Potential Liability of Physicians When Counselling Patients Regarding Exposure to Environmental Tobacco Smoke^{*}

I Introduction

Environmental Tobacco Smoke ("ETS"), also known as 'second-hand smoke', 'sidestream smoke' or 'passive smoke', is composed of the smoke emitted from the burning end of a lit cigarette, pipe or cigar together with the tobacco smoke exhaled by the smoker. Major authorities have established that exposure to ETS is harmful to both smokers and nonsmokers, particularly children and people with respiratory and heart disorders. This raises important questions for the medical practitioner when diagnosing whose symptoms may be associated with ETS. Physicians face potential liability if they do not take steps to advise their patients in a manner commensurate with their duty and the appropriate standard of care they are expected to meet.

Despite the well-known risk factors associated with ETS, many physicians are not taking smoking histories from parents when treating children. Fewer still are noting the results on childrens' charts. Physicians may feel it is intrusive to involve themselves in such a personal matter yet, paradoxically, most patients report that smoking cessation advice from physicians would be welcome¹. Whatever the cause, failure to take adequate measures to diagnose and counsel with respect to the potential harms of ETS may expose the physician to legal liability.

This opinion explores the responsibilities of a physician when counselling patients who smoke (and who may be exposing others to ETS) as well as when counselling patients who are themselves exposed to ETS. Because many of the patients in the second category are children, the physician must be aware of the special responsibilities the law imposes in those circumstances.

It is impossible, within the confines of a general opinion, to anticipate every ETS-related scenario which could give rise to physicians' liability. This opinion canvasses the present law as it relates to ETS and comments on the likely elements of an appropriate standard of care in this area, may assist physicians. As always, a physician who has particular questions or concerns about a specific case should contact their College or seek advice from the CMPA or independent legal counsel.

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¹ B.L. Frankowski et al. "Advising Parents to Stop Smoking: Pediatricians and Parents' Attitudes" 91 *Pediatrics* 296 (February, 1993). The studies in the Frankowski article were done as the dangers of ETS were becoming widely known in the general public.

II Tobacco Industry Personal Injury Litigation

It is not the purpose of this opinion to exhaustively review the history of tobacco-related litigation. However, a basic understanding of the background may be necessary to fully understand the context in which we analyze the physicians' duties when treating smoking patients, and so we undertake the following brief review.

In the early 1950s, the first studies suggesting strong causal relationships between smoking and disease in smokers were published. In 1954, Liggett & Myers, RJ Reynolds and Phillip Morris, three giant US tobacco companies, were sued in separate actions. One was dismissed promptly by the court for lack of evidence; the second was won by Phillip Morris in 1963, and the third, *Pritchard v. Liggett & Myers Co*², dragged on for 12 years before the plaintiff, financially exhausted, dropped the action. In fact, between 100 and 150 cases were filed against tobacco companies in 1953 and 1954. Of these, only 10 went any significant distance towards trial. Four were voluntarily dismissed, three resulted in jury verdicts for the manufacturers, and three ended in summary judgment for the manufacturer³.

Further attempts by smokers to sue the tobacco industry met with similar failures throughout the 1960s and 70s; establishing a familiar pattern. Because smoking-related disease was primarily a statistical assumption, plaintiffs could not prove with legal certainty that a particular company's product caused their disease. This 'causation problem' will be discussed later. Even beyond the legal obstacles, the tobacco industry's resources were virtually insurmountable by individual plaintiffs. So as one tobacco industry lawyer confirmed (circa 1988): "The aggressive posture we have taken... continues to make these cases extremely burdensome and expensive for plaintiffs' lawyers... To paraphrase General Patton, the way we won these cases was not by spending all of [RJR]'s money, but by making the other son of a bitch spend all of his." Although hundreds of cases were initiated in the US 'first wave', only a very few (perhaps 11) ever reached trial. In none of these were plaintiffs successful.

Following the 'first wave' of litigation, there were significant advances in public health and policy. The U.S. Surgeon General's Report on tobacco was published in 1964 (the report of the U.K. Surgeon General, published in 1962 and reached similar conclusions), and contained solid scientific evidence regarding the health hazards of tobacco. Such evidence continued to mount and the causation of smoking-related diseases soon reached wide-spread scientific and medical acceptance. This was followed by legislation in the U.S. requiring warnings on cigarette packs and restricting advertising.⁴ The legislation was amended in 1970 and 1984 to require stricter

² 350 F. 2d 479 (3d Cir. 1965).

