruled that the district court did not abuse its discretion in concluding that, without additional evidence and weighed against the defendants' expert testimony, the plaintiffs' population studies did not put them across the "preponderance of the evidence" threshold. *Id.* at 1087. The Seventh Circuit emphasized the narrow scope of its review and commented that "a reasonable factfinder might reach a different conclusion." *Id.* Therefore, *Doe* does not stand for a general principle that population studies are inherently "unreliable, inadmissible or insufficient" evidence to prove a fact about a specific individual in a litigation context. See ECF # 1735 at 14. Instead, it invites factfinders to factor such evidence into their assessment whether a party has met its burden as to an element of a claim.

Second, Dr. Besunder's opinion that each plaintiff lost approximately ten IQ points as a result of his lead exposure is addressed to the question of damages. The injury question ("Did plaintiff suffer a brain injury?") and the cause question ("Was lead exposure a substantial factor in causing plaintiff's brain injury?") are both yes/no questions and were both primarily addressed by Dr. Trope. The question Besunder answers is quantitative: "How severe is the portion of plaintiffs' brain injury attributable to lead exposure?" The question assumes that injury and causation have been established, and seeks to assign a value to them. As Sherwin-Williams notes, Wisconsin case law provides that where the amount of damages cannot be proven with exact proof, a plaintiff must present "evidence with such certainty as the nature of a particular case may permit" to "lay a foundation which will enable the trier of fact to make a fair and reasonable estimate." *Cutler Cranberry*

G. Causation

Sherwin-Williams makes several arguments that plaintiffs failed to prove the causation element of their claims.

1. Presence of Sherwin-Williams' WLC in Plaintiffs' Homes

Sherwin-Williams argues that plaintiffs presented “no evidence” that they ingested a defective Sherwin-Williams product containing WLC, and that therefore plaintiffs did not meet their burden with respect to causation. The heart of Sherwin-Williams' argument is that its expert chemist, Dr. Perricone, analyzed paint chips taken from plaintiffs' homes and concluded (1) that the paint layers containing WLC did not match the known formulas of Sherwin-Williams products containing WLC; and (2) that the WLC in those layers did not match Sherwin-Williams WLO products which was made from an especially pure form of pig lead. Under risk contribution, it was not plaintiffs' burden to prove that Sherwin-Williams products were present in their homes; rather, Sherwin-Williams adduced the Perricone evidence in support of an exculpatory defense on which it bore the burden of proof. See ECF # 1060 at 4-7. Sherwin-Williams is essentially arguing that the jury should have treated Perricone's evidence as controlling; however, it was proper for the jury to decide how much weight to give Perricone's testimony.

Co., Inc. v. Oakdale Elec. Coop., 254 N.W.2d 243, 240-41 (Wis. 1977). Dr. Besunder's use of population studies as a basis for an estimate of the scale of plaintiffs' injuries was entirely consistent with this approach. By analogy, in a price fixing case, an expert economist might use general economic principles and general evidence about market performance during a time period to devise a formula which might be applied to an individual plaintiff's purchasing history and yield an estimate of the amount the plaintiff was overcharged. In short, Dr. Besunder's reliance on population evidence does not render his opinion unreliable for the purpose of estimating the scale of plaintiff's injuries.

Sherwin-Williams also argues that plaintiffs failed to show “when or how any WLC was applied to their residence as a result of a Sherwin-Williams . . . advertisement.” ECF # 1765 at 11. Plaintiffs were under no obligation to make such showing. Under risk contribution theory, each plaintiff established his prima facie case against Sherwin-Williams by showing that Sherwin-Williams made and sold WLC during the time period of his house’s existence; Sherwin-Williams then had the opportunity to exculpate itself by showing that it did not make or sell WLC in the relevant geographic market, which I previously determined was no larger than the City of Milwaukee. Plaintiffs presented the evidence of Sherwin-Williams’ advertising in Milwaukee to rebut Sherwin-Williams’ geographic market defense. Plaintiffs did not need to demonstrate any causal relationship between the advertisements they produced and the WLC present in their homes.

2. Intervening Factors Between Sherwin-Williams’ Negligence and Plaintiffs’ Injuries

Sherwin-Williams also asserts that plaintiffs did not present sufficient evidence that Sherwin-Williams’ negligence was a substantial factor in producing their harm. Sherwin-Williams cites the principle that, to establish cause-in-fact, “an unbroken series of events must be proven wherein the negligence of a party is actively operating at the time of an injury.” *Cefalu v. Cont’l W. Ins. Co.*, 703 N.W.2d 743, 747 (Wis. App. 2005). Sherwin-Williams argues that chain of causation is broken by the passage of time between its manufacture of WLC and plaintiffs’ exposure, and the intervening negligence of third parties like landlords and tenants of the properties where plaintiffs were exposed.

I have already rejected these arguments in resolving Sherwin-Williams motion for JNOV. ECF # 1706 at 6-9. Though that motion was based on the Wisconsin public policy

factors precluding liability and the present motion is addressed to causation-in-fact as an element of plaintiffs' claims, the arguments and analysis are essentially the same. See *Cefalu*, 703 N.W. at 779-80 ("The public policy factor, 'whether the injury is too remote from the negligence,' is a restatement of the old chain of causation test. It is not much different than the substantial factor test used to determine cause in fact. Thus, there will be few cases in which it makes sense to say that a defendant's negligence has been a substantial factor in the plaintiffs injury but is too far removed to allow recovery.")(internal citations omitted). I will rest on the analysis in my earlier order.

