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CLEMENCY IN THE STATE OF DELAWARE: HISTORY AND PROPOSALS FOR CHANGE

Lieutenant Governor Matthew Denn*

In late 2011, the Delaware Board of Pardons (the “Board”) heard a sentence commutation application from a relatively young man who had served approximately five years of a fifty-four year prison sentence.¹ He had been sentenced after being convicted of a crime that classified him as an habitual offender under Delaware law, a classification that carried with it a heavy minimum mandatory sentence.² His most recent offense was holding up a woman at an ATM machine with a pocket knife. His prior crimes had been similar: all had been property crimes, none appeared to involve injuries to the victims. But, several of them had involved weapons that could have caused serious harm if the victims had resisted. A dangerous guy who should serve some serious jail time? Absolutely. A guy who should serve a sentence far longer than many inmates who have taken human life? Not so clear.

The Attorney General’s office provided its opinion on the commutation application, as it does under Delaware statute for all pardon applications.³ The Deputy Attorney General – no light touch on the subject of criminal sentences – told the Board (in more tactful language) that the applicant was an idiot who had insisted on going to trial on an open-and-shut case, turning down a plea offer for a much lighter sentence, and leaving the sentencing judge no choice but to sentence the applicant as an habitual offender once the inevitable conviction occurred. The Deputy Attorney General said: “We don’t think this man should be in prison for fifty-four years.” I said: “You know what my next question is going to be.” He said: “Yes, you want to know how long we think he should be in jail. And the answer is, at least another five years.” The Board recessed,⁴ and when it reconvened I told the applicant that the Board was not recommending a sentence commutation to the Governor, but that he could expect if he maintained good behavior in prison and reapplied in five years, that he would likely get a more favorable reception from those Board members still serving. No guarantees, but a good day for a young man otherwise expecting to spend most of the rest of his life in prison.

Other applicants’ appearances before the Board have not gone as smoothly. In 2010, the Board heard an application from a man who had hit his girlfriend in a convenience store parking lot about eight years prior. He had pled guilty to a misdemeanor offense, which was causing him difficulty with job applications. The Board heard his presentation, in

* Matthew Denn is the Lieutenant Governor of the State of Delaware.

1. The Delaware Board of Pardons must approve an application for clemency before the application may be considered by the Governor of Delaware. DEL. CONST. ART. VII, § 1. The Board consists of the Lieutenant Governor (who serves, pursuant to the Board’s rules, as its president), the Chancellor, the Secretary of State, the Treasurer, and the Auditor. DEL. CONST. ART. VII, § 2.

2. DEL. CODE ANN. TIT. 11, § 4214.

3. DEL. CONST. ART. VII, § 3.

4. As noted, the Board of Pardons is expressly excluded from the open meeting requirements of the Freedom of Information Act. DEL. CODE ANN. TIT. 29, § 10004(h).

which he appeared remorseful, responsible, and respectful. The Board then discussed his application in executive session. A majority of the Board members decided to recommend a pardon, but the vote was not unanimous. When the Board reconvened and I told the applicant about the divided nature of the Board's recommendation, his demeanor changed suddenly. He abruptly walked away from the podium toward the exit without saying a word, and angrily stared the Board members down as he was walking out the door. After witnessing this display, the Board decided to postpone its recommendation and have the applicant reappear before the Board. The Board's staff contacted the applicant to let him know of the change in plans. The applicant never returned; the conviction remains on his record to this day.

In this author's opinion, the Board reached the correct conclusion in both of these cases. And, the outcomes were the furthest thing from arbitrary – the Board members thoughtfully considered and discussed both cases. But, decisions that would have a dramatic impact on the lives of convicted criminals were made by a Board that had limited objective information about the applicants, and without the benefit of detailed formal procedures or substantive decision-making standards. Indeed, the Board hears thirty-forty cases each month without the benefit of statutory procedures or formal legal standards to guide it, and without detailed, independently-provided information about many of its applicants.⁵

This article examines whether Delaware can improve its handling of clemency requests. It begins by examining the creation of Delaware's current process, and then outlines the approaches adopted by other states. After discussing the wisdom of adopting practices from other states, the article concludes that (i) decision-makers in the clemency process would benefit in many cases from the input of the judges who originally heard the applicants' cases; (ii) the Board's procedures should be changed to protect victims who are compelled to participate in serial clemency applications filed by persons who harmed them; and (iii) the state should adopt a different process for uncontroversial clemency applications involving some non-violent crimes.

I. THE DELAWARE LEGAL FRAMEWORK

Delaware's legal framework for clemency is, in one way, fairly typical of those found in other states around the country: a Governor, with sweeping clemency authority, is shielded and overseen by an intermediate body that screens clemency applications before they reach his desk. But, Delaware's Board is unusual by national standards. Whereas the national trend is toward creating professional, full-time, non-elected, pardon screening boards, Delaware's Board is comprised primarily of elected officials and their appointees. This membership was chosen in reaction to Delaware's first century.

A. Clemency Prior To 1897

Delaware's Board of Pardons did not exist for more than one hundred years of its existence. In Delaware's original 1776 Constitution, clemency authority was granted to an executive known as the President (also referred to as a Chief Magistrate), who was selected by both houses of the legislature. The President's pardon authority did not apply to prosecutions carried on by the House of Assembly (one of the two branches of the legislative branch). In addition, the Constitution permitted the legislature to assign pardon authority for any types of cases to the House of Assembly rather than the President.⁶

5. As noted, the Delaware statute does provide means for the Board to obtain additional factual information about certain types of applicants, particularly those who have committed more serious crimes, but the additional information is not primarily factual in nature.

6. DEL. CONST. OF 1776, ART. VII.

This bifurcated responsibility for pardons was consolidated in the executive branch in Delaware's 1792 Constitution, when the Governor was granted unrestricted authority to grant pardons and reprieves, except in cases of impeachment.⁷ Similar language appears in the Constitution of 1831, which added a provision requiring the Governor to report to the legislature on his pardon activity. By the time of the state's 1897 Constitutional Convention, the Governor of Delaware had enjoyed unrestricted pardon authority for over one hundred years.

B. Delaware's 1897 Constitution Creates The Board Of Pardons

The delegates to Delaware's 1897 Constitutional Convention arrived with the clear intention to restrict the Governor's pardon authority. In the very first days of the Convention, the Standing Committee on the Governor and Other Executive Offices proposed the creation of a Board of Pardons. The proposal was to bar the Governor from granting a pardon or commutation without the recommendation of three of the following four officials: the Chancellor, Speaker of the Senate, Attorney General, and Secretary of State.⁸ Delegate William Spruance said that a Board was proposed because:

it was extremely desirable that there should be some relief to the Governor, to say the least of it, in regard to the exercise of Executive clemency. There have been times when that power has been used in a manner not the most discreet, and when its exercise was not always entirely above suspicion that it was exercised for improper purposes.⁹

Spruance elaborated that the purpose was twofold: to shield the Governor from direct appeals for clemency from members of the public, and to guard the public from pardons granted by an improperly motivated Governor.¹⁰

The original list of Board members proposed by the Standing Committee was not organic; Spruance confirmed that the language had been copied from the Constitution of Pennsylvania.¹¹ The reason for creating a Board of Pardons made up of existing state officials, rather than appointed members, appears to have been economic rather than philosophical:

[T]he idea which seemed to your committee to be a good one was that there should be an advisory Board which should not be composed of new people who are to be salaried people, and which should require the creation of new places, but that it should be composed of certain officers who shall ex officio act in this capacity.¹²

Delegates to the Convention engaged in a prolonged debate over the specific make-up of the Board. Delegate John Biggs objected to the wholesale adoption of the Pennsylvania model on the grounds that it appeared to be drawn

7. DEL. CONST. OF 1792, ART. III, § 9.

8. 1 DELAWARE CONSTITUTIONAL DEBATES 1897 at 175.

9. *Id.* at 176.

10. *Id.*

11. *Id.* at 176.

12. *Id.*

from a jurisdiction where the Attorney General was not the chief prosecuting officer, as he was in Delaware.¹³ Biggs proposed that another officer – he suggested either the Speaker of the House or the Treasurer – be substituted. His proposal prompted significant debate over whether the Attorney General should be a member. The primary concern appears to have been that the Attorney General would likely have been involved in the prosecution of any crime for which an applicant was seeking clemency.¹⁴ Eventually, the Delegates reached a compromise regarding the Attorney General's involvement; he would not be a member of the Board, but the Constitution would permit the Board to require the Attorney General to provide information to the Board upon request. The Board thereby gained the benefit of the Attorney General's experience without making him a member.¹⁵

One of the proposed alternatives to including the Attorney General on the Board was to include a judge with personal knowledge of the case. This suggestion, made by Delegate Edward Bradford,¹⁶ anticipated one of the challenges today's Board faces routinely: the need to make a consequential decision based upon very limited information – far less than is commonly possessed by a criminal jury or sentencing judge. One of the objections to having a judge on the Board, however, was that it could cause the judge to be lax in his administration of the original case, knowing that he would have a “second chance.”¹⁷

The debate was initially resolved by an amendment offered by Delegate Charles Richards. He proposed that the Board of Pardons consist of the Lieutenant Governor, Secretary of State, and Registers of Wills of each of the three counties, in order to ensure geographic diversity.¹⁸ Delegate Spruance agreed that the proposal was consistent with his larger view of the Board's function:

My notion about this Board of Pardons is this: It is not a body in which we care to have, or in which we need to have lawyers or judges necessarily. They ought to be sensible, sagacious men, who looking over the whole of this case, come to the conclusion that it is wise or unwise to recommend to the Governor the exercise or the withholding of the pardoning power....¹⁹

The Convention approved Richards' proposal for a Board consisting of the Lieutenant Governor, Secretary of State, and the three Registers of Wills.²⁰

Weeks later, however, Delegate J. Wilkins Cooch proposed an amendment to the already-passed Board of Pardons provision, replacing the three Registers of Wills with the Treasurer, Auditor, and Insurance Commissioner.²¹ Part

13. *Id.*

14. *Id.* at 190-91.

15. *Id.* at 700.

16. *Id.* at 192-93.

17. Testimony of William Spruance, 1 DELAWARE CONSTITUTIONAL DEBATES 1897 at 204-06.

18. *Id.* at 698.

19. *Id.* at 701.

20. *Id.* at 708.

21. 3 DELAWARE CONSTITUTIONAL DEBATES 1897 at 1975.

of Cooch's concern was that the Registers of Wills would be "overrun" by pardon applicants in their counties.²² Cooch's proposal was voted down by the Convention, but with the subject re-opened, the membership debate began anew.²³

Delegate Woodburn Martin then proposed a Board consisting of the Lieutenant Governor, Chancellor, resident Associate Judge, Secretary of State, and Speaker of the House. Martin's logic was that the Auditor, Treasurer, and Insurance Commissioner were "lower grade" offices that did not belong on the Board of Pardons.²⁴ That motion was also defeated, based in part upon some of the same arguments that had been raised in connection with the debate over including a judge on the Board.²⁵ Finally, the current Board make-up was proposed and approved. The Chancellor was included in order to gain the benefit of a judicial officer without the complication of including someone who had participated in the original criminal case. The other four members were statewide officers (the Treasurer, Auditor, Lieutenant Governor, and Secretary of State) whose positions already existed under the Constitution.²⁶ With a friendly amendment, the Chancellor was placed before the Lieutenant Governor in the relevant paragraph, his position being deemed more important.²⁷ That Constitutional language, including the involvement of the Attorney General in an advisory role, survives to this day as Article VII of the Delaware Constitution:

Section 1. The Governor shall have power to remit fines and forfeitures and to grant reprieves, commutations of sentences and pardons, except in cases of impeachment; but no pardon, or reprieve for more than six months, shall be granted, nor sentence commuted, except upon the recommendation in writing of a majority of the Board of Pardons after full hearing; and such recommendation, with the reasons therefor at length, shall be filed and recorded in the office of the Secretary of State, who shall forthwith notify the Governor thereof.

He or she shall fully set forth in writing the grounds of all reprieves, pardons and remissions, to be entered in the register or his or her official acts and laid before the General Assembly at its next session.

Section 2. The Board of Pardons shall be composed of the Chancellor, Lieutenant-Governor, Secretary of State, State Treasurer, and Auditor of Accounts.

Section 3. The said board may require information from the Attorney-General upon any subject relating to the duties of said board.²⁸

C. The Non-Constitutional Legal Framework For Clemency

To the extent that the General Assembly has used its constitutional authority to regulate the Board of Pardons, it has done so primarily to require others to provide information to assist the Board in making its decisions. Aside from

22. *Id.*

23. *Id.* at 1987.

24. *Id.* at 1988.

25. *Id.* at 1991.

26. *Id.*

27. *Id.*

28. DEL. CONST. ART. VII (section headings omitted).

information provided by the Attorney General, there are three other sources of information that may be provided to the Board under the Delaware Code:

- (a) At the request of the Board, the Board of Parole is required by statute to prepare, a report on any person in the custody of the Department of Corrections seeking a pardon or commutation. The report must include the inmate's "record," and the Board of Parole's "opinion as to the state of rehabilitation of such person."²⁹
- (b) If authorized by the Commissioner of Corrections, the Department of Corrections is authorized to make investigations and recommendations to the Board regarding pardon applicants.³⁰
- (c) With respect to certain violent crimes, the Board may not recommend clemency unless it first obtains a psychologist's or psychiatrist's report.³¹ The report must contain "opinions as to the mental and emotional health of the applicant, and opinions as to the probability of the applicant again committing any crime if released."³²

One additional concern addressed by the General Assembly was the Board's need for privacy. Thus, the Delaware Code excludes the Board of Pardons from the state's Freedom of Information Act.³³ The need for the Board to meet privately on occasion, unlike other public bodies, was explicitly recognized by the 1897 Constitutional Convention, which turned down a proposed amendment that would have required Board of Pardons meetings to be "in open session."³⁴ But, exemption from the state's open meeting law does not preclude the Board from opening any of its records or proceedings to the public, except to the extent that those records or proceedings are deemed confidential by other provisions of Delaware statutory or common law. It is the Board's general practice to hear applicants' arguments in public session, to deliberate privately, and then to announce its recommendation to the applicant in public session.³⁵

Finally, the General Assembly adopted detailed provisions for notification of victims and their families, so they may be heard by the Board with respect to clemency applications for which they were victims.³⁶

The Delaware Constitution and Code provide no other procedural guidelines to the Board, nor do they provide any substantive guidance to the Governor or Board of Pardons regarding when to grant or deny clemency requests. The Board has generated a small number of rules on its own, namely, imposing waiting periods of thirty-six months (for a

29. DEL. CODE ANN. TIT. 11, § 4343.

30. DEL. CODE ANN. TIT. 11, § 4361.

31. DEL. CODE ANN. TIT. 11, § 4362.

32. *Id.*

33. DEL. CODE ANN. TIT. 29, § 10004(H).

34. 1 DELAWARE CONSTITUTIONAL DEBATES 1897 at 312.

35. On a small number of occasions, the Board has withheld its recommendation and issued it at a later time in writing.

36. DEL. CODE ANN. TIT. 11, § 4361.

first degree murder conviction) and eighteen months (for all other convictions) before a petitioner may refile a clemency petition after a denial,³⁷ and mandating that the Lieutenant Governor serve as the chairman of the Board.³⁸

D. Customary Practices Of The Board Of Pardons

In the absence of specific guidance from the Constitution or Code, members of the Board have developed informal practices that combine custom – the Board’s membership tends to change slowly, as it depends upon the results of staggered elections and judicial appointments – and the individual philosophies of Board members. For example:

- All of the current Board members believe that some period of time should pass between a conviction and an application for clemency. But, opinions regarding the length of time and the flexibility of that presumption vary among the Board members.
- Some current Board members believe the applicant’s practical need for clemency, for example, to pursue specific types of employment, deserves significant weight; other members believe the practical need for a pardon should not be a compelling factor.
- All current Board members attempt to gauge each applicant’s understanding of and remorse for the crime for which clemency is being sought, but the importance of this factor varies significantly among Board members.
- Some current Board members believe that the impact of clemency on an applicant’s immigration status is of significant importance, while others afford this factor no weight.

Again, none of the above is meant to suggest that the Board’s deliberations are anything other than thoughtful and rational. Board members spend a significant amount of time examining each applicant’s file and discussing those cases whose outcome is not immediately evident. What it does mean, however, is that the Board’s decisions are often the result of five individuals employing multiple methods of analysis. In addition, with the exception of the information provided for some applicants when required by statute, the Board commonly has before it only the factual information provided by the applicant and the Attorney General. The Attorney General’s information is generally limited to the applicant’s encounters with law enforcement.

II. CLEMENCY PROCEDURES IN THE OTHER FORTY-NINE STATES

There is a wide diversity of clemency practices in the other forty-nine states.³⁹ Some of the material differences from Delaware practice are discussed below, as a means of outlining possible changes to the manner in which Delaware currently considers clemency applications.

37. Delaware Board of Pardons RULE 7.

38. Delaware Board of Pardons Rule 5.

39. A helpful guide to many states’ pardon practices is found in David R. Dow et al., *Is It Constitutional To Execute Someone Who Is Innocent (And If It Isn’t, How Can It Be Stopped Following House v. Bell)?*, 42 TULSA L. REV. 277 (2006). However, it should be noted that the article is five years old, some state procedures have changed, and the article does not seek to describe the procedures in all states.

A. Transfer Of Authority From The Governor To An Independent Board

Some states have divested the Governor of the power to grant clemency, placing the power instead in the hands of an appointed board. Connecticut has perhaps the broadest such provision. Its Board of Pardons and Parole, whose members are appointed by the Governor and confirmed by both houses of its legislature, has sweeping authority to grant pardons and commutations.⁴⁰ The legislature has imposed a statutory waiting period before convicted criminals may apply for clemency after commission of a crime, but the board may waive the waiting period.⁴¹

Other states have followed this model but have placed more restrictions on their independent boards. Georgia, for example, vests its clemency authority in a Board of Pardons and Parole⁴² appointed by the Governor and confirmed by the State Senate. But, the legislature reserves for itself the right to create (by a supermajority vote) certain classes of crimes whose sentences cannot be commuted absent a finding of actual innocence or medical need.⁴³ Idaho's system is similar: an appointed board makes clemency decisions,⁴⁴ but the legislature has carved out a category of violent offenses for which the board may only make recommendations to the Governor.⁴⁵

B. Primary Authority To The Governor

Other states have stopped short of divesting their Governors of all clemency authority, but have instead made their Governors co-equal members of pardons boards. Florida employs such a hybrid model: clemency authority is vested in a four-member "cabinet" of independently elected officials, one of whom is the Governor.⁴⁶ Nebraska employs a variation of this model: its clemency decisions are made by a three-member board consisting of the Governor, the Attorney General, and the Secretary of State (who is appointed by the Governor).⁴⁷ Nevada has created a system similar to Florida's and Nebraska's, but with a significantly diminished role for the Governor.⁴⁸ The Nevada Constitution grants clemency authority to "[t]he Governor, justices of the Supreme Court, and the Attorney General, or a major part of them, of whom the Governor shall be one."⁴⁹ With seven justices currently sitting on the Nevada Supreme Court, the Governor has only one of nine votes in clemency decisions.

40. *Id.*

41. CONN. GEN. STAT. § 54-130A.

42. GA. CONST. ART. IV, § 2.

43. *Id.* The Georgia Constitution contains similar provisions regarding pardons for certain types of offenses carrying life sentences.