³ F. J. Vandall, "The legal theory and the visionaries that led to the proposed \$368.5 billion tobacco settlement" 27 *Southwestern L. R.* 473.

⁴ 1965 U.S. Federal Cigarette Labeling and Advertising Act.

warnings. In Canada, the tobacco industry mounted a lobby against similar legislation and forestalled it by voluntarily agreeing to advertising restrictions and labeling requirements.

In addition U.S. tort law became increasingly familiar with product liability claims for products that were dangerous not because they were defective, but simply because they were hazardous even when manufactured as intended and used as specified (asbestos and coal dust are immediate examples). - So called strict liability, because a manufacturer of such a product could be held liable notwithstanding no negligence in its manufacture. With the development of strict liability, tort law shifted away from the requirements of foreseeability and carelessness. These developments offered renewed hope to tobacco litigants. Claims in the 'second wave' of litigation relied upon the theory of strict liability: (a) that the cigarettes failed the risk-utility test; (b) that warnings were inadequate; and (c) even with adequate warnings, the product was so dangerous that it should not have been put on the market. Despite the new claims, juries preferred to place the blame for smoking-related illnesses squarely on the smokers themselves.

By the end of the 1980s, despite overwhelming evidence that smoking caused a vast number of diseases and premature deaths, the tobacco industry's litigation record was still intact. One award was made against the Liggett group in favour of a dead woman's husband, but was later overturned on a technicality, and abandoned by the plaintiff.⁵

In 1990, a Mississippi Court ruled that smoking was the cause of Nathan Horton's death, but did not award damages, saying that Horton shared culpability with American Tobacco because he chose to smoke. This 'contributory negligence' principle, and the connected rule of 'voluntary assumption of risk', are the second line of defence for the tobacco industry in suits brought by smokers, along with the problem of proving causation already discussed.

A spate of lawsuits have been brought in several other countries as well, including England, Ireland, Finland and Australia. One Helsinki University professor of anatomy, Ismo Virtanen, who supported under oath the industry's claim that medical science has not proved that tobacco causes disease (and was well paid for his efforts), was later indicted for criminal perjury. Nonetheless, no tort action succeeded in those countries against the manufacturers.

There has only been one completed personal injury action against Canadian tobacco manufacturers.⁶ The case was dismissed on the basis that the limitation period had expired. A new class action has been launched in Ontario, and British Columbia has recently passed a statute to facilitate suits against the industry, and has itself launched an action under it; at least one B.C. class action is being prepared by Vancouver counsel as this opinion is being written. Ontario has announced that it intends to pursue legal action against the tobacco industry in the US courts, using the powerful RICO law there, although technical and procedural bars may restrict Canadian provinces' rights to seek relief in America.

⁵ Cipollone v Liggett Group 501 U.S. 504 (1992).

⁶ Perron v R.J.R. MacDonald (October 7, 1996, B.C.C.A.).

Massive changes occurred in the 1990s, when revelations of previously secret tobacco industry documents⁷ have led to more creative lawsuits based on the industry's campaign of deception. As of this writing, five individual smokers' suits have so far been successful at trial, and have led to damage awards. Three were reversed on review by higher courts, and the other two, large jury awards made in 1999 in California⁸ and Oregon⁹, await appeal.

Also very recently, two class action suit have been successfully brought to trial. On July 7th, 1999, a Florida Jury found the tobacco industry liable for damages that could run into the hundreds of billions of dollars¹⁰. However, damages have yet to be assessed, and the class could still be decertified on appeal. Earlier, stewardesses had settled out of court for around \$349 million (US), for damages caused by environmental tobacco smoke in aircraft¹¹. As a result of this nascent wave of trial successes, many commentators believe that the tide has turned in favour of plaintiffs.

Certainly the most successful anti-tobacco litigation yet launched has been the so called 'third wave' lawsuits filed by various states for, among other things, the recovery of health care benefits paid to smokers. This litigation, which spread to encompass nearly every state in the US, eventually resulted in a handful of individual settlements before the final, global \$206 billion dollar (US) settlement was announced last year. As noted, B.C. has launched a similar suit in its own courts, and Ontario is seeking to pursue one before an American judge. Because, however, the litigation in these state lawsuits is not based on personal injury principles, it is not relevant to the discussion here.