3. WLC in Paint as Cause of Plaintiffs' Elevated Blood Lead Levels.

Finally, Sherwin-Williams argues that plaintiffs did not introduce sufficient evidence that WLC was the cause of their elevated blood lead levels, as opposed to other sources of lead. Again, plaintiffs need not prove that WLC in paint was the *exclusive* cause of their lead exposure, but rather that it was a substantial factor.

Mr. Burton adduced evidence that dust samples taken from his home at the time of his EBLLs revealed high levels of lead in the dust. Plaintiffs' expert Jenifer Heath testified that contemporaneous reports indicate the Health Department inspected Burton's home at that time and determined that there were areas of deteriorated paint in the home that needed lead abatement treatment. Tr. 2419. After the lead abatement was completed, the records indicate that Burton's blood lead levels dropped very quickly, Tr. 2420, and that the amount of lead present in household dust also dropped to almost non-detectable levels, Tr. 2421. Dr. Heath testified that these drops in Burton's BLLs and the levels in the dust in the house indicate that the abatement was effective in controlling the

main source of lead in the house. *Id.* Since the abatement process focused on controlling exposure to lead from paint, a reasonable inference is that paint was the main source of lead in the house. Paint chips later taken from Burton's home were tested and revealed high levels of WLC. Tr. 2422. It is reasonable therefore to infer that some of the lead to which Burton was exposed through paint was in the form of WLC. This is sufficient evidence to support the jury's conclusion that WLC in paint was a substantial factor in causing Burton's lead exposure.

Mr. Sifuentes adduced evidence that his BLL spiked from 6 µg/dL to 48 µg/dL shortly after he moved into the home on South 32nd Street where he lived when he was exposed. Tr. 2457-58. HUD inspections at the time of his exposure revealed high levels of lead in windowsills in the home. *Id.* at 2460. Lead abatement was performed on twelve windows and the porch, and after the abatement tests in the home revealed that lead was below the detectable limit. *Id.* at 2464, 2465. Dr. Heath testified that Sifuentes' BLLs came down following the abatement, indicating that the lead hazards resolved by the abatement had been a major contributor to Sifuentes' high BLL. *Id.* at 2465. Later, paint chips from the home were tested and indicated significant presence of WLC. Tr. 2466-67. As with Mr. Burton, this evidence is sufficient to support the jury's conclusion that WLC in paint was a substantial factor in causing Sifuentes' lead exposure.

Mr. Owens adduced evidence that he split time between two homes at the time that he experienced elevated blood lead levels. Tr. 2472. At one of the homes, on 6th Street, Owens was spotted eating paint chips. Tr. 2473. The 6th Street house was inspected, lead hazards were found and abatement of windowsills and trim was ordered. *Id.* Chip samples later taken from the 6th Street house indicated significant presence of

WLC. Tr. 2475. Those facts alone are sufficient to support the jury's finding that WLC in paint was a substantial factor in causing Owens' lead exposure. At the time of his exposure, Owens also lived part-time at a house on Locust Street. Dust wipe samples taken at the Locust Street home at the time of Owens' exposure revealed extremely high levels of lead in the household dust. Tr. 2479. Chip samples later taken from the Locust Street house indicated significant presence of WLC. Tr. 2476. Although data was not available for Dr. Heath to link a drop in Owens' BLLs to abatement efforts in the homes, the lead in dust and WLC in paint at the Locust Street home is strongly consistent with the conclusion that WLC in paint was a substantial factor in causing Owens' lead exposure.

H. Damages

Sherwin-Williams argues that the plaintiffs did not present a sufficient evidentiary basis for the jury's award of damages. Plaintiffs seek only compensatory damages for the pain and suffering they have experienced and will experience in the future as a result of their lead exposure. ECF # 1762 at 26. Under Wisconsin law, pain and suffering include worry, distress, embarrassment and humiliation. WIS JI-CIVIL 1767 – Personal Injuries: Future Pain, Suffering and Disability. In answering the damage question as to pain and suffering, a jury should consider “the extent plaintiff's injuries have impaired and will impair his ability to enjoy the normal activities, pleasures and benefits of life,” along with other factors. *Id.* Plaintiffs presented evidence that they had suffered injuries to their brains that impaired certain key cognitive functions. They also presented evidence that the scale of such injury might be estimated as roughly 10 IQ points. This is sufficient evidence for a jury to conclude that the plaintiffs had suffered and/or would suffer worry,

distress, embarrassment and humiliation as a result of their injuries, and that the injuries had substantially impaired and would impair the plaintiffs' ability to enjoy the normal pleasures, activities and benefits of life. Sherwin-Williams' argument is without merit.

IV. CONCLUSION

For the reasons stated, **IT IS ORDERED** that Sherwin-Williams' motions for judgment as a matter of law (ECF # 1731, 1734) are **DENIED**.

Dated at Milwaukee, Wisconsin this 27th day of February, 2020.

s/Lynn Adelman
LYNN ADELMAN
U.S. District Judge