44. IDAHO CONST. ART. IV, § 7.

45. IDAHO CODE ANN. § 20-240.

46. FLA. STAT. § 940.01.

47. NEB. CONST. ART. IV, § 13.

48. NEV. CONST. ART. VI, § 3.

49. NEV. CONST. ART. V, § 14.

A small number of states permit their Governors to grant or deny pardons without any involvement by an intermediate body. But, it does not appear that the Governors with this legal right often choose to exercise it. In the State of Colorado, for example, the Governor is permitted to make pardon decisions unilaterally.⁵⁰ The only restriction imposed by statute is that the views of corrections officials, prosecutors, and judges must be solicited by the Governor prior to granting a pardon.⁵¹ However, it appears that the Governor of Colorado traditionally appoints an Executive Clemency Board, fashioned by Executive Order, which serves many of the same functions as a Board of Pardons (albeit with no outside oversight of its membership). Similarly, the Governor of New Jersey is permitted to grant or deny pardons without the involvement of an outside body, but the state constitution also allows him to create an outside body to advise him in this area.⁵² In addition, the Governor may, but need not, refer pardon applications to the Board of Parole.⁵³ New York's system is similar to New Jersey's: the Governor may, but need not, refer pardon applications to the state's Board of Parole for assistance.⁵⁴

C. Professionalization Of Pardons Boards

Delaware is one of the only states in America that has a pardons board whose members serve by virtue of their positions rather than being selected. Among those states that have pardons boards whose members are selected, an increasing number have put measures in place to ensure the professional background or knowledge of those members.

Most state pardons boards created by law must have their appointees approved by one or both houses of the state's legislature. And, a number of states have in place additional restrictions on membership. Some states, such as Alabama,⁵⁵ require by statute that board members be screened by a separate group before they can be nominated by the Governor. Others, such as Illinois, require potential board members to meet statutory qualifications. Illinois' Prisoner Review Board, which makes clemency recommendations to the Governor, consists of fifteen full-time members, who must have at least five years of experience in penology, corrections work, law enforcement, sociology, law, education, social work, medicine, psychology, other behavioral sciences, or a combination thereof. Illinois' board also requires partisan balance and that some members have expertise in juvenile justice.⁵⁶ Maryland and Kentucky have similar systems: Maryland's board is appointed by its chief corrections official with the consent of the Governor and Senate.⁵⁷ Kentucky's board members are drawn from a list provided to the Governor from a list provided to him by a state corrections commission, appointed by

50. COLO. CONST. ART. IV, § 7.

51. COLO. REV. STAT. § 16-17-102.

52. N.J. CONST. ART. V, § 2; *see also* N.J. STAT. ANN. § 2A: 167-4.

53. N.J. STAT. ANN. 2A: § 167-7.

54. N.Y. CONST. ART. IV, § 4. The identification of the Board of Parole as the entity to which pardon applications may be referred is found at N.Y. EXECUTIVE LAW § 259-C (MCKINNEY).

55. ALA. CODE § 15-22-20. The Alabama legislature also passed a law in 2003 that added board members for an interim period from 2003 through 2006. 2003 ALA. ACTS 415.

56. 730 ILL. COMP. STAT. § 5/3-3-1.

57. MD. CODE ANN., CORR. SERVS. § 7-202.

the Governor and confirmed by the State Senate.⁵⁸ Both Maryland and Kentucky, like Illinois, require board members to have a background in criminology-related professional fields.

Pennsylvania, the state that provided the model for Delaware's Board of Pardons in 1897, has evolved to a hybrid board composition. Two of its five members are state officials, as they were in 1897. But, the remaining three members are appointed by the Governor and confirmed by the State Senate. One must be a crime victim, one a corrections expert, and one a doctor.⁵⁹

D. Substantive Standards For Clemency

A small number of states have tried to impose substantive standards for the granting of clemency, at least with respect to more serious crimes. Those standards tend to take the form of restrictions on the ability of pardons boards to recommend, or Governors to grant, clemency with respect to serious violent offenses. Arizona, for example, prohibits its Board of Executive Clemency from recommending commutation of a sentence for a felony committed after 1994 unless it finds by clear and convincing evidence that the sentence was clearly excessive and that there is a substantial likelihood that the offender will not reoffend.⁶⁰ The Georgia Constitution allows its legislature, by a two-thirds vote, to label certain types of violent felonies as being out of the purview of the Board of Pardons and Parole, thereby barring the Board from reducing sentences.⁶¹ Montana's Board of Pardons has also set forth in its rules a set of substantive standards for recommending clemency, although those standards have catch-all exclusions that effectively allow the Board to bypass its own standards.⁶²

E. Providing Factual Information To Decision-Makers

Some states have taken additional steps to enhance the information available to the persons making clemency decisions and recommendations. Most significantly, California and Connecticut require the judges who originally sentenced an individual seeking clemency to opine on the individual's clemency petition.⁶³

F. Protecting Victims

Finally, most states have taken steps to ensure that the clemency process imposes a minimal burden upon the victims of crime. Virtually every state has provisions in its constitution, code, or rules that provides for notice to the victims of crimes for which clemency is being sought, and an opportunity to be heard on those applications. In addition, a number of states (including Delaware) have statutes or rules regarding mandatory periods of time that must elapse before unsuccessful clemency applicants can reapply. Those waiting periods are designed partly to allow pardon authorities to

58. KY. REV. STAT. ANN. § 439.320.

59. PA. CONST. ART. IX, § 4.

60. ARIZ. REV. STAT. ANN. § 31-402.

61. GA. CONST. ART. IV, § 2.

62. Montana Board of Pardons and Parole Rule 20.25.901A.

63. CAL. PENAL § 4803; CONN. GEN. STAT. § 54-130C.

operate efficiently, but they also reduce the number of times that crime victims must relive their traumas by formally opposing their assailants' clemency applications.

III. LESSONS LEARNED AND STEPS FORWARD

The foregoing overview of clemency practices in other states illustrates the types of improvements that Delaware should consider making to its own clemency process. But, considering changes to the current system requires more than selecting from a menu of options. Decisions about any changes to Delaware's clemency process should be guided by at least three considerations: the rights of clemency applicants, the overall goals of the clemency process, and the efficiency of the clemency process (including the minimization of its impact on victims of crime).

A. What Rights Do Clemency Applicants Have?

Thanks to some unequivocal language from the United States Supreme Court, it is fairly clear that clemency applicants have no federal constitutional or statutory rights absent extreme circumstances. No clemency applicant has presented facts to the Supreme Court that has resulted in the Court finding any constitutional rights that attach to clemency applications. In fact, the Court has repeatedly admonished lower courts that "pardon and commutation decisions have not traditionally been the business of courts; as such, they are rarely, if ever appropriate subjects for judicial review."⁶⁴ Some lower courts, based upon language from a concurring opinion written by Justice O'Connor warning against explicitly discriminatory clemency decisions, have warned that there are some factual scenarios where due process rights might affect the state's discretion with respect to clemency applications – but the examples given seem far-fetched.⁶⁵

Delaware courts have not often had to address legal issues arising from Delaware's clemency framework, and to the extent that they have, they have not found any constitutional protections beyond those expressly provided for in the law.⁶⁶ It is worth noting, however, that at least one Delaware court has compelled the state to permit inmates access to the tools necessary to fulfill the procedural prerequisites for a clemency application. In 2006, the Delaware Superior Court ordered the Department of Correction to grant an inmate's request for a fingerprint analysis, because such an analysis was required by the Board of Pardons' internal rules to permit the Board to obtain the criminal background information required for consideration of any clemency request.⁶⁷ Although the court did not cite a specific constitutional or statutory

64. *Ohio Adult Parole Authority v. Woodard*, 523 U.S. 272, 276 (1998) (citing *Conn. Bd. of Pardons v. Dumschat*, 452 U.S. 458 (1981)). See also *District Attorney for Third Judicial Dist. v. Osborne*, 557 U.S. 52, 67-68 (2009). The Second Circuit Court of Appeals' analysis of the current state of the law following *Osborne* was that "a prisoner has no liberty interest with respect to any procedures available to vindicate an interest in state clemency, because clemency is inherently discretionary and subject to the whim, or grace, of the decisionmaker..." *McKithen v. Brown*, 626 F.3d 143, 149 (2d Cir. 2010).

65. See, e.g., No. 110-CV-12169, *Berryman v. Sampson*, 2011 WL 6450775 (E.D. Mich. Sept. 8, 2011) (noting that "minimal" due process protections attach to commutation proceedings and citing concurring opinion of Justice O'Connor from *Woodard*).

66. "Furthermore, it is settled that because the Constitution imposes no standards constraining the Board of Pardons or the Governor concerning the grant of clemency, there is no constitutional right or entitlement sufficient to invoke the Due Process Clause. Additionally, since Section 4362 is equally inapplicable to all other capital defendants similarly situated, there is no valid Equal Protection claim." *State v. Sullivan*, 740 A.2d 506, 507-08 (Del. Super. 1999).

67. *State v. Hamil*, I.D. No. 9510006777, 2006 WL 3545377 (Del. Super. Nov. 13, 2006) (Witham, J.) (compelling Delaware Department of Correction to conduct fingerprint analysis of defendant seeking clemency because fingerprint analysis is required by Board of Pardons for consideration of clemency petition).

basis for its decision, it is logical to infer that the court believed the inmate had a due process right to obtain access to a clemency process.

In this author's view, no changes to Delaware's clemency system are needed to remedy any loss or violation of applicants' rights. The next consideration is whether changes to Delaware's clemency process are needed to further a particular state policy regarding when clemency is appropriate.

B. What Is The Purpose Of Clemency?

Over the last several decades, there has been occasional academic debate over the issue of whether the federal or state governments should grant clemency based upon a specific "theory" of clemency. Much of the discussion has been driven by Professor Kathleen Dean Moore's thorough 1989 book *Pardons: Justice, Mercy, and the Public Interest*.⁶⁸ Professor Moore advocates for a "retributivist" approach to clemency, which would allow for pardons only when they are justified under an exclusive list of reasons, namely, that the applicant is actually innocent of the crime (which would include insanity and lack of competency); that the applicant's crimes are excused (*i.e.*, *unsuccessful attempts, crimes where full reparations have been made, and strict liability crimes where the defendant did not know he was committing a crime*); that the crimes are justified (*i.e.*, *crimes that are legitimate acts of conscience*); or that the sentence is simply too long. Other academics have made contrary arguments. For example, some argue that the clemency process, at least in the case of capital punishment, exists primarily as a fail-safe against defects in the judicial process.⁶⁹ Others argue that redemption is an independently sufficient basis for clemency, including the commutation of a prison sentence.⁷⁰

These theories are all interesting fodder for debate, and perhaps the clemency process would be fairer if the awarding or withholding of clemency could be placed in a unified philosophical framework. Indeed, some members of the Delaware Board of Pardons have conscientiously tried to develop their own personal frameworks for analyzing applications. But these theories and frameworks inevitably give way to facts. This should be no surprise. The willingness of criminal juries, sworn to uphold complex and detailed jury instructions, to bypass those instructions when their sense of justice so demands is well documented.⁷¹ There is no reason to expect clemency boards, unrestricted by rules, to act differently. They, too, do so with the legitimate and noble goal of assuring that justice is done.

In 2010, the Delaware Board of Pardons heard an application from a young woman who had recently graduated as one of the top-performing students at a Delaware university. She was destined for a graduate program at an out-of-state university, where she would be one of the first African-American women to enter the program in its history. Her personality and life story were compelling. She was the first person in her family to have completed college. She had never been in trouble in her life until she and a group of her friends shoplifted some relatively small items from a department store less than a year prior to her Board of Pardons hearing – something that she said she was incredibly ashamed of. Having

68. KATHLEEN DEAN MOORE, *PARDONS: JUSTICE, MERCY, AND THE PUBLIC INTEREST* (1989).

69. Daniel T. Kobil, *Due Process in Death Penalty Commutations: Life, Liberty, and the Pursuit of Clemency*, 27 U. RICH. L. REV. 201 (1993).

70. Elizabeth Rapaport, *Retribution and Redemption in the Operation of Executive Clemency*, 74 CHICAGO-KENT L.R. 1501 (2000).

71. Andrew Leipold, *Rethinking Jury Nullification*, 82 VA. LAW. REV. 253 (1996) (detailed discussion of academic literature regarding prevalence of and justification for jury nullification).

the criminal offense on her record would jeopardize her participation in the graduate program to which she had already been admitted.

There was nothing about her pardon application that fit into any overarching theory of clemency. The offense had just occurred; she had received a minimal sanction; and there was no suggestion that she had been subjected to the slightest unfairness throughout the process. But the Board recommended a pardon, simply because it did not want this young woman's extraordinary trajectory to come crashing down because of a single moment of stupidity – even if that moment had occurred just months prior.

The shoplifting charge was a misdemeanor, but this fact-specific approach to applications affects the Board's consideration of its most serious matters. Earlier this year, in connection with a death penalty commutation application, the Board issued a written recommendation that reflected a variety of different philosophical approaches to the application. The Board recommended that the applicant's death sentence be commuted to a sentence of life without parole, if the applicant voluntarily forfeited his right to further legal appeals of his conviction and forfeited forever his right to apply for a further reduction of his sentence. The Board's written recommendation, issued on behalf of four of the Board's five members, indicated that one of the four members was against the death penalty in all circumstances where a prisoner had been incapacitated and posed no future harm to society. But, it also indicated that the four Board members recommending clemency based their recommendations on a variety of fact-based concerns that included the physical, emotional, and sexual abuse the inmate had suffered as a child, his complaints of involuntary violent impulses to medical professionals a year prior to the murder, the fact that the inmate's death sentence had been imposed based upon a jury recommendation that was not unanimous, and a concern about sentencing disparities in other murder cases that had similar facts.

In the end, decisions regarding clemency are intensively fact-specific, and decision-makers will base their decisions on those facts to the extent that the legal framework allows. Thus, the only truly effective legal rules will be those that absolutely preclude clemency under certain specific circumstances. The Delaware General Assembly could certainly consider such legislation. It could, for example, impose a Georgia-style rule declaring certain crimes or penalties to be exempt from the clemency process. But, if it considers such an approach, the legislature should also consider the fact that Delaware's Board of Pardons is already uniquely answerable to the public – a majority of the Board must face election by the voters every four years. Although the Board's deliberations are not open, it is highly unlikely that a candidate for office would refuse to disclose his vote on a particular clemency application if asked.

Thus, it appears that no major renovations to Delaware's clemency process are required for the purpose of imposing a stricter substantive framework on the granting of clemency. There are, however, improvements that can be made to Delaware's process, to make it more efficient, to ensure that decision-makers base their decisions on the best information reasonably possible, and to protect the rights of victims.

C. Improving the Accuracy and Efficiency of Delaware's Clemency Process

One deficiency in Delaware's clemency process is the shortage of objective information available to the Board of Pardons when making its recommendations. As noted above, clemency applications for inmates and for certain categories of violent crimes require reports from third parties that provide the Board with additional information and perspective. But, the majority of the Board's applications do not fit into categories that invoke third party reports. And even when they do, the third party reports are of mixed value and inevitably reflect the biases of the institutions that create them. The reports provided to the Board by the Department of Correction often reflect an interest in divesting the Department of responsibility for the inmate. The reports from mental health experts are based upon minimal contact with the petitioner

and usually avoid reaching any conclusions about the applicant's potential danger to the public.⁷² Reports from the Board of Parole are generally based on no information other than that available to the Board of Pardons and, thus, simply reflect the conclusions of a separate group of individuals.

Other than these third party reports, the Board has in its possession only materials submitted by the applicant, the applicant's criminal record (both arrests and convictions), and whatever additional information is provided by the Attorney General's office. Information from the Attorney General's office is often extremely helpful. The real-time information from police reports and prosecutors about the events underlying the applicants' convictions can serve to support or undermine an applicant's version of events.

This author believes that improving the quality of information available to the Board is a worthy goal. After surveying the practices of other states, the information that would appear to be most useful would be the perspective of the judge who originally sentenced the individual seeking clemency. This information will not be available or helpful in every instance—many of the Board's clemency applications are for low-level offenses that sentencing judges are unlikely to recall. But, in cases involving more serious crimes, it is more likely that the judges will have played a role in sentencing and may have an objective, detailed recollection of the applicant. This information could be invaluable to the Board of Pardons when it later considers granting clemency for those same offenses. One helpful reform to Delaware's clemency process would be for original sentencing judges to be invited to provide their perspective on the clemency applications of persons whom they sentenced.

A second change to the existing clemency process would serve two goals outlined above: ensuring that clemency decisions are based upon the maximum information reasonably possible, and streamlining the clemency process. Each year, the Board hears scores of cases involving relatively minor, non-violent crimes. Most of these crimes involve low-level theft (typically shoplifting) and minor drug possession offenses. Most of the applicants seeking pardons for these crimes do so because the convictions are preventing the applicant from obtaining employment, professional licensure, or security clearances. Most of the applications meeting this description are not opposed by the Attorney General, and many of the Board's recommendations with respect to these cases are unanimous. These applications are also the least likely to be accompanied by helpful information about the applicant in the paper file as they meet none of the statutory requirements for third-party reports. Nevertheless, applicants in this category must await the Governor's approval in order to receive pardons, delaying resolution of their applications, creating a substantial amount of work for the Governor and his staff, and forcing the Governor to make clemency decisions with very little factual information.

Clemency authority historically rests with Delaware's Governor, and in the case of either difficult decisions or serious crimes, there is no reason to disturb that tradition. But in cases involving low-level, non-violent offenses where the Board unanimously supports clemency, there is good reason for Delaware to emulate some of the states that have afforded their pardons boards direct authority to grant clemency. Applications for clemency involving less serious, non-violent crimes that receive the unanimous support of the Board of Pardons should be granted as a matter of law. The Governor's time and attention should be reserved for clemency applications that involve serious crimes or that present difficult issues for the Board. In the latter case, the Board should be permitted to request that the Governor make the decision.

Finally, the Delaware Board of Pardons would be well served if it followed the lead of other states and set stricter limits on the ability of persons convicted of violent crimes to apply repeatedly for clemency and subject their victims to multiple clemency hearings. Although the Board already enforces waiting periods for violent criminals to reapply for

72. I have not seen one mental health evaluation in my three years on the Board of Pardons that recommended denying clemency for an applicant. That may simply reflect a decision by applicants who receive such mental health reports to postpone their applications.

clemency after an application is denied, there are some cases where the existing waiting periods are clearly inadequate. A common scenario involves an inmate convicted of extremely violent crimes and serving a long sentence, affording multiple opportunities to seek clemency. In such cases, the Board is unlikely to recommend clemency due to the nature of the crimes and the propriety of the sentence; there is little purpose to be served by forcing victims of violent crime to appear as often as every eighteen months to face their assailants. This is an area where universal rules are difficult to create – there may be cases involving violent crimes where good reasons exist to have the applicant reapply after eighteen or thirty-six months. But the Board should have the discretion to protect crime victims from being re-victimized by their assailants through the clemency process by determining the appropriate waiting period in each case. When denying a clemency application opposed by a victim, the Board of Pardons should impose a binding interval of time that must expire before the applicant may again apply for clemency. This interval may be the existing default period of eighteen or thirty-six months, or it may be longer, but it should be a conscious decision of the Board, made with an eye toward protecting victims from applicants' unreasonable use of the clemency process.

IV. CONCLUSION

In general, Delaware's unique clemency process works well and results in thoughtful, just outcomes from a Board of Pardons that has an unusually high level of public accountability. However, the state could take steps to help the Board make better-informed decisions, to streamline the clemency process for uncontroversial, non-violent offenses, and to protect crime victims from overuse of the clemency system.

CLEAR AS MUD — THE ROLE OF EPIDEMIOLOGICAL DATA IN ASSESSING ADMISSIBILITY UNDER DELAWARE RULE OF EVIDENCE 702

Daniel J. Brown*

I. OVERVIEW

Causation is an essential element in practically every legal theory of recovery, yet it is paramount in the field of tort litigation, especially toxic or mass tort litigation. For that reason, the admissibility of expert opinions on the issue of causation has become the preeminent battleground in tort litigation, perhaps to the chagrin of Delaware courts.¹ As such, this article will discuss the general rule governing the admissibility of expert opinions by Delaware courts and will specifically examine the role epidemiology plays in assessing scientific evidence in the form of expert testimony in toxic tort cases under Delaware Rule of Evidence 702 (“Rule 702”).