As will be demonstrated later in this paper, reference to personal injury actions by smokers against the tobacco industry is of limited utility when discussing liability for ETS related illnesses. Many of the defences that have served the tobacco industry well when defending against smokers' suits are completely inapplicable when it comes to non-smokers. Further, ETS suits may be brought against the party who causes a person to be exposed to ETS; for instance a restaurant, a workplace, an airline, or even a parent. Unlike tobacco companies, these defendants do not have the massive financial resources to employ the same kind of 'scorched earth' litigation preferred from time to time by the tobacco industry.

III The Basic Principles of Negligence: A Physician's Duty and Standard of Care

⁷ The documents have come to light through whistle-blowers and through the states' lawsuits filed since 1994.

⁸ Henley v Philip Morris Inc., et al₂ (February 9, 1999) Sup Ct of CA, SF Case No. 995172.

⁹ Joann Williams-Branch v. Philip Morris, Inc., (March 30, 1999) No. 9705-03957, (Circuit Court for the County of Multnomah (Portland)).

¹⁰ Engle et al. v. R.J. Reynolds Tobacco Company, et al. (July 7, 1999) No. 94-08273 CA-22 (Florida: 11th Judicial District).

¹¹ This case, brought by stewardess Norma Broin as representative plaintiff, is discussed later in this paper.

Cases involving a failure to diagnose, or a failure to advise of medical risks, can be assessed under three legal 'causes of action': breach of contract, negligence, and breach of fiduciary duty. Practically speaking, however, a physician's duties in contract are identical to his or her duty of care in negligence law. While the argument could be made that a physician also owes a fiduciary duty, particularly to minor patients, such a duty would be largely superseded by child-protection statutes, as will be discussed later in this opinion. At any rate, Canadian courts have lately expressed a clear preference to view cases of physician malpractice as incidents of alleged negligence¹². This opinion will therefore be generally confined to that perspective.

It is trite law to say that a physician owes a duty of care to a patient. That duty arises upon the formation of the doctor-patient relationship and has many facets: the duty to exercise care in attending upon the patient; in diagnosing, advising and treating the patient; in making referrals; and in obtaining informed consent. If a patient alleges negligence on the part of the physician, the patient will be required to prove that:

- a. at the material time the physician owed a duty of care to the patient,
- b. the physician breached the duty of care by failing to maintain the requisite standard of care owed to the patient, and
- c. the patient suffered an injury or loss which was both factually and foreseeably caused by the acts or omissions of the physician.

(a) Duty of Care

i. Reasonable Foreseeability:

A physician's duty of care as it relates to his or her acts or omissions, will be said to exist only where the event giving rise to the harm suffered by the patient was a reasonably foreseeable consequence of such acts or omissions. For example, where the injuries of a patient are the result of the patient's reckless impulse which could not reasonably have been foreseen, the attending physician will not be said to have owed a duty of care to prevent the injury.¹³

ii. Duty to Diagnose:

¹² Per Maclachlan J. in Arndt v. Smith, [1997] 2 S.C.R. 539 at para. 38, rejecting an application of fiduciary law:

^{...}I would reject the alternative approach of fiduiary obligation proposed by the respondent... I see no reason to depart from the approach which considers the failure of a physician to advise of medical risks under the law of negligence relating to duty of care, absent special circumstances like fraudulent misrepresentation or abuse of power for an unprofessional end: see *Reibel v. Hughes, supra; Norberg v. Wynrib...*

¹³ See University Hospital Board v. Lepine (1966), 57 W.W.R. 5 (S.C.C.).

A physician owes a duty to exercise reasonable care, skill and judgment with respect to all medical care and treatment of patients. When a court is assessing the extent of this duty, a physician will only be held to the standard of a reasonable physician of like training, qualifications and experience. In making a diagnosis, a physician must exercise reasonable care, skill, and judgment.¹⁴ The physician must, if possible, take a complete history of the patient,¹⁵ conduct a proper examination,¹⁶ order any necessary tests,¹⁷ and consult with or make a referral to colleagues where appropriate.¹⁸ Where sufficient information is not obtained from the patient, an examination is cursory or incomplete, or necessary diagnostic tests are not performed, the physician is likely to be held liable in negligence for a faulty diagnosis. The duty to exercise reasonable care in diagnosis means that practitioners cannot rely only on what they are told by patients, but must make any reasonable inquiries.

iii. Duty to Third Parties:

In the majority of medical negligence cases, the physician is sued for an alleged breach of the duty owed *to the patient*. However, in some situations a physician may also owe a duty of care to someone other than the patient, and may be held liable for negligence which causes foreseeable injury to that third party. Although the duty of health practitioners to warn or otherwise protect third parties from the wilful or dangerous conduct of their patients is an emerging and still uncertain area of law, there is little doubt that a duty is owed where the threat of harm posed by a patient is serious, and there are reasonable grounds to believe that the patient may carry out the threat. The appropriate steps required of a physician will depend upon the particular circumstances, but may include undertaking the patient's involuntary civil commitment, warning identifiable persons who are threatened, or contacting the appropriate authorities. If a practitioner fails to take such steps and a third party is injured, the practitioner may be liable for any injuries suffered.