Ever since the Delaware Supreme Court, in *M.G. Bancorporation, Inc. v. Le Beau*,² adopted the rule announced by the U.S. Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*³ and its progeny, Delaware trial courts have been obligated to act as gatekeepers to prevent irrelevant and unreliable scientific evidence from entering the courtroom. To fulfill this obligation, trial judges must look behind the “scientific curtain” to determine whether the proffered scientific evidence, in the form of expert testimony, comports with the strictures of the scientific method. This task has become particularly important in the toxic tort context where the plaintiff is required to demonstrate that her exposure to some substance or chemical was responsible for causing her to develop, or contract a specific disease. Thus a plaintiff is required to prove both general causation — *i.e.*, that the substance is capable of causing the disease in question — as well as specific causation — *i.e.*, that the particular plaintiff’s exposure to that substance caused that particular plaintiff to develop the disease. To prove causation, the plaintiff must rely on scientific evidence and frequently will attempt to marshal substantial quantities of different types of scientific evidence. One such type of scientific evidence will be in the form of epidemiology. “Epidemiology is the branch of medical science that studies the distribution and determinants of health-related states and events in populations.”⁴

The role epidemiological evidence plays under Rule 702 in expert opinions can be somewhat convoluted, yet in recent years it has come into clearer focus with the Delaware Superior Court opinions in *Long v. Weider Nutrition Group*,

* Daniel J. Brown is an associate McCarter & English, LLP in Wilmington, Delaware. The views expressed in this article are those of the author and do not necessarily reflect the views of the author’s law firm or positions that the author’s law firm might assert in litigation on behalf of clients.

1. See *Wright v. Clark*, C.A. No. 09C-03-201, 2010 Del. Super. LEXIS 295, at *4 (Del. Super. July 14, 2010) (noting that the court was tempted not to consider a motion under DEL. R. EVID. 702 filed after the deadline in the scheduling order “to slow the *Daubert*-motion-cottage-industry-train”).

2. 737 A.2d 513 (Del. 1999).

3. 509 U.S. 579 (1993).

4. *Long v. Weider Nutrition Group, Inc.*, C.A. No. 00C-12-249, 2004 Del. Super. LEXIS 204, at *9 (Del. Super. June 25, 2004).

*Inc.*⁵ and *In re Asbestos Litigation*,⁶ which was remanded for clarification but not overruled, *sub nom.*, by *General Motors Corp. v. Grenier* (“*Grenier I*”),⁷ clarified by the Superior Court in *In re Asbestos Litigation; Grenier v. General Motors Corp.* (“*Grenier II*”),⁸ and ultimately affirmed by the Supreme Court in *General Motors Corp. v. Grenier* (“*Grenier III*”).⁹ Reading *In re Asbestos* and *Grenier II* together, it is clear that while epidemiological evidence is not required, as a matter of law, for an admissible expert opinion under Rule 702, where epidemiological evidence exists the parties must address that evidence in a principled, scientifically methodological and reliable manner.

Part II of this article briefly discusses the U.S. Supreme Court’s decision in the so-called *Daubert* trilogy, including *Daubert* itself, *General Electric v. Joiner*¹⁰ and *Kumho Tire Co. v. Carmichael*,¹¹ and Delaware’s adoption of the *Daubert* test as the proper interpretation of Rule 702. Part III briefly describes the field of epidemiology as well as its limits and benefits in supporting general causation opinions. Finally, Part IV explores the role epidemiological evidence plays in the determining the admissibility of general causation opinions under Delaware law.

II. DAUBERT BACKGROUND

A. The *Daubert* Trilogy

The history of the landmark U.S. Supreme Court case of *Daubert* has often been repeated, but its impact, as well as that of *Joiner* and *Kumho Tire*, cannot be understated. In *Daubert*, the U.S. Supreme Court unanimously held that the enactment of the Federal Rules of Evidence, and in particular Federal Rule of Evidence 702 (“Federal Rule 702”) superseded the *Frye*¹² test, which had previously been used to assess the admissibility of expert opinions in the federal courts.¹³ The *Daubert* Court held that Federal Rule 702 obligated trial judges to act as gatekeepers and admit only scientifically relevant and reliable expert testimony.¹⁴ *Daubert* marked a sea change whereby trial court judges are now under a duty to ensure that irrelevant and unreliable expert testimony is not presented to the trier of fact.

With *Daubert*, the U.S. Supreme Court established a two-prong test to determine the admissibility of expert testimony pursuant to Federal Rule 702. To assess the first prong, or the relevancy prong, the U.S. Supreme Court stated that expert testimony cannot “assist the trier of fact to understand the evidence at issue or to determine a fact in issue”¹⁵

5. 2004 Del. Super. LEXIS 204.

6. 911 A.2d 1176 (Del. Super. 2006).

7. 981 A.2d 524 (Del. 2009).

8. C.A. No. 05C-11-257, 2009 Del. Super. LEXIS 548 (Del. Super. Apr. 8, 2009).

9. 981 A.2d 531 (Del. 2009).

10. 522 U.S. 136 (1997).

11. 526 U.S. 137 (1999).

12. *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

13. *Daubert*, 509 U.S. at 589.

14. *Id.*

15. *Id.* at 591 (quoting FED. R. EVID. 702).

under the rule unless it is “sufficiently tied to the facts of the case.”¹⁶ The standard of “helpfulness” embodied in Federal Rule 702 “requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.”¹⁷ *Daubert* characterized this relevancy prong as one of “fit.” The U.S. Supreme Court warned that “[f]it is not always obvious, ... scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes.”¹⁸ Rather, in order for the expert evidence to assist the trier of fact it must “fit” the facts of the case and be connected to the pertinent inquiry, otherwise, it is inadmissible. For example, while it may seem that studies done on the effect of Substance X on rats may be relevant, those studies may actually not fit the facts of addressing the effect that same substance might have on humans because rats and humans are different species that may react completely differently to that substance. Further, such a study may not fit because the amount of the substance administered to the rats in the studies may have far exceeded the amount that a human would be exposed to on a proportional basis. Thus, such evidence would be inadmissible under *Daubert* and Federal Rule 702 because it does not fit the facts at issue.

With respect to the second prong, or the reliability of the proposed expert evidence, the U.S. Supreme Court held that the trial judge must determine whether such expert evidence is “ground[ed] in the methods and procedures of science.”¹⁹ *Daubert* identified four, nonexclusive factors the trial court could use to assess whether the proposed expert evidence is the reliable product of the scientific method: (1) testing, (2) peer review, (3) error rate and standards, and (4) general acceptance.²⁰ The U.S. Supreme Court, however, emphasized that the “inquiry envisioned by Rule 702 is ... a flexible one. Its overarching subject is the scientific validity ... of the principles that underlie a proposed submission. The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate.”²¹ Thus, the fundamental edict of *Daubert* is that in order for expert evidence to be reliable, and thus admissible, that evidence must be based on the scientific method employed by the proffered expert in arriving at his or her opinion.²²

In *Joiner*, four years after *Daubert*, the U.S. Supreme Court further clarified how trial judges are to perform their gatekeeping role under Federal Rule 702. *Joiner* involved allegations that workplace exposure to polychlorinated biphenyls (PCBs) promoted the development of small-cell lung cancer in the plaintiff, who was a long-time smoker with a family history of lung cancer. The District Court, applying *Daubert*, excluded the plaintiff’s experts’ opinions and the U.S. Court of Appeals for the Eleventh Circuit reversed after applying a “particularly stringent standard of review to the trial judge’s exclusion of expert testimony.”²³

The U.S. Supreme Court overruled the Court of Appeals and held the abuse of discretion is the correct standard of review to apply to appeals of admissibility determinations under Federal Rule 702.²⁴ The Court then proceeded to

16. *Id.* (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985)).

17. *Daubert*, 509 U.S. at 591-92.

18. *Id.* at 591.

19. *Id.* at 590.

20. *Id.* at 593-94.

21. *Daubert*, 509 U.S. at 594-95.

22. *Id.* at 590 (explaining that “in order to qualify as ‘scientific knowledge,’ [under FED. R. EVID. 702] an inference or assertion must be derived by the scientific method”)

23. *Joiner v. General Elec. Co.*, 78 F.3d 524, 529 (11th Cir. 1996).

24. *Joiner*, 522 U.S. at 143.

review, and affirm, the District Court's decision to exclude the plaintiff's expert testimony as inadmissible under *Daubert* and Federal Rule 702.²⁵ The plaintiff argued that his experts' causation opinions were admissible because those experts properly relied on animal studies and epidemiology. The U.S. Supreme Court, however, rejected those arguments and held that the district court did not abuse its discretion in finding that the plaintiff's experts' opinions were nothing more than speculation.²⁶ The Court held that the plaintiff never explained "how and why the experts could have extrapolated their opinions" from animal studies so "far-removed" from the context of the plaintiff's own alleged exposure.²⁷ Additionally, the Court found that the four epidemiological studies the plaintiff's experts relied on were insufficient to support the experts' opinions.²⁸ The Court thus reiterated its earlier holding in *Daubert* that adherence to the scientific method was a prerequisite to an admissible expert opinion. In other words, it is not enough for an expert simply to cite various studies that are loosely connected to the issue of causation. Rather the trial court, in fulfilling its gatekeeping function, must determine that the studies the expert relied upon in arriving at her opinion do, indeed, validate that opinion. The *Joiner* Court famously stated that "nothing 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. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered."²⁹

Two years later, the U.S. Supreme Court again addressed the issue of the admissibility of expert evidence under *Daubert* and Federal Rule 702. In *Kumho Tire*, the Court was called upon to determine whether a tire-failure expert's testimony was admissible and, perhaps more fundamentally, whether the *Daubert* test applied to "engineers or other experts who are not scientists."³⁰ The Supreme Court held that *Daubert's* "gatekeeping" obligation applies to all expert testimony, both scientific and experience based, because "the trial judge's general 'gatekeeping' obligation - applies not only to testimony based on 'scientific' knowledge, but also to testimony based on 'technical' and 'other specialized' knowledge."³¹

In *Kumho Tire*, the U.S. Supreme Court emphasized that the test enunciated in *Daubert* is a flexible one, and that there may be many cases where the four nonexclusive factors identified in *Daubert* are inapplicable.³² The *Daubert* test depends on "the particular circumstances of the particular case at issue"³³ and, thus, the trial court has "considerable

25. *Id.* at 146-47.

26. *Id.* at 146.

27. *Id.* at 144. The animal studies plaintiff's experts relied on were done on infant mice who were directly injected with massive doses of PCBs and developed a different type of cancer than the plaintiff. Whereas, the plaintiff was an adult, exposed to a much lower dose of PCBs, who developed a completely different type of cancer. In fact the U.S. Supreme Court noted that "[n]o study demonstrated that adult mice developed cancer after being exposed to PCB's." *Id.*

28. *Joiner*, 522 U.S. at 145-46. The first study failed to support the experts' opinions because, even though the study found a higher than expected lung cancer death rate among ex-employees, the study authors refused to conclude that PCB exposure caused lung cancer. The second study was insufficient because it did not find that the somewhat higher incidence of lung cancer deaths was statistically significant. The third was insufficient because it "made no mention of PCB's," and the fourth was insufficient because it examined exposure to numerous potential cancer-causing substances in addition to PCBs. *Id.*

29. *Id.* at 146.

30. *Kumho Tire*, 526 U.S. at 137, 141.

31. *Id.* (citing FED. R. EVID. 702).

32. *Id.* at 150.

33. *Kumho Tire*, 526 U.S. at 152.

leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable” and relevant.³⁴ In the end, the trial court’s gatekeeping function under *Daubert* “is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing his testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.”³⁵

B. Rule 702 And Delaware’s Adherence To *Daubert* And Its Progeny

A mere month after the U.S. Supreme Court decided *Kumho Tire*, the Delaware Supreme Court was called upon to assess the admissibility of expert testimony under Rule 702 in *M.G. Bancorporation, Inc. v. Le Beau*.³⁶ In *M.G. Bancorp.*, the Delaware Supreme Court explicitly “adopt[ed] the holdings of *Daubert* and [*Kumho Tire*] as the correct interpretation of the Delaware Rule of Evidence 702”³⁷ because Rule 702 is “identical to its federal counterpart.”³⁸ Thus under *Daubert* and Rule 702, Delaware trial judges must serve as “gatekeepers” and, as such, “must decide ‘whether the reasoning or methodology underlying the testimony is scientifically valid and ... whether that reasoning or methodology properly can be applied to the facts in issue.’”³⁹ The *Daubert* trilogy is the operative test for the admissibility of expert evidence pursuant to Rule 702.

Additionally, the Delaware Supreme Court has outlined five factors to consider in determining whether proffered expert testimony is admissible under Rule 702: (1) whether the witness is qualified as an expert by knowledge, skill, experience, training or education; (2) whether the evidence is relevant and reliable; (3) whether the expert’s opinion is based on information reasonably relied on by experts in the particular field; (4) whether the expert testimony will assist the trier of fact to understand the evidence or to determine a fact in issue; and (5) whether the evidence will create unfair prejudice, confuse the issues or mislead the trier of fact.⁴⁰ As clearly stated in *Daubert*, pursuant to Rule 702 these five factors are not inflexible. Rather trial judges “have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable.”⁴¹

34. *Id.* at 150.

35. *Id.* at 152.

36. 737 A.2d 513 (Del. 1999).

37. *Id.* at 521.

38. *Id.* at 522.

39. *Grenier III*, 981 A.2d at 536 (quoting *Daubert*, 509 U.S. at 592-93).

40. *Eskin v. Cardin*, 842 A.2d 1222, 1227 (Del. 2004); *Minner v. Am. Mortgage & Guar. Co.*, 791 A.2d 826, 843 (Del. Super. 2000).

41. *Garden v. State*, 815 A.2d 327, 338 (Del. 2003) (quoting *Kumho Tire*, 526 U.S. at 152); *see also Grenier III*, 981 A.2d at 536 (noting that “the trial court has ‘broad latitude’ to determine whether any or all of the *Daubert* factors are ‘reasonable measures of reliability in a particular case....’” (quoting *Kumho Tire*, 526 U.S. at 153)).

III. BACKGROUND ON EPIDEMIOLOGY

A. What Epidemiology Is And What Epidemiology Can Do

“Epidemiology is the field of public health and medicine that studies the incidence, distribution and etiology of disease in human populations.”⁴² Epidemiology, thus, looks at patterns of a disease amongst groups of humans to attempt to determine the nonlegal cause(s) of such diseases based on risk assessments. Because epidemiology looks for patterns of diseases based on some common factor, or exposure, it assumes that those patterns are not the product of chance — that there is some other force behind the observed disease patterns.⁴³ For this reason, epidemiology is most frequently used in toxic or mass tort actions to support opinions that exposure to a certain product, medicine, chemical, *et cetera* is capable of causing some type of harm or disease in humans, *i.e.*, another way of defining general causation. This type of expert causation opinion will be the focus of this article. Because epidemiology focuses on the distribution and etiology of diseases in groups, its use in causation opinions “focuses on the question of general causation (*i.e.*, is the agent capable of causing disease?) rather than that of specific causation (*i.e.*, did it cause disease in a particular individual?).”⁴⁴

It is critical to emphasize that the field of epidemiology serves primarily to identify “agents that are associated with an increased risk of disease in groups of individuals, [to] quantif[y] the amount of excess disease that is associated with an agent, and [to] provide[] a profile of the type of individual who is likely to contract a disease after being exposed to an agent.”⁴⁵ Importantly, epidemiology can only identify *an association* between a substance and a particular injury or disease, which *is not the equivalent of legal causation*.⁴⁶ An epidemiological association means that the relationship between exposure and the development of a disease “occur more frequently together than one would expect by chance.”⁴⁷ Such an association is clearly distinct from legal causation, that “but for” the exposure the claimant would not have developed the disease. Epidemiology can only indicate that exposure to a substance increases the risk of a particular disease within that group of individuals, and can quantify the amount of the disease that is associated with exposure above the background rate of independently occurring disease. Lastly, because epidemiology generally studies disease causation (in the nonlegal sense) and prevention it can be used to furnish “a profile of the type of individual who is likely to contract a disease after being exposed.”⁴⁸

42. MICHAEL D. GREEN ET AL., REFERENCE MANUAL ON SCIENTIFIC EVIDENCE: REFERENCE GUIDE ON EPIDEMIOLOGY 333, 335 (2d ed. 2000); *see also Joiner*, 522 U.S. at 144 n.2. (“Epidemiological studies examine the pattern of disease in human populations.”); *Long*, 2004 Del. Super. LEXIS 204, at *9 (“Epidemiology is the branch of medical science that studies the distribution and determinants of health-related states and events in populations.”). The section on epidemiology is intended to provide a brief overview of the science. For a more in-depth analysis, including the potential confounding factors and potential applicability under the *Daubert* framework please refer to GREEN ET AL., *supra*. Additionally, etiology is a cause or origin of a disease or abnormal condition. WEBSTER’S SEVENTH NEW COLLEGIATE DICTIONARY 286 (Merriam-Webster 1965).

43. GREEN ET AL., *supra* note 42, at 335.

44. *Id.* at 336 (citations omitted).

45. *Id.*

46. *Id.*

47. GREEN ET AL., *supra* note 42, at 336 n.8.

48. *Id.*

B. Types Of Epidemiological Studies.

For the purposes of this article, there are two major types of epidemiological studies: (1) experimental, and (2) observational. There are, in turn, four different subtypes of observational epidemiological studies. Experimental epidemiological studies are clinical trials. Experimental epidemiological studies involve two different groups of study participants where one group is intentionally exposed to a substance while the other group is not. Both groups are then evaluated to determine the impact of the substance on the group that received it. Experimental studies are generally considered the “gold standard” for determining the relationship, if any, between an agent and a disease.⁴⁹ Experimental studies are typically used to determine the safety and efficacy of new drugs or medical treatments and are often randomized, placebo controlled and double blinded to ensure that, to the greatest extent possible, the observed result is attributable to the exposure to the substance and not some other element.⁵⁰

Due to ethical constraints, however, experimental studies may only be used where the substance to be studied is suspected of providing a benefit, *i.e.*, a previously undiscovered pharmaceutical compound, and not where the substance is thought to be harmful, *i.e.*, a previously unknown carcinogen. If the substance to be evaluated is thought to be harmful, researchers are limited to observational studies. Observational studies, therefore, are studies where the researcher “observes” a group who has been exposed to a substance and then compares the rates of a particular disease in the exposed group to another group who has not been exposed to the same substance.⁵¹ With observational studies researchers cannot control all aspects of the study’s subjects, such as diet, weight, exercise, *et cetera* in the same manner that researchers can in experimental studies, where the researchers handpick the subjects and can closely monitor all aspects of the study’s subjects, as necessary. As such, other unwanted factors may influence the result of an observational epidemiological study. Because researchers in observational studies have no control over the characteristics of the subjects who were exposed to the substance be studied, they attempt to control for these unwanted factors with various techniques, including the design of the study discussed *infra*.

As noted above, there are four different subtypes of observational epidemiological studies: (1) cohort studies, (2) case-control studies, (3) cross-sectional studies, and (4) ecological studies. Cohort studies and case-control studies are the two main types of observational studies.⁵² In a cohort study, also known as a prospective study or follow-up study,⁵³ “the researcher identifies two groups of individuals: (1) individuals who have been exposed to a substance that is considered a possible cause of a disease and (2) individuals who have not been exposed.”⁵⁴ The researcher then observes both groups

49. *Id.* at 338.

50. *Id.* Randomization is the practice of providing the experimental substance to the study participants in a random manner. The purpose of randomization is to attempt to minimize the impact of individual differences between study participants on the study’s outcome. Placebo controlling is the practice of giving the nonexposed group a placebo. And, double blinding is the process of preventing both the study participants and those conducting the study from knowing which group receives the substance and which group does not. *Id.*

51. GREEN ET AL., *supra* note 42, at 339.

52. *Id.*

53. *Id.* at 340 n.17.

54. *Id.* at 340. Additionally cohort studies can include a number of different groups with differing levels of exposure to the suspect substance. *Id.* at 340 n.18.

for a specific amount of time and compares the proportions of both groups that develop the disease in question. Thus, cohort studies “measure and compare the incidence of disease in the exposed and unexposed (‘control’) groups ... [and] take[] the exposed status of the participants (the independent variable) and examine[] its effect on incidence of disease (the dependent variable).”⁵⁵ Because the researcher must take his, or her, study subjects as they exist in observational cohort studies, the researcher has little control over the various characteristics of the individuals in either group. As a result, there exists the potential that any observed increased risk of the specific disease studied in the exposed group could be caused by a variable other than the substance being studied.⁵⁶ Therefore, researchers must carefully design the study to identify other factors that could be responsible for any observed, increased risk. And, if the data gathered includes other possible causal factors, researchers may use statistical methods to determine whether an association truly exists between the exposure to the substance in question and the specific disease at issue.⁵⁷

In a case-control study, or retrospective study,⁵⁸ “the researcher begins with a group of individuals who have a disease (cases) and then selects a group of individuals who do not have the disease (controls)” and compares each group in connection with their level of prior exposure to the substance at issue.⁵⁹ A case-control study, thus, measures and compares the incidence of exposure between the cases and controls and “takes the disease status as the independent variable and examines its relationship with exposure, which is the dependent variable.”⁶⁰ The rates of exposure in the two groups are then compared and the odds of developing the disease when exposed to the substance at issue are compared with the odds of developing the disease without exposure. The crucial difference between the cohort and case-control studies is that “cohort studies begin with exposed people and unexposed people, while case-control studies begin with individuals who are selected based on whether they have the disease or do not have the disease and their exposure to the agent in question is measured.”⁶¹ Despite these differences, the goal of both types of studies is to determine (1) if there is an association between exposure to the substance in question and a disease, and (2) the strength of that association.

The remaining two categories, cross-sectional studies and ecological studies are less pertinent to expert opinions on general causation. In cross-sectional studies, individuals are examined and the “presence of both the exposure of interest and the disease of interest is determined in each individual at a single point in time.”⁶² These studies “determine the presence (prevalence) of both exposure and disease in the subjects and do not determine the development of disease or risk of disease (incidence).”⁶³ In ecological studies, the researcher collects data about the group as a whole rather than about individuals in the group. In ecological studies, “overall rates of disease or death for different groups are obtained

55. GREEN ET AL., *supra* note 42, at 340.

56. *Id.* at 342.

57. *Id.*

58. *Id.* at 342 n.23.

59. GREEN ET AL., *supra* note 42, at 342.

60. *Id.* at 340.

61. *Id.*

62. *Id.* at 343.

63. GREEN ET AL., *supra* note 42, at 343.

and compared” with the objective being “to identify some difference between the two groups ... that might explain differences in the risk of disease observed between the two groups.”⁶⁴

C. Interpretation Of The Results Of Epidemiological Studies

To reiterate, the goal of epidemiological studies is to determine whether an association exists between exposure to a substance and the development of disease. If there is such an association, then the strength of that association must also be analyzed. Generally, such an association exists when exposure to a substance and disease occur more often than would be expected by chance alone.⁶⁵ There are three different measures to state the strength of such an association: (1) relative risk, (2) an odds ratio, and (3) attributable risk. Each of these measures the extent to which exposure to a substance impacts the risk of disease.

First, relative risk is the ratio of the incidence rate of a disease in the exposed individuals versus the incidence rate of the same disease in the unexposed individuals. The “incidence rate” is the number of individuals in the cohort that develop the disease during a specific time period divided by the number of individuals in that group. Once the relative risk is calculated, it can generally be interpreted that a relative risk of 1.0 indicates that no association exists between exposure and disease because the same number of individuals who were exposed to the substance developed the disease as those who were not. A relative risk above 1.0 indicates a positive association between exposure and disease meaning that the risk of contracting the specific disease in those exposed to the substance is higher than those who were not exposed. In contrast, a relative risk below 1.0 indicates a negative association between exposure and disease meaning that exposure to the substance could have a curative or protective effect on the risk of developing the disease.⁶⁶ The size of the relative risk indicates the strength of that association. For example, a relative risk of 3.5 means the risk of disease in those exposed to the substance is three and half times higher than the risk of disease in those who were not exposed. Thus, relative risk is a quantitative expression of the association between exposure and disease.

Second, an odds ratio is similar to relative risk in that it is a quantitative expression of the association between exposure and disease; however, an odds ratio “approximates the relative risk when the disease is rare.”⁶⁷ In a case-control study, the odds ratio is “the ratio of the odds that a case (one with the disease) was exposed to the odds that a control (one without the disease) was exposed.”⁶⁸ Whereas in a cohort study, the odds ratio is “the ratio of the odds of developing a disease when exposed to a suspected agent to the odds of developing the disease when not exposed.”⁶⁹ Because an odds ratio approximates the relative risk, the same general rules of interpretation apply, *i.e.*, an odds ratio of 1.0 indicates that there is no association between exposure and disease, whereas an odds ratio above 1.0 indicates a positive association and an odds ratio below 1.0 indicates a negative association.

64. *Id.* at 344.

65. *Id.* at 348.

66. *Id.* at 349.

67. GREEN ET AL., *supra* note 42, at 350.

68. *Id.*

69. *Id.*

The third measurement, attributable risk, indicates the maximum amount of disease that can be “attributed” to exposure to the substance among the exposed individuals.⁷⁰ In other words, attributable risk is the proportion of a disease in the groups that can be credited to the exposure. To determine the attributable risk, the researcher would subtract the incidence rate in the unexposed group from the incidence rate in the exposed group and then divide the difference by the incidence rate in the exposed.⁷¹ For example, if the incidence rate in the unexposed group is ten and the incidence rate in the exposed is fifty then the attributable risk is 80 percent (*i.e.*, $50-10 = 40$; $40/50 = 80\%$). This would mean that 80 percent of the disease in the exposed group is attributable to the exposure to the suspect substance. This, however, is not the same as stating that 80 percent of the disease is caused by the exposure.

D. Types Of Errors That Could Result In An Incorrect Result

Even though a study may find a positive association, *i.e.*, a relative risk over 1.0, this alone does not necessarily mean that a true association exists. There are three reasons why a study may show a positive association where one does not truly exist: (1) chance or sampling error, (2) bias or systematic error, and (3) confounding.⁷² Each of these phenomena “must be evaluated to extract a valid message from the study. Evaluation of these factors measures the ‘internal validity’ of an epidemiology study, that is, the extent to which the study’s findings are viable and sound.”⁷³

1. Sampling Error

The first, significant source of a potential false positive is sampling error, *i.e.*, the risk that the study’s findings may be due solely to “chance” and not a real, true association. Although there are a number of techniques, the three main techniques that are used to reduce or eliminate any sampling error are: (1) study design, (2) statistical significance, and (3) confidence intervals.⁷⁴ Study design can help alleviate the likelihood of sampling error by ensuring that the sample size is large enough to account for the possibility of chance affecting the outcome. By increasing the sample size, the researcher increases the likelihood that the results are associated with exposure to the substance being studied rather than mere happenstance. Increasing the sample size, however, cannot completely eliminate the possibility that chance has affected the study’s outcome, thus epidemiologists must also use other techniques to attempt to control for sampling error.

The second key method for controlling for sampling error is to determine whether the study’s results are statistically significant. In order for a study to be statistically significant, the *p*-value of that study must fall below the researcher’s selected significance level. The *p*-value “represents the probability that a positive association would result from [chance] if no association were in fact present.”⁷⁵ The most common significance level used is 5 percent. Therefore, in order for a

70. *Id.* at 351.

71. GREEN ET AL., *supra* note 42, at 352.

72. *Id.* at 354.

73. *Magistrini v. One Hour Martinizing Dry Cleaning*, 180 F. Supp. 2d 584, 592 (D.N.J. 2001). To put it another way, *Magistrini* explains that there are three reasons for a positive association “(1) bias (including confounding factors), (2) chance, and (3) real effect.” *Id.* at 591.

74. GREEN ET AL., *supra* note 42, at 354-55.

75. *Id.* at 357.

study to be statistically significant the probability that the observed, positive association resulted from chance would need to be less than 5 percent.

The third key method for controlling for sampling error is by employing confidence intervals to provide yet another level of validity. “A confidence interval is a range of values calculated from the results of a study, within which the true value is likely to fall; the width of the interval reflects random error.”⁷⁶ Confidence intervals show “the relative risk determined in the study as a point on a numerical axis [and] also display[] the boundaries of relative risk consistent with the data found in the study on one or several selected levels of . . . statistical significance.”⁷⁷ Confidence intervals can allow the researcher to make a more sophisticated determination of the inferences to be drawn from the associations found in the study because they display the ranges of relative risk based on several levels of statistical significance.⁷⁸

2. Bias

The second major culprit for an observed association where there truly is none is bias, or systematic error. Bias is simply anything that makes the two groups being compared different in any way other than the variable being studied, *i.e.*, exposure to the substance in question.⁷⁹ While the majority of epidemiological studies contain some bias, the sources of the bias need to be examined as bias can produce incorrect results. There are two major types of bias: (1) selection bias, and (2) information bias. “Selection bias refers to the error in an observed association that is due to the method of selection of cases and controls (in a case-controlled study) or exposed and unexposed individuals (in a cohort study).”⁸⁰ For example, studies that are based on hospital populations will most likely suffer from selection bias because the cases and controls, or exposed and unexposed, individuals will all be from a population that has some type of medical condition, which is serious enough to require hospitalization.⁸¹ The same goes for studies based on prison populations or members of the armed forces — each group has some other factor common to all that is not necessarily the factor that is the subject of the study. Therefore, the observed association between the substance and the disease needs to be scrutinized to determine whether it is a true association, and not the result of the method of selecting the groups to be included in the study.

Information bias, on the other hand, “refers to the bias resulting from inaccurate information about the study participants regarding either their disease or exposure status.”⁸² Information bias, therefore, is the error in measuring the data that forms the basis of the study.⁸³ For example, researchers often must rely on individuals to accurately recount their level of exposure or past medical history and some individuals may be better historians than others for various reasons.⁸⁴ Therefore, the method of data collection needs to be scrutinized as well in assessing the results of a study.

76. *Id.* at 360.

77. *Id.* at 360-61.

78. GREEN ET AL., *supra* note 42, at 360-61.

79. *Magistrini*, 180 F. Supp. 2d at 592.

80. GREEN ET AL., *supra* note 42, at 363.

81. *Id.* at 364.

82. *Id.* at 365.

83. *Id.*

84. See GREEN ET AL., *supra* note 42 at 366-68 for a more detailed explanation and discussion on informational bias.

3. Confounding

The third major, potential reason why an observed association may not be a true or real association is the problem of confounding. Confounding is where the association observed is the result of some other factor present in the studied groups other than the exposure that was to be studied.⁸⁵ It is where some other factor present in the studied groups is also a risk factor for the disease. For example, the presence of differences in residence, socioeconomic status, age or family medical history can be confounding factors in a study intended to determine whether there is an association between occupational exposure to a substance and a certain disease. To the extent the confounding factors can be identified, those confounding factors can be controlled through the study design, such as separating the groups to be studied into groups of smokers versus nonsmokers.⁸⁶ Confounding factors can be further controlled by using the statistical techniques of stratification and multivariate analysis.⁸⁷ Stratification involves the use of statistical methods to combine the results of different exposure levels (or strata) to the confounding factor to arrive at one overall estimate of risk.⁸⁸ Multivariate analysis involves using mathematical modeling to “describe the simultaneous effect of exposure and confounding factors on the increase in risk.”⁸⁹

Most importantly, confounding is inherent in observational epidemiological studies because, in observational studies, individuals are not randomly assigned to the groups being studied. Rather, the researcher must take the individuals as they find them, including all the other aspects of individuals’ lives that may or may not be related to the topic being investigated. As such “[c]onfounders ... do not reflect an error made by the investigators; rather they reflect the inherently ‘uncontrolled’ nature of observational studies.”⁹⁰ Thus, practically every observational epidemiological study will be confounded in one way or another and the key is for researchers to identify and mitigate the effects of confounding.

E. Methods For Combining Multiple Studies To Produce A Single Result

When faced with numerous epidemiological studies with different findings an epidemiologist may conduct a meta-analysis of those studies. Meta-analysis is a method of combining the results of numerous different studies into a single value of the risk.⁹¹ In a meta-analysis, studies are assigned different weights in proportion to the different attributes of the studies being combined, including, *inter alia*, the studies’ population sizes. Meta-analysis, therefore, “is a way of

85. *Id.* at 369.

86. *Id.* at 372.

87. *Id.* at 373.

88. GREEN ET AL., *supra* note 42, at 373.

89. *Id.* For a more detailed discussion of stratification see *id.* For a more detailed discussion of multivariate analysis see DANIEL L. RUBINFELD, ET AL., REFERENCE MANUAL ON SCIENTIFIC EVIDENCE: REFERENCE GUIDE ON MULTIPLE REGRESSION 179 (2d ed. 2000).

90. GREEN ET AL., *supra* note 42, at 371.

91. See *In re Paoli Railroad Yard PCB Litigation*, 916 F.2d 829, 856 (3d Cir. 1990) (“Meta-analysis involves combining the results of different epidemiological studies done by other scientists, and re-analyzing the combined data to see if the data, *in toto*, renders different results than the individual studies done with a smaller data sample.”). In *Paoli*, which is a pre-*Daubert* opinion, the Third Circuit overruled the District Court’s exclusion of the plaintiff’s expert’s meta-analysis based, in part, on an incomplete record.

systematizing the time-honored approach of reviewing the literature, which is characteristic of science, and placing it in a standardized framework with quantitative methods for estimating risk.⁹² Meta-analysis is typically employed in combining the results of randomized clinical trials where the studies to be combined are carefully controlled and the studies share many important methodological attributes.⁹³ It is in the clinical trial context where meta-analysis is most appropriate.

When meta-analysis is employed with observational studies, however, it is fraught with problems. Such as, how does the researcher assign weights to the different studies and what is the researcher's methodology for assigning those weights? The most significant problem, however, is that the very method of conducting a meta-analysis masks "the differences among the individual studies included in the meta-analysis and the reasons for the differences."⁹⁴ These differences "are important in themselves and need to be understood" in order to properly assess the weight of the various studies' outcomes.⁹⁵ In other words, any bias and confounding can be downplayed or glossed over in a meta-analysis of observational epidemiological studies.

F. Epidemiological Association And General Causation

As noted above, an epidemiological study that demonstrates an association between exposure to a substance and an increased risk of developing an adverse health effect is not the same as a finding that exposure to a substance *caused* that adverse health effect. In other words, a well controlled and designed study that finds a statistically significant increased association between exposure and a disease to a 95 percent confidence level where the confounding factors have been analyzed does not itself indicate that exposure to that substance "causes" the observed disease. In fact, "[t]he strong consensus among epidemiologists is that conclusions about causation should not be drawn, if at all, until a number of criteria have been considered."⁹⁶ These criteria, often referred to as the Bradford Hill considerations⁹⁷ are: (1) temporal relationship; (2) strength of the association; (3) replication of findings; (4) evidence of a dose-response relationship; (5) biological plausibility; (6) consideration of alternate explanations; (7) specificity of the association; and (8) consistency of the relationship.⁹⁸

While an entire article could be devoted to the Bradford Hill considerations this, unfortunately, is not that article. That said, a short explanation of the Bradford Hill considerations is necessary. First "temporal relationship"

92. GREEN ET AL., *supra* note 42, at 380.

93. *Id.*

94. *Id.* at 381.

95. *Id.*

96. Merrell Dow Pharm., Inc. v. Havner, 953 S.W.2d 706, 718 (Tex. 1997).

97. These criteria or "viewpoints" are referred to as the Bradford Hill criteria because they were first developed by Sir Austin Bradford Hill in his article: *The Environment and Disease: Association or Causation?*, 58 PROC. ROYAL SOC'Y MED. 295 (1965).

98. GREEN ET AL., *supra* note 42, at 375; *see also Magistrini*, 180 F. Supp. 2d at 592-93 (identifying the Bradford Hill criteria); *Havner*, 953 S.W.2d at 718 n.2. *See also Grenier II*, 2009 Del. Super. LEXIS 548, at *30-33 (referencing the Bradford Hill criteria and reciting the nine factors: "plausibility, coherence, strength of association, consistency of observed associations, biological gradient, experiment, analogy, specialty of the association, and temporality") (citations omitted); *In re Asbestos*, 911 A.2d at 1190 (same).

or “temporality” means that the exposure to the substance must occur before development of the disease. While there can be a true causal relationship without the presence of certain factors, temporality is not one of them; temporality is required for a finding of causation.⁹⁹ Second, “strength of the association” refers to the relative risk of the association, as that is exactly what relative risk measures. “The higher the relative risk, the stronger the association and the lower the chance that the effect” is based on any bias or confounding factor.¹⁰⁰ A lower relative risk, however, does not mean there is no casual relationship; it could simply mean that the possible biases or confounding factors will need to receive greater scrutiny.¹⁰¹ Third, “replication of findings” means the particular study’s findings are capable of being replicated in different studies under different circumstances.¹⁰² While replication is not essential, any variances in the results between the different studies will need to be explored prior to a determination of causation.¹⁰³ Fourth, “dose-response” refers to whether an increase in exposure results in an increase in the risk of disease.¹⁰⁴ The presence of a dose-response is a strong indicator of causation; however, some substances exhibit a “threshold phenomenon” whereby exposure to a certain dose results in disease but there is no increased risk with higher doses.¹⁰⁵ Fifth, “biological plausibility” refers to whether the observed association is consistent with “existing knowledge about the mechanisms by which the disease develops.”¹⁰⁶ Biological plausibility is sometimes referred to as the “mechanism of action” and can be a difficult criterion to assess because it depends, for the most part, on the current state of scientific knowledge. Sixth, “consideration of alternate explanations” simply refers to whether potential sources of biases or confounding factors have been considered and either ruled out or reconciled with the observed results. Seventh, “specificity of the association” refers to whether exposure to the substance is associated with one disease or type of disease rather than a wide variety of diseases.¹⁰⁷ The common example would be asbestos and mesothelioma. While, evidence of specificity can strengthen a claim of causation, the lack of such evidence does not weaken it when there is a plausible explanation. Finally, “consistency of the relationship” refers to whether the results are consistent with other studies.

In the end, there is no special formula for using the Bradford Hill criteria to determine whether causation exists, as some factors may be missing even where a true causal relationship exists, and vice versa.¹⁰⁸ “Drawing causal inferences after finding an association and considering [the Bradford Hill] factors requires judgment and searching analysis ... and ... [thus] [w]hile the drawing of casual inferences is informed by scientific expertise, it is not a determination that is made by using scientific methodology.”¹⁰⁹

99. GREEN ET AL., *supra* note 42, at 376.

100. *Id.*

101. *Id.* at 376-77.

102. *Id.* at 377.

103. GREEN ET AL., *supra* note 42, at 377-78.

104. *Id.* at 377.

105. *Id.*

106. *Id.* at 378.