There are two, quite distinct, situations in which the physician's duty to warn can be said to extend to third parties. The first broad category of a physician's duty to third parties may be examined in the context of recent jurisprudence addressing the issues that arise where a seropositive patient refuses to inform his or her sexual partners of the risk of infection.¹⁹

¹⁹ See, for example, *Pittman Estate* v. *Bain* (1994), 112 D.L.R. (4th) 257 (Ont. Gen. Div.).

¹⁴ Reibl v. Hughes (1980), 114 D.L.R. (3d) 1 (S.C.C.); Laferriere v. Lawson (1991), 78 D.L.R. (4th) 609 (S.C.C.).

¹⁵ "It is a doctor's duty to take a careful and thorough history, but that need not always amount to a cross-examination": *Lankenau* v. *Dutton* (1986), 37 C.C.L.T. 213 (B.C.S.C.) aff'd (1991), 7 C.C.L.T. (2d) 42 (B.C.C.A.), leave to appeal to S.C.C. refused [1991] 6 W.W.R. lxvii (note) (S.C.C.).

¹⁶ See, for example, *Law Estate* v. *Simice* (1994), 21 C.C.L.T. (2d) 228 (B.C.S.C.) aff'd [1996] 4 W.W.R. 672 (B.C.C.A).

¹⁷ See, for example, *Trainor* v. *Knickle*, [1996] P.E.I.J. No. 55 (QL) (S.C.)

¹⁸ Joshi (Guardian ad litem of) v. Woolley (1995), 4 B.C.L.R. (3d) 208 (S.C.).

Although contact tracing should ordinarily be done with the co-operation and consent of the patient, the doctor may, at the very least, be justified in breaching confidentiality.²⁰ The 1988 position statement of the Canadian Medical Association provides that such disclosure may be justified when all of the following conditions are met: the partner is at risk of infection with HIV and has no other reasonable means of knowing of the risk; the patient has refused to inform his or her sexual partner; the patient has refused an offer of assistance by the physician to do so on the patient's behalf; and the physician has informed the patient of his or her intention to disclose the information to the partner.²¹ Such a duty has also been recognized in some American cases which have held that a physician may be liable for failing to warn family members of a patient's contagious disease.²² The difficulty for physicians lies in resolving the tension between preventing the possibility of serious harm to third parties and maintaining the patient's right to confidentiality.²³

A physician may be liable under the second category of duty to third parties where, for example, the physician fails to advise a patient to refrain from driving while taking medication and a third party is injured in the resultant motor vehicle accident. In the case of *Wenden* v. *Trikha*²⁴, a voluntary psychiatric patient absconded from the hospital and drove through a red light, injuring another motorist. In absolving the hospital and psychiatrist from liability, on the ground that they had not been negligent, the trial Judge held that two conditions must be satisfied. First, the relationship between the psychiatrist and the patient must be such as to impose a duty on the former to control the conduct of the latter and secondly, sufficient "proximity" must exist between the psychiatrist and the third party in danger.²⁵ Although in many cases only the patient is injured,²⁶ it is likely that if a third party were injured (such as a passenger or another motorist) there would be sufficient proximity

²⁰ This has been accepted by the Canadian Medical Association. Its 1988 position statement provides that disclosure to a spouse or current sexual partner may not be unethical and, indeed, may be indicated when physicians are confronted with an HIV-infected patient who is unwilling to inform the person at risk.

²¹ Canadian Medical Association, "Acquired Immunodeficiency Syndrome: A CMA Position" (1989) 140 C.M.A.J. 64A.

²² See, for example, *Bradshaw* v. *Daniel*, 854 S.Q. 2d 865 (Tenn. 1993) (Court recognizing cause of action against doctor for failure to warn wife of patient who was suffering from Rocky Mountain Spotted Fever).

²³ The right of a physician to breach confidentiality in circumstances where harm to third parties might result from maintaining the confidence has recently been upheld by the Supreme Court of Canada, which held that disclosure of confidential information from the doctor/patient relationship by a B.C. psychiatrist was justified in order to prevent foreseeable harm. See *Smith* v. *Jones* (25 March 1999), File No. 26500 (S.C.C.) for a discussion of privilege and the public interest.