107. GREEN ET AL., *supra* note 42, at 379.

108. *Id.* at 375; *see also In re Asbestos*, 911 A.2d at 1190 (“None of these criteria stand alone; they are all important when considering the issues of association and risk.”).

109. GREEN ET AL., *supra* note 42, at 375.

IV. ANALYSIS

A. Epidemiological Data Is Not Required Under Rule 702 For An Admissible Expert Causation Opinion

Both the Delaware Supreme Court and Delaware Superior Court have explicitly held that epidemiological data is not required, as a matter of law, for an admissible general causation opinion.¹¹⁰ The Superior Court first announced this rule in *Long v. Weider Nutrition Group* and in doing so adopted the reasoning of several federal courts that had announced a similar rule.¹¹¹ *Long* involved a *Daubert* challenge to the plaintiff's causation experts where the plaintiff claimed that the decedent's death due to cardiac hypertrophy was caused by the use of dietary supplements containing significant amounts of ephedra/ephedrine and caffeine.¹¹² The *Long* defendants argued that the plaintiff's experts' general causation opinions, *i.e.*, that dietary supplements containing ephedra/ephedrine and caffeine could cause cardiac hypertrophy, were unreliable because there were no epidemiological studies that established an association between the use of such products and sudden adverse cardiac side effects.¹¹³ The plaintiff agreed that there were no such epidemiological studies. Yet the plaintiff argued that such studies were unnecessary considering the other reliable information the experts had relied on, including *inter alia*, studies finding that ephedra in nutritional supplements produces cardiovascular stimulant effects; that ephedra is similar to other substances known as sympathomimetics; studies finding that sympathomimetics can produce sudden adverse cardiac side effects; and, the fact that the FDA banned the sale of all ephedra products after finding that the risks outweighed the benefits.¹¹⁴ The *Long* court agreed with the plaintiff: "As a matter of public policy, courts should not be hampered in the search for truth by the rigid proposition that no expert, however qualified, can reliably opine on the causal link between a toxic substance and injury without epidemiological studies...."¹¹⁵ The holding in *Long* fits within the flexible framework of the test for admissibility under *Daubert*, *Kumho Tire* and Rule 702.¹¹⁶

The Superior Court, reiterated and reestablished the rule that epidemiological data is not required, as a matter of law, for an admissible general causation opinion in *In re Asbestos* and clarified that holding in *Grenier II*, which was

110. *Grenier III*, 981 A.2d at 539 ("[T]here is no *a priori* requirement that an expert opinion be based on epidemiology in order to be admissible."); *Long*, 2004 Del. Super. LEXIS 204, at *21 ("Epidemiological studies are not required in every case as a threshold for the admission of an expert opinion as to the general causation relationship between and allegedly toxic substance and a plaintiff's injury or death."); *see also In re Asbestos*, 911 A.2d at 1190 (stating that "epidemiology is not required, as a matter of law, to establish general causation in every case").

111. *Long*, 2004 Del. Super. LEXIS 2004, at *19 n.20 (collecting cases).

112. *Id.* at *2-4.

113. *Id.* at *16.

114. *Id.* at *16-18.

115. *Long*, 2004 Del. Super. LEXIS 2004, at *18.

116. *See, infra*, Parts II.A and B discussing the *Daubert* trilogy and the Delaware Supreme Court's adoption of *Daubert* as the operative interpretation of DEL. R. EVID. 702. The *Long* opinion also addresses the admissibility of expert opinions based on the process of differential diagnosis. The differential diagnosis aspects of *Long* are not addressed in this article, which focuses on the narrow issue of epidemiology in the admission of expert causation opinions under *Daubert* and DEL. R. EVID. 702. The issues surrounding the admission of opinions based on differential diagnoses is left for another day and another article.

ultimately affirmed in *Grenier III*. In *In re Asbestos*, the Superior Court was faced with a *Daubert* challenge to the plaintiff's expert causation opinion that exposure to asbestos-containing automotive friction products, *i.e.*, clutches and brakes, can cause asbestos related diseases.¹¹⁷ The defendants claimed that the plaintiff's expert opinion was inadmissible, *inter alia*, because it contradicted all the available occupation-specific epidemiological studies that found no association (or even a negative association) between exposure to automotive friction products and asbestos-related diseases.¹¹⁸ "Stated differently, when considering the link between toxic exposure and human disease, does epidemiological evidence, when it exists, trump all other science for purposes of testing the reliability of a scientific hypothesis and assessing the reliability of a scientific conclusion?"¹¹⁹ The Superior Court answered that question in the negative stating that parties "need not support their general causation case with epidemiological evidence as a matter of law. Other scientific evidence, if sufficiently relevant and reliable, may suffice."¹²⁰ The Supreme Court ultimately affirmed this aspect of the opinion stating that "there is no *a priori* requirement that an expert opinion be based on epidemiology in order to be admissible."¹²¹

In the end, because epidemiology does not "trump" all other scientific data in the context of general causation¹²² it also cannot form the sole basis of an admissible general causation opinion. The flexible framework of *Daubert* and Rule 702 does not allow for such a formulaic approach either for or against admission of general causation opinions. Therefore, it is simply insufficient to a party to rely exclusively on epidemiology to support an expert general causation opinion, or as the grounds to exclude an expert general causation opinion.

B. The High Level Of Other Scientific Data Required In The Absence Of Epidemiological Data To Demonstrate An Admissible Expert Opinion

Even though epidemiology has its flaws and is not required by Delaware law, well designed and controlled epidemiological studies are generally regarded as the best evidence for demonstrating general causation.¹²³ Therefore, the lack of such evidence sets a high threshold for a plaintiff to overcome in proffering an admissible general causation opinion

117. *In re Asbestos*, 911 A.2d at 1178.

118. *Id.* at 1179. *In re Asbestos* and the *Grenier* line of cases address numerous issues pertinent to the admissibility of expert opinions and asbestos litigation in general. This article, however, will not address those points. This article addresses only the narrow issue of the use of epidemiological evidence in assessing admissibility under DEL. R. EVID. 702 and the holding that such evidence is not required, as a matter of law.

119. *In re Asbestos*, 911 A.2d at 1181.

120. *Id.* at 1209.

121. *Grenier III*, 981 A.2d at 539.

122. *In re Asbestos*, 911 A.2d at 1210.

123. *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 882 (10th Cir. 2005) (holding "that epidemiology is the best evidence of general causation in a toxic tort case.... While the presence of epidemiology does not necessarily end the inquiry, where epidemiology is available, it cannot be ignored. As the best evidence of general causation, it must be addressed.") (citations omitted); *see also* *Rider v. Sandoz Pharm. Corp.*, 295 F.3d 1194, 1198 (11th Cir. 2002) ("Epidemiology ... is generally considered to be the best evidence of causation in toxic tort actions."); *Soldo v. Sandoz Pharm. Corp.*, 244 F. Supp. 2d 434, 532 (W.D. Pa. 2003) ("Epidemiology is the primary generally accepted methodology for demonstrating a causal relation between a chemical compound and a set of symptoms or a disease.") (citation and internal quotations omitted).

under Rule 702. As such, the level of other scientific data the plaintiff must marshal is substantial, as evidenced by the amount and type of scientific evidence present in both *Long* and *In re Asbestos*.

In *Long* the other scientific evidence plaintiff's experts relied on was substantial enough to meet this high threshold.¹²⁴ The plaintiff's expert was able to rely on the fact that the FDA banned the sale of all ephedra products after finding that the risks outweighed the benefits and that numerous national organizations, including, the American Medical Association, the American Heart Association, the U.S. Navy and the National Football League had accepted the connection between ephedra and sudden adverse events, including significant cardiac problems.¹²⁵ The expert in *Long* also cited several studies finding that ephedrine and other sympathomimetics could lead to cardiac issues and even death.¹²⁶ Moreover, the *Long* expert testified that there was "no scientific basis to presume that ephedrine taken as a dietary supplement would have different clinical effects that [sic] ephedra in prescription drug form."¹²⁷ Thus, while the expert in *Long* was not able to point to epidemiology as support for his general causation opinion, he was able to point to the findings of at least twelve different government agencies and private organizations that had come to the same conclusion as well as other scientific evidence demonstrating the same causal relationship with the same substance, albeit in a pharmaceutical product rather than in a dietary supplement product. *Long*, therefore, demonstrates the high threshold of data that an expert's proponent would have to marshal to meet the requirements of Rule 702 in the absence of reliable epidemiological data.

The *In re Asbestos* and *Grenier* line of opinions reiterate this point, but for different reasons. In *Grenier II*, the Superior Court clarified its holding in *In re Asbestos* and ultimately arrived at the same conclusion — admitting the general causation opinions. In *Grenier II*, the experts started from the scientifically accepted premise that chrysotile asbestos can cause asbestos related diseases, which is supported by available epidemiological data. The experts then "conducted research to determine that friction products contain a significant amount of chrysotile asbestos, and conducted further research to conclude that working with friction products ... can release respirable chrysotile fibers in amounts sufficient to cause disease."¹²⁸ Additionally, the experts testified that they were not aware of any credible evidence to support the defendants' hypothesis that the process used to manufacture friction products somehow changed the chrysotile asbestos fibers such that they were no longer capable of causing disease.¹²⁹ The plaintiff's experts admitted that none of the occupation-specific epidemiological studies supported a positive association between asbestos-related disease and exposure to friction products.¹³⁰ However, plaintiff's experts pointed out the numerous confounders and structural defects in the occupation-specific epidemiological studies the defendants claimed demonstrated a negative association between exposure to friction products and asbestos-related diseases.¹³¹ Based on this, the Superior Court found that the occupation-specific epidemiological studies

124. *Long*, 2004 Del. Super. LEXIS 204, at *16-20.

125. *Id.* at *17-18.

126. *Id.* at *17.

127. *Id.*

128. *Grenier II*, 2009 Del. Super. LEXIS 548, at *31-32.

129. *Id.* at *22-23, 39-40.

130. *Id.* at *34.

131. *In re Asbestos*, 911 A.2d at 1210.

were equivocal.¹³² Perhaps more importantly, the Superior Court stated that epidemiology serves a less significant role in the asbestos context because the background rate for asbestos-related diseases is so low and those diseases are “signature” diseases.¹³³ Therefore, in the *Grenier* line of opinions, the experts overcame the fact that the occupation-specific epidemiology did not support a positive association (and in defendants’ opinion, demonstrated a negative association between exposure to friction products and asbestos-related diseases) by relying on other scientific data as well as “the abundant epidemiological evidence of a positive association between exposure to chrysotile and asbestos disease.”¹³⁴ Outside of the asbestos context, where epidemiological evidence would not have such a limited role, the fact that the occupation-specific epidemiology did not demonstrate a positive association between exposure and disease would, no doubt, receive more weight than it did in *Grenier II* and *In re Asbestos*.

Despite the fact that epidemiological data is not required as a matter of law, the typical case, toxic tort or otherwise, will not fall into the mold of *Long* and *Grenier*. Thus a plaintiff whose opinion is not supported with reliable epidemiological studies will need a substantial amount of otherwise reliable scientific evidence to demonstrate an admissible opinion under Rule 702.

C. The Role Of Epidemiological Data Under Rule 702

1. Epidemiological Evidence, Where It Exists, Must Be Addressed

As noted by the U.S. Court of Appeals for the Tenth Circuit in *Norris v. Baxter Healthcare Corp.*, “[w]hile the presence of epidemiology does not necessarily end the inquiry, where epidemiology is available, it cannot be ignored. As the best evidence of general causation, it must be addressed.”¹³⁵ While not formally adopted by any Delaware court, the *Norris* rule succinctly articulates the rule applied by *Long* and the *Grenier* line of opinions — where epidemiological evidence exists it must be addressed. In *Long*, the Superior Court was faced with a situation where there were no “stud[ies], using generally-recognized epidemiological methodology, that show[] what percentage of the population has any adverse reaction after using a dietary supplement containing ephedra and caffeine.”¹³⁶ Thus, in such a situation where there are no epidemiological studies to rely on, then the lack of such data alone would not be grounds for exclusion of the expert opinion under *Daubert* and Rule 702.¹³⁷ The other scientific evidence relied upon to support the expert’s general causation opinion, however, must still be reliable under *Daubert* and Rule 702.

Where epidemiological evidence does exist, either in support of or in opposition to the proffered expert opinion, the proponent of that opinion will have to “at least address it with evidence that is based on medically reliable and sci-

132. *Grenier II*, 2009 Del. Super. LEXIS 548, at *36.

133. *Id.* at *35.

134. *Id.*

135. *Norris*, 397 F.3d at 882.

136. *Long*, 2004 Del. Super. LEXIS, at *11-12.

137. See also *Norris*, 397 F.3d at 882, which expands the rule from there simply being no studies available to where there are no studies that contradict the expert’s opinion. The *Norris* court held that “[i]n cases where there is no epidemiology challenging causation available, epidemiological evidence would not necessarily be required.” *Id.* This holding is somewhat obvious. Yet, if there were no studies contradicting the expert’s opinion, it would reasonable to believe that the expert would include that fact in his opinion.

entifically valid methodology.”¹³⁸ In *Norris*, the plaintiff’s experts opined that silicone breast implants caused plaintiff’s systemic autoimmune disease, despite the fact that there existed a mountain of reliable epidemiological studies that found no reliable association between silicone breast implants and systemic autoimmune disease.¹³⁹ The Court of Appeals affirmed the District Court’s exclusion of plaintiff’s experts’ opinions because both had ignored or discounted the extensive epidemiological evidence to the contrary without any explanation. Instead both proffered experts relied, almost entirely, upon their own personal observations to support their conclusions; observations that contradicted the epidemiological evidence.¹⁴⁰

The *Norris* rule is also consistent with the holdings of *In re Asbestos* and later clarified and reiterated in *Grenier II*. In *In re Asbestos*, plaintiffs’ experts did not ignore and dismiss without explanation the defendants’ occupation-specific epidemiological evidence. Rather, plaintiffs’ experts disagreed with the defendants’ characterization of the occupation-specific epidemiological data, critiqued defendants’ occupation-specific epidemiological studies, and cited to the well-accepted epidemiological evidence that general exposure to chrysotile asbestos can cause asbestos-related diseases.¹⁴¹ The Superior Court, thus, determined that the occupation-specific epidemiological data was “equivocal” and based on the

disagreement between two “well-credentialed camps of scientists” with respect to the meaning and importance of the occupation-specific epidemiology, ... determined that it would not decide who was right and who was wrong ... but would instead allow the parties to present their scientifically sound methodologies and conclusions to the jury for resolution.¹⁴²

As such, where epidemiological data exists, the proponent of the expert general causation opinion must address that data in order to comply with *Daubert* and Rule 702.

Therefore, where epidemiological studies do exist, in order for those studies to support the proffered general causation opinion those studies must be properly controlled, designed and reliable. As the U.S. Supreme Court held in *Joiner*, epidemiological studies that do not report a statistically significant association between exposure to the substance in question and the disease, that lack proper controls and that examine substances other than the substance in question (*i.e.*, do not fit the facts of case) cannot be used to support an admissible expert general causation opinion that exposure to the substance can cause disease.¹⁴³

2. Methods For Assessing Epidemiological Evidence To Ensure It Is Reliable

Thus, under *Daubert* and Rule 702, the trial court must analyze epidemiological studies to determine whether they can provide a reliable foundation for the expert’s general causation opinion in keeping with the scientific method. In fulfilling its gatekeeping role the trial court must thoroughly evaluate the studies to determine whether the expert was

138. *Id.*

139. *Id.* at 886.

140. *Id.* at 884-86.

141. *In re Asbestos*, 911 A.2d at 1209-10; *Grenier II*, 2009 Del. Super. LEXIS 548, at *34-36.

142. *Grenier II*, 2009 Del. Super. LEXIS 548, at *36 (quoting *In re Asbestos*, 911 A.2d at 1210).

143. *Joiner*, 522 U.S. at 145-46.

justified in relying on those studies.¹⁴⁴ Put another way, the trial court must ensure that “the expert’s opinion is based upon information reasonably relied upon by experts in the particular field.”¹⁴⁵ In doing so, the trial court must evaluate the studies with respect to at least four different areas.¹⁴⁶ First, the trial court would need to identify whether the study found an association, *i.e.*, was the relative risk higher than 1.0, and then determine whether the relative risk is sufficiently high to support a causation opinion. For example, a study could result in a relative risk of 1.1, which equates to only a 10 percent increase in risk in the exposed group versus the nonexposed group. Such a relative risk would signify a positive association between exposure and disease; albeit a weak association that arguably would not support an admissible general causation opinion.¹⁴⁷

Other courts have held that an association of less than a 2.0 relative risk cannot support a reliable, admissible general causation opinion. “A relative risk of 2.0 thus implies a [50 percent] likelihood that the agent caused the disease. Risks greater than 2.0 permit an inference that the plaintiff’s disease was more likely than not caused by the agent.”¹⁴⁸ In other words because “the threshold for concluding that an agent was more likely than not the cause of an individual’s disease is a relative risk greater than 2.0,”¹⁴⁹ any relative risk below 2.0 cannot meet the proponents burden of proof on causation. That is, the proponent of the causation opinion would not be able to demonstrate that the plaintiff’s disease was more likely than not caused by the exposure to the substance where the relative risk was less than 2.0, *i.e.*, less than 50 percent. Additionally, at least one court has suggested that a relative risk of less than 3.0 denotes only a weak association.¹⁵⁰

Second, the trial court would need to assess whether the study adequately controlled for the possibility that the association was caused by chance, or sampling error, rather than a true association. To that end the trial court, acting as the gatekeeper, would need to closely look at the study’s design to determine, *inter alia*, whether the sample size was large enough to address the possibility that the results were caused by chance. The trial court would also need to ensure that the results were statistically significant to a 95 percent confidence level.

Third, the trial court would need to assess whether the study was affected by any bias — or systemic error — that would lead to an incorrect, unreliable result. As such, the trial court would need to assess the likelihood of any possible

144. *Daubert*, 509 U.S. at 589; *see generally Joiner*, 522 U.S. at 144-47 (analyzing the studies plaintiff’s expert relied on to hold that the district court did not abuse its discretion in excluding the expert’s opinion as unreliable).

145. *Eskin*, 842 A.2d at 1227 (citations and internal quotation marks omitted).

146. *See* Parts II.C and D of this article, *supra*, generally outlining the methods for interpreting epidemiological studies and identifying the possible sources of and solutions to errors in epidemiological studies.

147. *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1315 (11th Cir. 1999) (affirming the District Court’s exclusion of an epidemiological study that only reported “a relative risk of only 1:24, a finding so significantly close to 1.0 that the court thought the study was not worth serious consideration for proving causation”).

148. *Id.* at 1315 n.16. The *Allison* court also held that “the threshold for concluding that an agent more likely than not caused a disease is 2.0. A relative risk of 1.0 means that the agent has no causative effect on incidence. A relative risk of 2.0 thus implies a 50% likelihood that the agent caused the disease. Risks greater than 2.0 permit an inference that the plaintiff’s disease was more likely than not caused by the agent.” *Id.* at 1315 n.16. This 2.0 threshold has been adopted by various other courts including *Magistrini*, 180 F. Supp. 2d at 591, and *Siharath v. Sandoz Pharmaceuticals Corp.*, 131 F. Supp. 2d 1347, 1356 (N.D. Ga. 2001).

149. *Magistrini*, 180 F. Supp. 2d at 591 (*quoting* GREEN ET AL., *supra* note 42, at 384).

150. *See Havner*, 953 S.W.2d at 719 (noting “that some of the literature indicates that epidemiologists consider a relative risk of less than three to indicate a weak association” and citing to various statements made by influential scientists corroborating that sentiment).

selection bias and the effect such selection bias would have on the outcome. The trial court would also need to assess whether any information bias could have impacted the study's results by scrutinizing the method of data collection in the study.