²⁴ (1991), 116 A.R. 81 (Q.B.), aff'd (1993), 14 C.C.L.T. (2d) 225 (C.A.), leave to appeal to S.C.C. refused (1993), 159 N.R. 80 (note) (S.C.C.). See Kleinman, "Confidentiality and the Duty to Warn" (1993) 149 C.M.A.J. 1783.

²⁵ Discussing Tarasoff v. Regents of the University of California, 551 P.2d 334 (Cal. 1976).

²⁶ See, for example, *Joyal* v. *Starreveld* (1996), 37 Alta. L.R. (3d) 19 (Q.B.); *Zawada* v. *O'Kelly* (1995), 179 A.R. 1 (Q.B.) appeal dismissed [1997] A.J. No. 1078.

and foreseeability of harm to justify finding that the physician owed the third party a duty of care.²⁷

iii. Duty to Children:

A statutory duty to disclose confidential information is contained in child protection legislation. If a physician or, indeed, anyone, has reasonable and probable grounds to believe that a child is in need of protection (for example, is a victim of physical or sexual abuse), the physician *must* report this to the proper authorities, even though it may involve disclosing confidential information. As with the duty to report unfit drivers, failure to report suspected cases of child abuse may result in both criminal²⁸ and civil²⁹ liability. These legislative requirements lend support to the proposition that a physician's duty of care to third parties may be increased when the third party is a child.

iv. Expectant Mothers

While it can be regarded as possible that an expectant mother's exposure to ETS can also harm her unborn child notwithstanding lack of direct maternal smoking, the causation analysis in such a case would be complex and outside the scope of this general opinion on the topic³⁰.

Nevertheless, it remains a legal possibility that a person responsible for exposing a pregnant woman to ETS might be held liable if it can be demonstrated that the exposure caused harm to a child³¹. However, the possibility that liability might be established against the physician for failing to warn an expectant mother that ETS exposure can harm the child, is extremely remote. To show that a physician was liable, it would be necessary to demonstrate that pre-natal exposure to ETS (as opposed to post-natal exposure to ETS or direct pre-natal maternal smoking)was the

²⁷ Support for this might well be found in the cases involving failure by a doctor to notify the motor vehicle authorities of a patient's unfitness to drive, in which the physician has been held to be liable to a third party injured as a result of the patient's driving: see *Toms* v. *Foster* (1994), 7 M.V.R. (3d) 34 (Ont.C.A.); *Spillane (Litigation Guardian of)* v. *Wasserman* (1992), 42 M.V.R. (2d) 144 (Ont. Gen. Div.) appeal allowed in part with respect to apportionment of liability [1998] O.J. No. 2470.

²⁸ See, for example, *R*. v. *Cook* (1985), 46 R.F.L. (2d) 174 (Ont. C.A.); *R*. v. *Stachula* (1984), 40 R.F.L. (2d) 184 (Ont. Fam. Ct.)

²⁹ There are no Canadian cases directly on point. However, an analogy can be drawn with the case of J.(L.A.) v. J.(H.) (1993), 102 D.L.R. (4th) 177 (Ont. Gen. Div.), in which a mother was held liable for breach of fiduciary duty towards her daughter for failing to take steps to report or prevent the sexual abuse of the daughter by the mother's common law husband.

³⁰ See for instance F.D. Martinez et al. "The Effect of Paternal Smoking on the Birthweight of Newborns Whose Mothers Did Not Smoke," *Am Jour. Pub Health* (September, 1994) 84(9):1489-1491.

³¹ This might be argued in a workplace situation, with a large employer, where a class of persons could demonstrate causation on a statistical basis rather than that of narrow factual causation.

cause of an ailment manifest after birth³². However, any such a finding is in turn considerably complicated by the issues of maternal responsibility (and immunity under tort law), discussed in the companion opinion on smoking cessation.

It is conceivable that direct-causation problems such as these might be circumvented by a class action suit. Many common law jurisdictions, including British Columbia, allow proof of harm to be established on a statistical or epidemiological basis. While the law is in its infancy, it is not beyond the realm of possibility that non-smoking women who have had low-birthweight babies, and their children, might bring a suit as a class against counselling physicians as a class. They could then rely on studies indicating the degree to which patients received cessation counselling, coupled with the correlative statistics of low-birthweight related disease. It is noteworthy, though, that in the US where both tobacco-based actions (and class action lawsuits generally) have a long history, there has not been a single such proceeding brought against physicians related to tobacco.