Fourth, and finally, the trial court would need to identify whether the study's result was affected by any confounding factor(s) and whether those confounding factors were properly controlled for by the researcher through the study's design and/or the use of stratification and multivariate analysis. The trial court would also need to assess whether any of those confounders, if uncontrollable, could have a negative impact on the study's results. If after thoroughly scrutinizing the epidemiological data, the trial court is satisfied that the study can form the basis of the expert's opinion then that general causation opinion can be submitted to the jury under *Daubert* and Rule 702.

It is along this line that it appears the *Long* opinion may have deviated from the teachings of *Daubert* and *Joiner*. In holding that epidemiology is not required as a matter of law for an admissible expert general causation opinion under Rule 702, the Superior Court stated:

As a matter of public policy, courts should not be hampered in the search for truth by the rigid proposition that no expert, however qualified, can reliably opine on the causal link between a toxic substance and injury without epidemiological studies *conducted according to strict guidelines*.¹⁵¹

The addition of the phrase “*conducted according to strict guidelines*” would appear to indicate that the *Long* court is dispensing with the requirement that in order for epidemiological studies to form the basis of an admissible opinion those studies need to be well-controlled and report a statistically significant positive association. The U.S. Supreme Court was clear in *Daubert* and *Joiner* that in order for epidemiological studies to be admissible, those studies must be conducted according to the scientific method, including proper epidemiological protocols.¹⁵² And those opinions were explicitly adopted by the Delaware Supreme Court as the correct interpretation of Rule 702 in *M.G. Bancorp*.¹⁵³ Quite simply, inconclusive or sloppily-done science can never be reliable under *Daubert*. Thus, in order for epidemiological, or any scientific, evidence to be admissible it must be *conducted according to strict guidelines*, which are necessary to comply with the scientific method.

3. Epidemiology's Role In The Bradford Hill Considerations

Epidemiology is a key component in assessing the Bradford Hill considerations. As noted above, a finding of a positive association is not the same as a determination of causation. For that reason, before arriving at a potentially admissible general causation opinion, an expert must assess the Bradford Hill considerations.

Without epidemiological data, it is practically impossible to assess the “strength of the association” let alone demonstrate that an association even exists.¹⁵⁴ Relative risk, by definition, measures the strength of the association. Yet,

151. *Long*, 2004 Del. Super. LEXIS 204, at *18 (emphasis added).

152. *Daubert*, 509 U.S. at 590 (holding that “in order to qualify as ‘scientific knowledge,’ [pursuant to FED. R. EVID. 702] an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation — *i.e.*, ‘good grounds,’ based on what is known”); *Joiner*, 136 U.S. at 146-47 (holding that because the epidemiological studies relied upon by the experts were not sufficient due to various scientific shortcomings to support the experts conclusions and thus were properly excluded).

153. *M.G. Bancorp.*, 737 A.2d at 521-22.

154. GREEN ET AL., *supra* note 42, at 376.

even where there is a statistically significant positive association between exposure to a substance and a disease, courts have rejected such studies under *Daubert* where the relative risk is only somewhat elevated.¹⁵⁵ Moreover, at least one court has suggested that a relative risk of less than 3.0 times denotes only a weak association.¹⁵⁶

Epidemiology is also essential when considering alternate explanations. As described above, the process of identifying potential biases and confounding factors seeks to ferret out and address other alternate explanations for a positive association. This is necessary to ensure that the observed increased incidence of disease is associated with exposure to the substance in question and not some other phenomenon. Thus, despite the fact that epidemiology is not required as a matter of law, epidemiology is germane to the determination of admissibility under *Daubert* and Rule 702, and the failure of a general causation expert to address the available epidemiological evidence will, in most instances, result in the exclusion of that opinion.

D. The Role of Meta-Analysis under Rule 702

The admissibility of general causation opinions based on meta-analysis — the process of combining numerous epidemiological studies to arrive at a single risk assessment — has yet to be thoroughly analyzed by Delaware courts. In fact, this author's research has only revealed two opinions in Delaware that address meta-analysis and those opinions were *In re Asbestos* and *Grenier II*. In both *In re Asbestos* and *Grenier II*, the Superior Court noted the plaintiff's expert's disagreement with and challenges to the defendants' expert's meta-analysis.¹⁵⁷ The Superior Court, however, did not analyze the methodology employed by the defendants' expert in conducting the meta-analysis. Rather, the experts' disagreement formed the basis for the Superior Court's conclusion that the occupation-specific epidemiological evidence was equivocal.¹⁵⁸

Considering the inherent limitations of meta-analysis, Delaware courts should carefully scrutinize any expert opinion that relies on meta-analysis to support a general causation conclusion. Particularly because meta-analysis can downplay or eliminate the legitimate impact of bias and confounding factors in each of the underlying studies. Meta-analysis can be reliable if properly conducted pursuant to the scientific method; however, *Daubert* and Rule 702 require the court to delve into that methodology to determine whether it is both relevant and reliable. One commentator has stated:

meta-analysis begins with scientific studies, usually performed by academics or government agencies, and sometimes incomplete or disputed. The data from the studies are then run through computer models of bewildering complexity, which produce results of implausible precisions.... Pursuant to *Daubert*, a court must look behind this "bewildering complexity" and require the expert to establish the reliability and relevance of both the different pieces of information going into the meta-analysis and the calculations used to combine the information into a single result.¹⁵⁹

155. See *Allison*, 184 F.3d at 1315 (affirming the District Court's exclusion of an epidemiological study that only reported "a relative risk of only 1:24, a finding so significantly close to 1.0 that the court thought the study was not worth serious consideration for proving causation").

156. *Havner*, 953 S.W.2d at 719.

157. *In re Asbestos*, 911 A.2d at 1192; *Grenier II*, 2009 Del. Super. LEXIS 548, at *35 n.52.

158. *Grenier II*, 2009 Del. Super. LEXIS 548, at *36.

159. Joe G. Hollingsworth and Eric G. Lasker, *The Case Against Differential Diagnosis: Daubert, Medical Causation Testimony, and the Scientific Method*, 37 J. HEALTH L. 85, 92 (2004) (quoting Samuel Shapiro, *Meta-Analysis/Shmeta-Analysis*, 140 AM. J. EPIDEMIOLOGY 771, 771 (1994)).

This approach fits the general framework of *Daubert* and Rule 702 to admit scientific testimony so long as that testimony is relevant, reliable and faithful to the scientific method.

V. CONCLUSION

Delaware courts have emphatically rejected the notion that epidemiological data is required as a matter of law in order to proffer an admissible general causation opinion under *Daubert* and Rule 702. Rather, Delaware has adopted the flexible approach, consistent with the U.S. Supreme Court's guidance in *Daubert* that an admissible general causation opinion may be based on "other" scientific evidence so long as that evidence is reliable and true to the scientific method. This rule, however, leaves a large swathe of grey area surrounding the role epidemiological data plays in determining admissibility under Rule 702. To that end, considering the holdings in both *Long* and *In re Asbestos/Grenier* as well as the U.S. Supreme Court's holdings in *Daubert* and *Joiner*, where epidemiological evidence on general causation exists it must be addressed by the proponent of the expert opinion, especially because epidemiological data is considered the best evidence of general causation. Faithful adherence to the scientific method requires the expert to consider and address such evidence.

Practitioners on both sides of the "v" need to be cognizant of the major role epidemiological evidence plays in the admissibility of general causation opinions. Where epidemiological evidence exists, it will be in only the rarest of circumstances that expert testimony that fails to address or contradict such epidemiological evidence will be admissible under Rule 702. Proponents of general causation opinions, therefore, need to be prepared to demonstrate to the trial court, as the gatekeeper, why the opinion is reliable in the face of, or in conjunction with, the existing epidemiological data. Similarly, opponents of general causation opinions must be able to effectively identify and attack the flaws in such studies, and efficiently and easily demonstrate to the trial court why the expert's opinion is unreliable.

AN ANALYSIS OF THE SHIFT-IN-PURPOSE APPROACH TO FOURTH AMENDMENT JURISPRUDENCE IN DELAWARE

Charles B. Vincent*

Over the past three years, the Delaware Supreme Court has issued a series of opinions analyzing police encounters with citizens and the encounters' effects on subsequent motions to suppress. In these opinions, the Court has attempted to clarify the murky Fourth Amendment line where a consensual encounter may turn into something different. This article discusses those cases in the context of a Fourth Amendment continuum, and it proposes a straightforward framework counsel may use to explore the underlying encounter and aid the trial court's analysis of a motion to suppress. Adopting the proposed "shift in purpose" framework could help prosecutors, defense counsel, and the trial judge determine whether and at what point (if at all) a police officer has violated a person's rights under the Fourth Amendment or the Delaware Constitution. The article then examines additional doctrines that may apply when there has been such a violation. Finally, the article concludes with a brief examination of the Delaware Supreme Court's recent decision in *Moore v. State*,¹ which applied some of these principles.

I. BACKGROUND

In 2008, the Delaware Supreme Court issued three opinions examining the suppression of evidence obtained following a citizen's encounter with police. In each case, the arguments in the trial court focused primarily upon whether or not the police had reasonable suspicion to justify the stop. Although the appeals raised different issues, the underlying facts in the three cases are important to understanding the arguments both the State and defense counsel might make in future cases.

A. *State v. Meades*

In *State v. Meades*,² four police officers were investigating a tip that individuals were selling crack cocaine in front of a house in Wilmington.³ When the police arrived, the defendant and another man were sitting on the front steps.⁴ One of the officers approached the men, asked for their names, and asked whether they lived in the house.⁵ The men, including

* Charles B. Vincent is an associate at Labaton Sucharow LLP's Delaware office, specializing in complex corporate litigation in the Delaware Court of Chancery. He served as a law clerk for Justice Henry duPont Ridgely of the Delaware Supreme Court during the 2007-2008 term.

1. 997 A.2d 656 (Del. 2010).
2. 947 A.2d 1093 (Del. 2008).
3. *Id.* at 1094.
4. *Id.*
5. *Id.*

Meades, gave their names but denied living in the house.⁶ Another officer ran the mens' names to determine whether they had any outstanding capiases. When asked whether they had any illegal contraband and whether they would consent to a search, the men stated that they did not, and they consented to the search.⁷ The officer who patted down Meades testified that he "felt an object in Meades' buttocks, but...did not ask Meades to remove it."⁸ Upon discovering that Meades had an outstanding capias, the officer placed Meades under arrest. The police later determined that the object in Meades' buttocks was a bag of crack cocaine.⁹

At the suppression hearing, the Superior Court determined that the officer had lacked the requisite reasonable suspicion to detain and question Meades under 11 *Del. C.* § 1902 ("Section 1902"). The court suppressed the evidence as a violation of Meades' rights under the Fourth and Fourteenth Amendments to the United States Constitution and under Article I, Section 6 of the Delaware Constitution. The State appealed the decision, arguing that Meades was not "seized" when the officers asked for his name and that Section 1902, therefore, did not apply.¹⁰ The Supreme Court held that the State had waived this argument by failing to present it to the Superior Court and upheld the Superior Court decision.¹¹

B. *Lopez-Vazquez v. State*

In *Lopez-Vazquez v. State*,¹² police officers were investigating a tip related to a drug sale. During one of the controlled purchases, the officers saw the defendant park near the apartment they were watching, get out of his car, and begin talking with another man who was standing nearby.¹³ Later, after the police executed a search warrant for the apartment, another officer noticed Lopez-Vazquez outside the building, walking toward his car. A detective asked to speak with Lopez-Vazquez.¹⁴ The officer later testified that during their conversation, Lopez-Vazquez began acting nervously, gave inconsistent responses to the officer's questions, and could not answer certain follow-up questions.¹⁵ Lopez-Vazquez eventually consented to a search of his person and his car.¹⁶ Cocaine was later found in a hidden compartment in the car.¹⁷

At the suppression hearing, the State did not contest the defense position that Lopez-Vazquez was seized when the detective approached him, but argued that the issue was whether the detective possessed a reasonable and articulable

6. *Id.*

7. *Id.* at 1094-95.

8. *Id.* at 1095.

9. *Id.*

10. *Id.*

11. *Id.* at 1097.

12. 956 A.2d 1280 (Del. 2008).

13. *Id.* at 1283.

14. *Id.* at 1284.

15. *Id.*

16. *Id.*

17. *Id.*

suspicion at that point. The Superior Court denied the motion to suppress. On appeal, the Supreme Court reversed, holding that the totality of the circumstances did not support a finding that the detective had conducted a valid *Terry stop*.¹⁸ The Supreme Court also did not find that any of the doctrinal exceptions to the federal exclusionary rule applied to purge the illegal taint.¹⁹

C. *Williams v. State*

In *Williams v. State*,²⁰ a police officer noticed the defendant walking along the median of a highway on a cold and windy night.²¹ The officer asked Williams if he needed a ride, and Williams declined.²² After a brief conversation, during which the officer took his name and date of birth, Williams departed. The officer ran a computer check on Williams' name and discovered outstanding warrants for his arrest.²³ The officer then caught back up with Williams, arrested him, and discovered that he was carrying a handgun.²⁴ Following a suppression hearing at which the trial judge ruled Williams was not seized during the initial encounter, a jury convicted Williams of carrying a concealed deadly weapon.

On appeal, Williams argued that he had been seized during his initial encounter with the police officer. The Supreme Court affirmed Williams' conviction on two independent bases. First, the court determined that Williams had not been seized during his original encounter with the police officer because the totality of the circumstances would cause a reasonable person to believe that he was free to ignore the police officer's presence.²⁵ Second, the court held that even if there was a seizure, the officer's actions fell within the community caretaker exception to the warrant requirement, because under the totality of the circumstances, the encounter was a reasonable and appropriate effort by the officer to render assistance.²⁶

In *Meades and Lopez-Vazquez*, the State's arguments respecting the time of the defendants' seizure drove the analyses and ultimately led to the suppression of evidence. In *Williams*, the fact that the defendant was determined not to have been seized was dispositive. As discussed below, the analysis proposed in *Williams* shows why it is important that trial lawyers (and the court) determine exactly when a Fourth Amendment "seizure" has taken place.

18. *Id.* at 1291.

19. *Id.* at 1292.

20. 962 A.2d 210 (Del. 2008).

21. *Id.* at 213.

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.* at 216.

26. *Id.* at 221.

II. THE CONSENSUAL ENCOUNTER—STOP—ARREST CONTINUUM: WAS THERE A “SHIFT IN PURPOSE” TO THE POLICE ACTION?

There is no dispute that police serve an important public function. Today, a police officer is a “jack-of-all-emergencies” and has “complex and multiple tasks to perform in addition to identifying and apprehending persons committing serious criminal offenses; by default or design he is also expected to aid individuals who are in danger of physical harm, assist those who cannot care for themselves, and provide other services on an emergency basis.”²⁷ Put another way, a police officer will engage in multiple tasks while performing his or her duties, and for any individual situation, an officer may perform multiple actions (inward and outward) in response. When an officer interacts with a particular person, the officer’s outward actions are particularly susceptible to after-the-fact scrutiny, especially if the encounter leads to an arrest. The “shift in purpose” in the officer’s outward actions typically forms the basis for any Fourth Amendment analysis.

The Fourth Amendment provides “[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures”²⁸ Under *Terry v. Ohio*²⁹ and its progeny, the United States Supreme Court has articulated the factors applicable to an analysis of whether a person’s Fourth Amendment rights have been triggered. The continuum of police action may be thought of as containing three distinct points: Consensual Encounter—Stop—Arrest. In other words, whether a person has been “seized” for Fourth Amendment purposes depends upon where on the continuum the police action took place.

A. Continuum Point 1: The Consensual Encounter

In *Terry*, the United States Supreme Court noted that “not all personal intercourse between policemen and citizens involves ‘seizures’ of persons. Only when the officer, by means of physical force or show of authority, has in some way restrained the liberty of a citizen may we conclude that a ‘seizure’ has occurred.”³⁰ Since *Terry*, this initial contact has become known as (and will be referred to in this article as) a consensual encounter. The United States Supreme Court has made clear that “a seizure does not occur simply because a police officer approaches an individual and asks a few questions.”³¹ Police questioning alone “does not constitute a seizure.”³² Delaware courts have recognized this distinction.³³

27. *Williams*, 962 A.2d at 216-17 (quotations and citation omitted).

28. U.S. CONST. amend. IV. “What is constitutionally ‘unreasonable’ varies with the circumstances, and requires a balancing of the ‘nature and extent of the governmental interests’ that justify the seizure against the ‘nature and quality of the intrusion on individual rights’ that the seizure imposes.” *Johnson v. Campbell*, 332 F.3d 199, 205 (3d Cir. 2003) (quoting *Terry v. Ohio*, 392 U.S. 1, 22, 24 (1968)).

29. *Terry v. Ohio*, 392 U.S. 1 (1968).

30. *Id.* at 19 n.6.

31. *Florida v. Bostick*, 501 U.S. 429, 434 (1991). *See also id.* at 434-35 (“We have stated that even when officers have no basis for suspecting a particular individual, they may generally ask questions of that individual; ask to examine the individual’s identification; and request consent to search his or her luggage—as long as the police do not convey a message that compliance with their requests is required.”) (citations omitted).

32. *Id.* at 434; *accord Meuhler v. Mena*, 544 U.S. 93, 101 (2005). *See also Florida v. Rodriguez*, 469 U.S. 1, 5-6 (1984) (per curiam) (“The initial contact between the officers and respondent, where they simply asked if he would step aside and talk with them, was clearly the sort of consensual encounter that implicates no Fourth Amendment interest.”); *Florida v. Royer*, 460 U.S. 491, 497 (1983) (plurality opinion) (“[L]aw enforcement officers do not violate the Fourth Amendment by merely approaching an individual

B. Continuum Point 2: The Stop

Terry applies at the point an encounter becomes non-consensual.³⁴ This point differs in Delaware and federal courts. Both courts agree with the general principle that “[s]o long as a reasonable person would feel free ‘to disregard the police and go about his business,’ the encounter is consensual and no reasonable suspicion is required.”³⁵ Both courts’ “free to leave” tests are based on a totality of the circumstances analysis that determines “whether a reasonable person would feel free to decline the officers’ requests or otherwise terminate the encounter.”³⁶ Under the Delaware Constitution, if the court determines that a reasonable person would not feel free to leave, *Terry* applies.³⁷ Under federal law, however, even if a court finds that a defendant was not “free to leave,” *Terry* will only be triggered upon the use of physical force or submission to the assertion of authority.³⁸ If these tests are on a continuum, the “free to leave” test must be placed at an earlier point than the “assertion of authority” test; by definition, an individual would not be free to leave upon the police’s showing of physical force or the individual’s submission to the police authority. Thus, the continuum may be represented as:

Consensual encounter—Stop—Arrest
Delaware [“Free to Leave” Test] — Federal [“Assertion of Authority” Test]

If the court finds that a defendant was not “free to leave” (Delaware) or that there was physical force or submission to an “assertion of authority” (federal), *Terry* will apply, and the stop, however brief, must be justified. That is, “the police officer must be able to point to specific and articulable facts which, taken together with rational inferences from those facts, reasonably warrant the intrusion.”³⁹ “The *Terry* stop is a far more minimal intrusion [than an arrest], simply

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on the street or in another public place, by asking him if he is willing to answer some questions, by putting questions to him if the person is willing to listen, or by offering in evidence in a criminal prosecution his voluntary answers to such questions.”)

33. See, e.g., *Lopez-Vazquez v. State*, 956 A.2d 1280, 1286 (Del. 2008); *Williams v. State*, 962 A.2d 210, 214 (Del. 2008).

34. See *Bostick*, 501 U.S. at 434 (“The encounter will not trigger Fourth Amendment scrutiny unless it loses its consensual nature.”).

35. *Id.* (citation omitted); *Jones v. State*, 745 A.2d 856, 863 (Del. 1999).

36. *Bostick*, 501 U.S. at 437; accord *Terry*, 392 U.S. at 16 (“It must be recognized that whenever a police officer accosts an individual and restrains his freedom to walk away, he has ‘seized’ that person.”).

37. *Jones*, 745 A.2d at 869; *Williams*, 962 A.2d at 215.

38. *California v. Hodari D.*, 499 U.S. 621, 626 (1991).

39. *Terry*, 392 U.S. at 21; accord *Rodriguez*, 469 U.S. at 5 (“Certain constraints on personal liberty that constitute ‘seizures’ for purposes of the Fourth Amendment may nonetheless be justified even though there is no showing of ‘probable cause’ if ‘there is articulable suspicion that a person has committed or is about to commit a crime.’”) (citation omitted).

Much of the legal jurisprudence in this area has focused on what totality of the circumstances warrant a reasonable and articulable suspicion to justify a stop. See, e.g., *Bostick*, 501 U.S. at 437 (“We have consistently held that a refusal to cooperate, without more, does not furnish the minimal level of objective justification needed for a detention or seizure.”); *Illinois v. Wardlow*, 528 U.S. 119, 124 (2000) (“An individual’s presence in an area of expected criminal activity, standing alone, is not enough to support a reasonable, particularized suspicion that the person is committing a crime.”); *id.* (“Our cases have also recognized that nervous, evasive behavior is a pertinent factor in determining reasonable suspicion.”).

allowing the officer to briefly investigate further. If the officer does not learn facts rising to the level of probable cause, the individual must be allowed to go on his way.⁴⁰

The above analysis, therefore, distinguishes the consensual encounter and the *Terry* stop. Moreover, it emphasizes that the consensual encounter does not instantly trigger *Terry*. The United States Court of Appeals for the Ninth Circuit explains the test in this way: “By definition, a ‘consensual’ exchange between police and citizens cannot take place in the absence of consent. When a citizen expresses his or her desire *not* to cooperate, continued questioning cannot be deemed consensual.”⁴¹ Determining when a *Terry* stop begins is thus useful for evaluating what the police knew and when they knew it for evidentiary purposes.

In 2011, the Delaware Supreme Court provided additional guidance on this aspect of a *Terry* stop in its *Jones v. State* decision.⁴² Because of the “necessarily imprecise” standards for determining whether an individual has been stopped,⁴³ the Court adopted a non-exhaustive list of factors for the trial court to consider as part of its *Terry* stop totality-of-the-circumstances analysis. Those factors are: (1) whether the encounter occurred in a public or private place; (2) whether the suspect was informed that he was not under arrest and free to leave; (3) whether the suspect consented or refused to talk to the investigating officers; (4) whether the investigating officer removed the suspect to another area; (5) whether there was physical touching, a display of weapons, or other threatening conduct; and (6) whether the suspect eventually departed the area without hindrance.⁴⁴ Additionally, *Jones* holds that the trial court should consider all relevant circumstances and independently analyze the facts of each case.⁴⁵ The analysis of these factors should help further define where the *Terry* stop begins, creating a more definitive point in the record to aid the examination of pre- and post-*Terry* stop evidence.

C. Continuum Point 3: The Arrest

Of course, police may make a warrantless arrest of an individual when an officer develops probable cause (*i.e.*, a reason to believe) that the individual is committing a crime.⁴⁶ A finding of probable cause for a warrantless arrest — as for a seizure,⁴⁷ a pat down search,⁴⁸ an arrest warrant,⁴⁹ and a search warrant⁵⁰ — requires an objective determination of whether the totality of the circumstances supports the legal requirements for a finding of probable cause. A *Terry* stop is not a warrantless arrest. A *Terry* stop, however, may lead to an arrest.

40. *Wardlow*, 528 U.S. at 126.

41. *Morgan v. Woessner*, 997 F.2d 1244, 1253 (9th Cir. 1993).

42. *Jones v. State*, 28 A.3d 1046 (Del. 2011).

43. *Id.* at 1052.

44. *Id.* at 1052-53.

45. *Id.* at 1053.

46. *E.g.*, *Coleman v. State*, 562 A.2d 1171, 1177 (Del. 1989).

47. *E.g.*, *Jones*, 745 A.2d at 863.

48. *E.g.*, *Caldwell v. State*, 770 A.2d 522, 531-32 (Del. 2001).

49. *E.g.*, *Coleman*, 562 A.2d at 1177.

50. *E.g.*, *Thomas v. State*, 467 A.2d 954, 956 (Del. 1983).

III. DELAWARE'S CONSENSUAL ENCOUNTER—STOP—ARREST CONTINUUM

A. Section 1902

An analysis of seizure cases along the continuum of encounter—stop—arrest as described above requires some understanding of Section 1902, the Delaware detention statute. That Section provides:

- (a) A peace officer may stop any person abroad, or in a public place, who the officer has reasonable ground to suspect is committing, has committed or is about to commit a crime, and may demand the person's name, address, business abroad and destination.
- (b) Any person so questioned who fails to give identification or explain the person's actions to the satisfaction of the officer may be detained and further questioned and investigated.
- (c) The total period of detention provided for by this section shall not exceed 2 hours. The detention is not an arrest and shall not be recorded as an arrest in any official record. At the end of the detention the person so detained shall be released or be arrested and charged with a crime.⁵¹

The Delaware detention statute, including the Section 1902 detention provision, is based upon the Uniform Arrest Act (the "Act" or the "UAA"), enacted in 1951.⁵² Section 50 of section 5343-B of the Uniform Arrest Act provided: "A peace officer may stop any person abroad whom he has reasonable ground to suspect is committing, has committed or is about to commit a crime, and may demand of him his name, address, business abroad and whither he is going."⁵³ Two years later in 1953, "the General Assembly adopted and enacted into positive law a new Delaware Code," which "was the first annotated edition of the general statutory laws of Delaware."⁵⁴ That same year, Section 50 of section 5343-B of the UAA was moved to Section 1902 of Title 11,⁵⁵ where it remains today.⁵⁶

51. DEL. CODE ANN. tit. 11, § 1902. The original provisions of this section were first approved in 1951 and were amended in 1967. See 48 Del. Laws 304; 56 Del. Laws 152.

52. In 1951, the General Assembly amended Chapter 155 of the Revised Code of Delaware 1935, as amended, to provide for the Uniform Arrest Act. 48 Del. Laws 304 (1951).

53. Code 1935, § 5343-B; 48 Del. Laws 304 (1951). Section 50(2) of section 5343-B provided: "Any person so questioned who fails to identify himself or explain his actions to the satisfaction of the officer may be detained and further questioned and investigated." Section 50(3) provided: "The total period of detention provided for by this Section shall not exceed two hours. The detention is not an arrest and shall not be recorded as an arrest in any official record. At the end of the detention the person so detained shall be released or be arrested and charged with a crime."

54. *Schwalm v. Zachrais Constr.*, C.A. No. 00-06-090, 2002 WL 596808, at *11 (Del. Ct. Com. Pl.). The Report of the Revised Code Commission, quoted by Commissioner Maybee in *Schwalm*, explained:

The proposed code represents a revision of the statutes rather than a mere compilation or collection of existing laws. A number of statutes appearing in former codes have been omitted as obsolete after investigation disclosed that they had no remaining utility.... Statutes that were in conflict with the later adopted rules of court...were omitted or revised to give effect to such rules of court, since such rules have the force and effect of statutes and superseded statutes which were in conflict with the rules.... The commission has made no changes in the substance or meaning of the law as it has existed heretofore, except those of the character mentioned above and which the commission regarded as within the scope of its powers.

Id. (citation omitted). The law was "enacted into positive law on February 11, 1953 and approved by the Governor on February 12, 1953." *Id.* (citing Publishers' Preface to the 1953 Delaware Code Annotated).

55. DEL. CODE ANN. tit. 11, § 1902 (1953).

56. DEL. CODE ANN. tit. 11, § 1902 (2007).

In *State v. Deputy*,⁵⁷ the Delaware Supreme Court explained that the purpose of the UAA “was to legalize, without probable cause, the questioning and detention of persons where the express criteria of the statute are met.”⁵⁸ The Delaware Supreme Court has repeatedly held that the term “reasonable ground” has the same meaning as the words “reasonable and articulable suspicion,” as those words are used in *Terry*.⁵⁹ Although the UAA was enacted well before *Terry*, the Delaware Supreme Court has stated that Section 1902 represents a codification of the *Terry* principles.⁶⁰ The principles of *Terry*, as well as Section 1902 and the applicable body of case law explaining the labyrinth of searches and seizures, show that the trial judge’s analysis of an alleged infringement of constitutional rights begins at the point where the court determines that an encounter was no longer consensual.

The legislative history of Section 1902 reinforces this point. Section 1902 provides: “A peace officer may stop any person abroad, or in a public place, who the officer has reasonable ground to suspect is committing, has committed or is about to commit a crime, and may demand the person’s name, address, business abroad and destination.”⁶¹ The substance of this provision has not changed significantly since it was enacted. A slight modification came in 1967, which changed “whither” to “where” and added a comma.⁶² The gender neutral language was changed along with the other applicable provisions of the code globally in 1996.⁶³

Because Section 1902 had been part of the Uniform Arrest Act, an examination of the commentary to the UAA is helpful in determining the legislative intent behind Section 1902. Then-Harvard-Law-professor Sam Bass Warner served as the reporter for the Interstate Commission on Crime, which eventually drafted the Uniform Arrest Act.⁶⁴ Professor Bass explained each section of the Act in a comprehensive article.⁶⁵ His discussion of the “questioning and detaining suspects” provisions of the Act (“the Detention Section”), upon which Section 1902 is based, is useful.

The Detention Section was drafted to cover a gap in the law “to meet the modern needs for questioning and detaining suspects.”⁶⁶ According to Professor Bass:

57. 433 A.2d 1040 (Del. 1981).

58. *Id.* at 1042.

59. *E.g.*, *State v. Rollins*, 922 A.2d 379, 384 (Del. 2007); *Riley v. State*, 892 A.2d 370, 374 (Del. 2006); *Jones v. State*, 745 A.2d 856, 861 (Del. 1999).

60. *See Rollins*, 922 A.2d at 383.

61. DEL. CODE ANN. tit. 11, § 1902(a) (2007).

62. House Bill 125, which made these changes, was introduced by then-State representatives Michael N. Castle, J.P. Ferguson, W. Laird Stabler, Jr., and Mario Pagano on April 27, 1967. 56 Del. Laws 152, H.B. 125 (1967). It was referred to the Committee on the Judiciary and passed May 31, 1967 (22 yeas, 3 nays, 4 not voting, and 6 absences). *Id.* The Senate read the bill and referred it to the Committee on the Judiciary on June 5, and it was read a third time and approved (rules suspended) 17 yeas with 1 absence on December 12. *Id.* Section 1902(a) was replaced to provide: “A peace officer may stop any person abroad, or in a public place, who he has reasonable ground to suspect is committing, has committed, or is about to commit a crime, and may demand of him his name, address, business abroad, and where he is going.” Governor Terry signed the bill into law on December 26, 1967. 56 Del. Laws 152.

63. 70 Del. Laws 186 § 1. Thus, any statutory reference to this particular section of the Delaware Laws simply refers to the general gender neutral language of the statute and is not helpful to a legislative history.

64. Craig Hemmons, *Resisting Unlawful Arrest in Mississippi: Resisting the Modern Trend*, 2 CAL. CRIM. L. REV. 2 ¶ 23 (2000), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=235760; Sam B. Warner, *The Uniform Arrest Act*, 28 VA. L. REV. 315, 316 (1942) (hereinafter “Warner”).

65. *See Warner, supra* note 64.

66. *Id.* at 317.

The need for such a statute is clear. Every day large numbers of persons are questioned by police officers. The questioning, without immediate arrest, is essential to proper policing. A man climbing into a window late at night may be the householder who has forgotten his key and does not want to disturb his wife, or he may be a burglar. A man who looks round furtively, tries the door of an automobile, may or may not have a right to drive the car. Under such circumstances, a passing officer ought to question the suspicious behavior.⁶⁷

If the situations described by Professor Bass were to arise today, they certainly would provide the police with a basis to approach the individual and investigate. As explained by Professor Bass, however, before the Act, a legal question existed as to whether the officer's approach of the individual constituted an arrest.⁶⁸ The stop and identify section of the statute (i.e., Section 1902(a), (b), and (c)) was enacted to ensure that a suspect was not considered "arrested" when an officer conducted an investigation.⁶⁹ The Detention Section was designed to ensure the same.⁷⁰

Professor Bass's article also provided some insight into the boundaries of the statute. The limitation on questioning suspects "abroad" was not designed to "interfere with effective police work," nor was the statute intended to limit police questioning to a certain time of day.⁷¹ Further, an officer could "decide at once whether to let him go or to arrest and charge him with a crime."⁷² Together with the two-hour detention, the statute allowed an officer to "detain for further questioning and investigation a suspect who fails to identify himself or explain his actions satisfactorily...."⁷³ Professor Bass's discussion of the Detention Section concluded that the statute contained no constitutional infirmities and provided, reasonably, "for courteous treatment of the person questioned and for restraint for only a short period."⁷⁴ He also noted that "such questioning and detention is practiced regularly by the police in every large city of the United States...."⁷⁵

67. *Id.* at 320.

68. *See id.*:

Legalizing the questioning so that it does not constitute an arrest is to the advantage of both the police and the public. When an officer stops a person and arrests him, he is often in doubt whether these acts constitute an arrest. If they do, the officer is subjecting himself to the possibility of a suit for false arrest if he lets the suspect go instead of charging him with some misdemeanor and having the magistrate discharge him. And every time an innocent person is arrested, charged with a crime, and brought before a magistrate, he is humiliated, greatly inconvenienced, and probably put to considerable expense.

69. *See id.* at 321 ("This section...is limited to questioning suspects who are 'abroad'. . . since it is 'abroad' that police patrols encounter persons acting in a suspicious manner. A section authorizing the questioning of persons in their home is unnecessary, and its constitutionality seems doubtful.").

70. *Id.* at 322 ("[Section 2] provides that such detention is not an arrest and shall not be recorded as such in any official record."). *See also id.*:

Detention is, of course, something closely akin to what is ordinarily considered an arrest. But not calling it such, even when it includes taking the suspect to the police station for further inquiry, may prevent his humiliation. He will not have his name entered on the police blotter. If he is ever asked, when on the witness stand, seeking employment, or running for office, whether he has ever been arrested, he will still be able to give a negative answer.

71. *Id.* at 321.

72. *Id.*

73. *Id.* at 322.

74. *Id.* at 323-24. *See also id.* at 323 ("If the test of constitutionality is whether the questioning and detention is reasonable in view of modern conditions and needs, both statutes should certainly be constitutional.").

75. *Id.* at 323.

The legislative history of Section 1902 shows that the Section was enacted to help police avoid what used to be unclear constitutional issues regarding arrest.⁷⁶ Those concerns no longer exist today. Section 1902 enables an officer to perform his or her investigative duties without having to formally arrest an individual. The principles of Terry and Section 1902 work harmoniously. Section 1902 merely embodies the Terry principles.

B. The Community Caretaker Doctrine

Because Section 1902, in essence, “codifies the *Terry* principles,”⁷⁷ the natural question that follows is how the police can perform their basic duties without running afoul of *Terry*. The Delaware Supreme Court has answered this question, in part, through the adoption of the community caretaker doctrine.

In *Williams v. State*,⁷⁸ the Delaware Supreme Court adopted the community caretaker doctrine. As explained in *Williams*, the community caretaking function is an exception to a *Terry* stop.⁷⁹ When examined in the context of the encounter—stop—arrest continuum, the community caretaker doctrine falls somewhere in between an encounter and a stop. An encounter alone would not necessarily trigger the community caretaking function. At the moment the community caretaking function ends, *Terry* applies, and the officer must have a reasonable, articulable suspicion to continue to detain an individual. Evidence gathered during the community caretaking function of the police-citizen interaction, therefore, should be admissible.

Delaware’s community caretaker doctrine has three elements. First, there must be objective, specific, and articulable facts from which an experienced officer would suspect that a citizen is in apparent peril, distress or need of assistance. Second, if the citizen is in need of aid, the officer may take appropriate action to render assistance or mitigate the peril. Finally, once the officer is assured that the citizen is not in peril or no longer in need of assistance or that the peril has been mitigated, the community caretaking function has ceased.⁸⁰

IV. DELAWARE’S EXCLUSIONARY RULE EXCEPTIONS

Should a defendant’s Fourth Amendment rights be found to have been violated, evidence found as a result of the violation should be suppressed as “fruits of the poisonous tree.”⁸¹ Known as the exclusionary rule, this doctrine “acts as a remedy for a violation of a defendant’s right to be free of illegal searches and seizures” and “provides for the exclusion from trial of any evidence recovered or derived from an illegal search and seizure.”⁸² Both federal and Delaware law recognize

76. See also *Williams*, 962 A.2d at 220 (“The General Assembly based this provision on the Uniform Arrest Act, . . . which was intended to ensure that a suspect was not considered ‘arrested’ when an officer conducted an investigation.”).

77. See *Rollins*, 922 A.2d at 383.

78. 962 A.2d 210 (Del. 2008).

79. See *Williams*, 962 A.2d at 216-17.

80. *Id.* at 219.

81. *Wong Sun v. United States*, 371 U.S. 471, 484-85 (1963).

82. *Jones*, 745 A.2d at 872.

certain doctrinal exceptions to the exclusionary rule that permit the state to use evidence notwithstanding any constitutional infirmities with its acquisition. Federal law recognizes the independent source doctrine,⁸³ the inevitable discovery doctrine,⁸⁴ and the attenuation doctrine.⁸⁵ Delaware recognizes the independent source doctrine,⁸⁶ the inevitable discovery doctrine,⁸⁷ the attenuation doctrine,⁸⁸ and the exigent circumstances doctrine.⁸⁹ Delaware constitutional law, however, makes clear that if none of the foregoing doctrines applies, the evidence must be suppressed.⁹⁰ Particularly, “[i]f an officer attempts to seize someone before possessing reasonable and articulable suspicion, that person’s actions stemming from the attempted seizure may not be used to manufacture the suspicion the police lacked initially.”⁹¹ The Delaware Constitution’s emphasis on freedom from unreasonable searches and seizures makes drawing the line between a consensual encounter and a stop all the more important.

A. Outstanding Capiases and the Attenuation Doctrine

The attenuation doctrine may have particular applicability in cases where the illegally seized defendant has an outstanding capias. “The attenuation doctrine exception permits courts to find that the poisonous taint of an unlawful search and seizure has dissipated when the causal connection between the unlawful police conduct and the acquisition of the challenged evidence becomes sufficiently attenuated. Thus, even if there is an illegal search or seizure, direct or derivative evidence, such as consent, may still be admissible if the taint is sufficiently purged.”⁹² In *Lopez-Vazquez v. State*, the Delaware Supreme Court addressed the factors to be considered under the attenuation doctrine exception to the exclusionary rule. Particularly when the court is asked to determine whether evidence that is “impermissibly obtained may be sufficiently purged of the primary taint and admitted,” a court should address the following primary factors: (1) the temporal proximity of the illegality and the acquisition of the evidence to which the instant objection is made; (2) the presence of intervening circumstances; and (3) the purpose and flagrancy of the official conduct.⁹³

83. *E.g.*, *Murray v. United States*, 487 U.S. 533, 537 (1988); *Nix v. Williams*, 467 U.S. 431, 443 (1984); *Segura v. United States*, 468 U.S. 796, 805 (1984); *Costello v. United States*, 365 U.S. 265, 280 (1961).

84. *Murray*, 487 U.S. at 539; *Nix*, 467 U.S. at 444.

85. *Nardone v. United States*, 308 U.S. 338, 341 (1939); *Wong Sun v. United States*, 371 U.S. 471, 484 (1963); *Brown v. Illinois*, 422 U.S. 590, 602 (1975); *see also Jones*, 28 A.3d at 1055 (identifying this doctrine).

86. *Norman v. State*, 976 A.2d 843, 859 (Del. 2009); *Cummings v. State*, 765 A.2d 945 (Del. 2001); *Jones*, 745 A.2d at 873.

87. *Cook v. State*, 374 A.2d 264, 268 (Del. 1977); *Jones*, 745 A.2d at 873.

88. *Lopez-Vazquez*, 956 A.2d at 1293.

89. *Guererri v. State*, 922 A.2d 403, 406 (Del. 2007); *Blake v. State*, 954 A.2d 315, 318 (Del. 2008).

90. *Jones*, 745 A.2d at 873; *Lopez-Vazquez*, 956 A.2d at 1293.

91. *Jones*, 745 A.2d at 874.

92. *Lopez-Vazquez*, 956 A.2d at 1293 (citations and quotations omitted).

93. *Id.* (citing *Brown v. Illinois*, 422 U.S. 590, 603-04 (1975)).

In considering the first factor, the United States Court of Appeals for the Seventh Circuit has held that when the intervening circumstance is the discovery of an outstanding warrant, the first factor becomes less relevant, because “there is no chance that the ‘police have exploited an illegal arrest by creating a situation in which the criminal response is predictable”⁹⁴ Regardless, the “interval between the police misconduct and the acquisition of evidence is not itself dispositive and must be considered along with any intervening circumstances.”⁹⁵

The second factor is of particular significance when an officer discovers that the defendant had an outstanding warrant. The discovery of the warrant constitutes an intervening circumstance that provides independent probable cause that may operate to dissipate the primary taint.⁹⁶ Courts around the country agree that the discovery of an outstanding warrant is a “compelling” intervening circumstance that weighs heavily in favor of finding attenuation.⁹⁷

The third factor, the purpose and flagrancy of the official misconduct, “is tied to the rationale of the exclusionary rule itself.”⁹⁸ Evidence that the officer’s conduct is egregious or a flagrant abuse of police power may be dispositive. In *Brown v. Illinois*, for example, the United States Supreme Court found that the illegality of the officer’s conduct had a “quality of purposefulness” and that “[t]he manner in which Brown’s arrest was effected gives the appearance of having been calculated to cause surprise, fright, and confusion.”⁹⁹ The analysis of this factor is fact intensive.

Should the outstanding *capias* issue arise in a future Delaware case, the Delaware Supreme Court should consider holding that the attenuation doctrine applies to sufficiently purge the taint in most cases for the reasons discussed above.

94. *United States v. Green*, 111 F.3d 515, 522 (7th Cir. 1997) (quoting *United States v. Garcia-Jordan*, 860 F.2d 159, 161 (5th Cir. 1988)) (internal brackets omitted). *But see also id.*:

In intervening circumstance cases involving subsequent action on the defendant’s part, courts exercise great care in evaluating the later consent or confession to ensure that it is truly voluntary and not the result of the earlier, and unconstitutional, police action. In such cases, the dispositive question is whether the illegal act “bolstered the pressures for him to give the [statement], or at least vitiated any incentive on his part to avoid self-incrimination.” *Brown*, 422 U.S. at 605 n.12 In these cases, the time between the illegality and the consent is important because the closer the time period, the more likely the consent was influenced by the illegality, or that the illegality was exploited. (citations omitted).

95. *United States v. Ienco*, 182 F.3d 517, 522 (7th Cir. 1999) (citing *Green*, 111 F.3d at 521).

96. *Lopez-Vazquez*, 956 A.2d at 1293 (“There were no intervening circumstances that would have provided independent probable cause or would otherwise have operated to dissipate the primary taint.”).

97. *See United States v. Green*, 111 F.3d 515, 520-23 (7th Cir. 1997); *accord United States v. Simpson*, 439 F.3d 490, 495-96 (8th Cir.), *rehearing and rehearing en banc denied* (8th Cir. 2006); *Kansas v. Martin*, 179 P.3d 457, 463-64 (Kan. 2008); *Florida v. Frierson*, 926 So. 2d 1139, 1144 (Fla. 2006); *California v. Rodriguez*, 49 Cal. Rptr. 3d 811, 814-19 (Cal. Ct. App. 2006); *Idaho v. Page*, 103 P. 3d 454, 460 (Idaho 2004); *Fletcher v. Texas*, 90 S.W. 3d 419, 420 (Tex. Ct. App. 2002); *Louisiana v. Hill*, 725 So. 2d 1282, 1285 (La. 1998) (citing cases). *See also Ruffin v. Georgia*, 412 S.E. 2d 850, 852 (Ga. Ct. App. 1991) (addressing the issue in a postconviction context); *Washington v. Davis*, 669 P.2d 900, 901-02 (Wash. Ct. App. 1983) (reaching the same result but not applying *Brown*). *See generally Green*, 111 F.3d at 521:

It would be startling to suggest that because the police illegally stopped an automobile, they cannot arrest an occupant who is found to be wanted on a warrant—in a sense requiring an official call of “Olly, Olly, Oxen Free.” Because the arrest is lawful, a search incident to the arrest is also lawful. The lawful arrest of Avery [pursuant to a warrant outstanding] constituted an intervening circumstance sufficient to dissipate any taint caused by the illegal automobile stop.

98. *Green*, 111 F.3d at 523 (quoting *United States v. Fazio*, 914 F.2d 950, 958 (7th Cir. 1990)).

99. *Brown*, 422 U.S. at 605.

B. Abandonment Doctrine: A Species of Attenuation

In the 2011 *Jones* opinion, the Delaware Supreme Court addressed whether abandonment of evidence could also be an exception to the exclusionary rule.¹⁰⁰ In holding that it could be, the Supreme Court applied the attenuation doctrine to the facts surrounding the abandonment. That is, if the illegal seizure provoked the abandonment, the evidence must be suppressed unless the taint of the illegal action was sufficiently purged. In applying the attenuation factors to the drugs abandoned in *Jones*, the court found that the illegal stop and the abandonment of the drugs were contemporaneous.¹⁰¹ There was no intervening event that “severed the causal connection between when [the officer] seized [the defendant] and when [the defendant] abandoned the drugs.”¹⁰² Likewise, there was no additional action taken by the officer aside from the stop itself.¹⁰³ Accordingly, the court found that the abandoned drugs were fruits of the illegal seizure and such evidence should have been suppressed.¹⁰⁴

V. A PROPOSED FRAMEWORK FOR ANALYZING SEIZURE CASES IN DELAWARE

The Delaware Supreme Court has explained that the threshold inquiry in a seizure case is whether a seizure actually occurred.¹⁰⁵ Answering this question requires a court to determine (a) whether the initial encounter was consensual and (b) whether, and if so, where, the encounter changed from being consensual to investigatory or administrative under *Terry*.¹⁰⁶ The latter determination is the outward “shift in purpose” analysis. Practically, the shift in purpose may occur mere seconds later.¹⁰⁷ Determining the absence of consent or the communication of a desire not to cooperate is necessarily

100. *Jones*, 28 A.3d at 1055-57.

101. *Id.* at 1056.

102. *Id.*

103. *Id.*

104. *Id.* at 1057.

105. *Williams*, 962 A.2d at 214; *Lopez-Vazquez*, 956 A.2d at 1286; *Moore v. State*, 997 A.2d 656, 663 (Del. 2010).

106. Making this the threshold inquiry may present a secondary issue of whether the encounter itself was pretextual; however, the pretext argument is beyond the scope of this paper. *Whren* notes that for Federal Constitutional purposes, pretext does not trigger a Fourth Amendment violation and notes in passing that it may implicate the Equal Protection clause. *See Whren v. United States*, 517 U.S. 806, 813 (1996). *Cf. State v. Heath*, 929 A.2d 390 (Del. Super. Ct. 2006) (finding pretextual stops violate the Delaware Constitution). The contours of pretext remain an open question in the Delaware courts.

107. This “shift in purpose” problem has also been acknowledged but not reached, in *Meuhler v. Mena*, 544 U.S. 93 (2005), because it was not presented to the Court of Appeals. *See id.* at 102:

Mena has advanced in this Court, as she did before the Court of Appeals, an alternative argument for affirming the judgment below. She asserts that her detention extended beyond the time the police completed the tasks incident to the search. Because the Court of Appeals did not address this contention, we too decline to address it.

See also Illinois v. Caballes, 543 U.S. 405, 407 (2005) (“It is nevertheless clear that a seizure that is lawful at its inception can violate the Fourth Amendment if its manner of execution unreasonably infringes interests protected by the Constitution. A seizure that is justified solely by the interest in issuing a warning ticket to the driver can become unlawful if it is prolonged beyond the time reasonably required to complete that mission.”) (citation omitted). *Cf. Caldwell v. State*, 780 A.2d 1037, 1048 (Del. 2001) (“Whether a given detention is ‘unreasonably attenuated’ necessarily involves a fact-intensive inquiry in each case.”) (dealing with context of traffic stop).

a fact-intensive inquiry. If a court concludes that the initial encounter was consensual, then the “free to leave” analysis would only be triggered at the moment the encounter ceased to be consensual. If the defendant was not free to leave, the court will conduct a *Terry* analysis, followed (if necessary) by a probable cause analysis.

In evidentiary terms, the importance of making these determinations and creating the record is clear. All evidence obtained prior to the point where the encounter became a stop would be admissible and could be used by the officer in determining whether there was reasonable suspicion to detain the individual. Upon review at the trial or appellate level, the court would be better able to evaluate the context of the totality of the circumstances and assess whether the officer had a particularized and objective basis to suspect criminal activity.¹⁰⁸

This analysis is consistent with the Delaware Supreme Court’s jurisprudence and Delaware’s detention statute, 11 *Del. C.* § 1902. The Delaware Supreme Court has acknowledged that “[c]onsensual encounters are not deemed to be seizures and do not implicate the Fourth Amendment.”¹⁰⁹ In *Woody v. State*,¹¹⁰ the Delaware Supreme Court explained that “law enforcement officers may approach and ask questions of an individual, without reasonable articulable suspicion that criminal activity is afoot.”¹¹¹ This is the typical consensual encounter.¹¹² In response, the individual may consent to questioning, or he may decline. The refusal to answer “cannot form the basis for reasonable suspicion,”¹¹³ but it does mark the point at which the encounter ceases to be consensual. Similarly, the individual may simply ignore the police presence or walk or run away from the officers. The individual’s reactions and responses all may be part of the totality of the circumstances that will determine whether the officer had reasonable and articulable suspicion to detain the individual further. The same considerations are central to the federal “free to leave” analysis, which is consistent with Delaware’s approach of determining whether a reasonable person would have believed that he or she is not free to ignore the police presence.

The application of the foregoing principles of Delaware law may be summarized as follows:

- (1) Was the initial encounter consensual (mixed question of law and fact, determined by the totality of the circumstances)?
- (2) When, if at all, did the encounter shift from being consensual to something else (mixed question of law and fact based on the totality of the circumstances)? [See step 4]
 - (a) Evidence obtained during a consensual encounter is admissible.
- (3) Does the community caretaker doctrine apply (mixed question of law and fact, determined by the totality of the circumstances)?
 - (a) Evidence obtained during the community caretaking function of the encounter is admissible.

108. See *Lopez-Vazquez*, 956 A.2d at 1287-89 (discussing the analysis required to find reasonable suspicion).

109. *Quarles v. State*, 696 A.2d 1334, 1337 n.1 (Del. 1997) (citing *Bostick*, 501 U.S. at 439); accord *Woody v. State*, 765 A.2d 1257, 1263 n.3 (Del. 2001).

110. 765 A.2d 1257 (Del. 2001).

111. *Woody*, 765 A.2d at 1265; accord *Ross v. State*, 925 A.2d 489, 494 (Del. 2007) (“[T]he presence of uniformed police officers following a walking pedestrian and requesting to speak with him, without more, does not constitute a seizure under Article I, § 6 of the Delaware Constitution.”).

112. See *Hibel v. Sixth Judicial Dist. Ct. of Nev.*, 542 U.S. 177, 185 (2004) (“Asking questions is an essential part of police investigations. In the ordinary course a police officer is free to ask a person for identification without implicating the Fourth Amendment.”).

113. *Id.*

- (4) When did the stop occur? That is, when would a reasonable person in the defendant's position have been unable to ignore the police presence) (mixed question of law and fact, determined by the totality of the circumstances)? Courts will analyze all relevant facts and circumstances, including (i) whether the encounter occurred in a public or private place; (ii) whether the suspect was informed that he was not under arrest and free to leave; (iii) whether the suspect consented or refused to talk to the investigating officers; (iv) whether the investigating officer removed the suspect to another area; (v) whether there was physical touching, a display of weapons, or other threatening conduct; and (vi) whether the suspect eventually departed the area without hindrance.
- (a) Evidence obtained prior to the stop is admissible.
 - (b) For the stop to be admissible, the officer must have had a reasonable and articulable suspicion of criminal activity prior to the stop (mixed question of law and fact, based on the totality of the circumstances).
 - (c) If the stop is valid, evidence obtained because of the stop is admissible.
 - (d) If the stop is illegal, the evidence obtained is inadmissible unless an exception applies (independent source, inevitable discovery, exigent circumstances, attenuation).
- (5) Was there probable cause for the arrest (mixed question of law and fact, determined by the totality of the circumstances)?

Although the above chart breaks down the continuum to its component parts, the key to the analysis in any suppression motion is to determine the point where a shift in purpose occurred. To create the clearest record, parties should attempt to walk the court through the facts along the continuum, giving the trial judge the best opportunity to make all of the appropriate factual findings and weigh witness credibility. Practitioners and judges who follow this checklist will help to create a clear trial record and to ensure that any potential Fourth Amendment issues are properly preserved for appeal.

A. Applying the Continuum to the *Meades*, *Lopez-Vazquez*, and *Williams* Cases

The facts in *Meades*, as outlined in the opinion of the Delaware Supreme Court, are that four police officers, acting on a tip, approached two individuals sitting on a porch to inquire about drugs.¹¹⁴ A subsequent consensual search led the officers to find drugs, and a search of the mens' names revealed that one had an outstanding capias.¹¹⁵ The analysis presented to the trial judge focused on whether the men were seized at the time the officers approached.¹¹⁶ If the case had been assessed using the framework outlined above, however, the prosecution may have explored the factual circumstances surrounding the individuals' consent and whether and how the fact that four officers approached two individuals affected the situation.¹¹⁷ Application of a bright-line test for determining when the stop occurred may have permitted the admission of additional evidence for the court to consider. Even assuming that the Superior Court would have made the same

114. *Meades*, 947 A.2d at 1094-95.

115. *Id.* at 1095.

116. *Id.* at 1096.

117. It is unlikely the community caretaker doctrine would have applied in this situation, but factual determinations as to that aspect of the continuum could have been explored at the discretion of the prosecution and defense.

factual findings regarding the circumstances leading to the stop, the court could have applied the attenuation doctrine because the defendant had an outstanding warrant. Had the facts surrounding the police's conduct, namely, whether or not the conduct was egregious or a flagrant abuse of police power, been developed by the trial court, the record would have been more complete for appeal.

The record in *Lopez-Vazquez* may also have been different had the issue of consensual encounter been properly explored at the suppression hearing. First, the parties could have fully developed the record for the court to make a factual determination regarding the consent given upon the detective's first approach.¹¹⁸ Had the facts that the defendant began acting nervous, gave inconsistent responses to the officer's questions, and failed to answer certain follow-up questions been obtained during the consensual part of the encounter, those facts could have been considered as part of the totality of the circumstances when determining whether there was reasonable suspicion for the stop. The totality of the circumstances may have balanced differently depending upon the point on the continuum where the stop actually occurred.

In *Williams*, the court found that the encounter between the officer and the defendant was consensual, and so there was no Fourth Amendment violation.¹¹⁹ In addition, the court found that the community caretaking doctrine applied.¹²⁰ Even if the trial court had determined that the encounter was not consensual, the stop was invalid, or the community caretaker doctrine was inapplicable or improperly applied, the court could have applied the attenuation doctrine to reach the same conclusion. The intervening circumstance of discovery of the outstanding *capias*, weighs in favor of a finding of attenuation. The opinion also states that the time lapse between the initial encounter and the subsequent discovery of Williams' name was negligible.¹²¹ The second attenuation factor is of particular significance. Upon running Williams' name, the officer discovered an outstanding warrant. The discovery of the warrant constitutes an intervening circumstance that provides independent probable cause, which may operate to dissipate the primary taint. This factor weighs heavily in favor of a finding of attenuation. The third factor, the purpose and flagrancy of the official misconduct, also weighs in favor of a finding of attenuation, because nothing in the opinion suggests that the officer's conduct was egregious or was a flagrant abuse of police power.¹²² The attenuation doctrine is another arrow in the prosecution's quiver that may be used when a court finds constitutional infirmities with a stop.

B. *Moore v. State*: The Continuum Applied

In July 2010, the Delaware Supreme Court reviewed an appeal in which the Superior Court had applied the community caretaker doctrine. In *Moore v. State*,¹²³ police had responded to reports that a "large group of disorderly black males...were yelling and threatening each other," that "one person involved in the dispute may have been stabbed and fled the area," and that gunshots had been fired.¹²⁴ The factual record of the police action was developed at the suppression

118. *Lopez-Vazquez*, 956 A.2d at 1284. Again, it is unlikely the community caretaker doctrine would have applied to the facts in this case.

119. *Williams*, 962 A.2d at 216.

120. *Id.* at 221-22.

121. *Id.* at 213.

122. *Id.* at 221.

123. 997 A.2d 656 (Del. 2010).

124. *Moore*, 997 A.2d at 658-59.

hearing. In particular, the Superior Court found that the stop occurred when an officer asked the defendant to “place [his] hands on the car.”¹²⁵ The Supreme Court, in contrast, found that the stop occurred “when Sgt. Malone turned around in the middle of the street with lights flashing and pulled up in front of Moore and his companion, driving against the flow of traffic, and asked the two men to show her their hands.”¹²⁶ All evidence leading up to that point was therefore admissible for purposes of determining whether the officer had reasonable suspicion to support making the stop.

Turning next to the community caretaker doctrine, the Supreme Court found that the stop was reasonable under the doctrine and that aspects of the officer’s reasons for stopping and investigating were fully developed at the suppression hearing.¹²⁷ Upon finding the point at which the community caretaker doctrine no longer applied, the analysis turned to whether the officer had a reasonable, articulable suspicion of criminal activity at the time of the stop, — in this case, when the officer conducted a protective search.¹²⁸ Again, the trial judge made factual findings and determined that the totality of the circumstances revealed the requisite reasonable suspicion for the stop.¹²⁹ The Supreme Court agreed, and it affirmed the decision of the Superior Court to admit the evidence recorded from the frisk.¹³⁰

VI. CONCLUSION

As the Delaware Supreme Court has stated: “[T]he law concerning unreasonable searches and seizures reflects differing standards between federal and state constitutions and a labyrinth of factual situations.”¹³¹ Applying the correct standards to these factual situations is difficult, at both the trial and appellate levels. Identifying the proper standards before the trial court is key to presenting a case and creating a clear record. The “shift in purpose” demonstrated by the officer’s outward actions toward the defendant takes place seamlessly, and it is important for the trial judge to make factual findings regarding this shift. Understanding the key points along the continuum of Fourth Amendment action and applying the proposed framework for analysis may help ensure that Fourth Amendment issues are properly presented and preserved for appeal.

125. *Id.* at 664.

126. *Id.*

127. *Id.* at 665.

128. *Id.* at 666.

129. *Id.* at 667.

130. *Id.* at 667-68.

131. *Jones*, 745 A.2d at 873.