(b) The Standard of Care

Once the patient has established that a duty of care existed, the patient must prove that there was a breach of that duty: that the required standard of care was not met by the practitioner. Most of the jurisprudence discusses the standard of care owed by physicians to their patients in the context of treatment; however, the standard is just as high when physicians perform an examination or reach a diagnosis. How is the required standard of care defined?

Generally, a physician is expected to act in the same way as a reasonable physician with comparable training would act in the same circumstances; that is, the physician must meet the standard of care of a "reasonably competent practitioner".³³ Accordingly, primary care physicians will be required in law to meet the standard of care of a reasonably competent general practitioner as of the date of examination or treatment. Expert evidence of the standard must be adduced before the court unless the alleged error is so obvious that a lay person can determine that the practice or conduct was negligent without the necessity of resorting to expert evidence. Failure to meet the standard may result in a court finding against the physician for professional negligence.

i. Duty to keep abreast of current scientific knowledge:

The requisite standard of care owed by a physician to a patient necessarily relates to a specific point in time. In particular, the standard of care evolves with the development of knowledge in the scientific community and in the profession. Physicians must respond to changing

 $^{^{32}}$ We have not found reference to research causally linking pre-natal ETS exposure to specific harm in children; the available literature rather seems to suggest ETS exposure as a risk factor in low birthweight, which in turn is a risk factor in certain ailments, particularly respiratory ailments. Nevertheless it is difficult to conceive of a case where such exposure to lead to the establishment of causation in a legal sense - see discussion of causation, *infra*.

³³ Wilson v. Swanson, [1956] S.C.R. 804. See also Crits v. Sylvester (1956), 1 D.L.R. (2d) 502, affirmed [1956] S.C.R. 991.

circumstances and keep up with new developments since the standard of care is determined with reference to knowledge the health practitioner *ought reasonably to have had* at the material time, namely, at the time when the alleged negligence occurred.³⁴

For example, in *ter Neuzen* v. *Korn* (*"ter Neuzen"*),³⁵ a recent case before the Supreme Court of Canada, this principle was applied in the context of artificial insemination procedure. The patient in *ter Neuzen* participated in the defendant physician's artificial insemination program for a period of four years at a time when such participation was not considered to put anyone at risk of contracting the human immunodeficiency virus ("HIV"). Accordingly, the patient received no warnings from the attending physician about the risk of HIV infection. Although the patient was later found to have been infected by HIV during the course of the program, her negligence claim was dismissed by the Court since the physician complied with the standard procedure at the pertinent time and could not reasonably have been expected either to have discontinued the program or to have warned her of the risk.

It should be noted, however, that in some circumstances the fact that the health professional met the requisite standard of care will not provide protection from a negligence claim. This will be the case where the court finds that the standard practice itself is negligent in that it fails to adopt "obvious and reasonable precautions which are readily apparent to the ordinary [person]".³⁶ Therefore, to reach any conclusions with respect to a physician's standard of care as it relates to ETS, it is necessary to determine both the current state of knowledge of the scientific and medical communities and the state of knowledge of the average person.

(c) Injury and Causation

It is not sufficient that the patient or third party establish that a duty of care existed and that the standard of care was not met by the physician. For a negligence action to be successful, the injured party must also prove that he or she suffered an injury which was caused by the practitioner's acts or omissions. This requirement is two-fold: the practitioner's conduct must have caused the injury on a balance of probabilities, and the injury must be sufficiently proximate to the breach of duty.

i. Factual Causation:

Recent decisions of the Supreme Court of Canada have settled the issue of proof of causation of patient injuries arising from a physician's negligence, although the mechanics of application of these principles in individual cases may still be somewhat controversial. In *Snell v. Farrell*, the Court rejected the notion that a plaintiff must prove with scientific certainty that negligence

³⁴ See W.C.J. Meredith, *Malpractice Liability of Doctors and Hospitals* (Toronto: Carswell, 1956); E.I. Picard & G.B. Robertson, *Legal Liability of Doctors and Hospitals in Canada*, 3rd ed. (Toronto: Carswell, 1996).

³⁵ [1995] 3 S.C.R. 674.

³⁶ See Girard v. General Hospital of Port Arthur, June 27, 1997, File No. 2332/91.

caused the plaintiff's injuries. The Court upheld the traditional tort law test that a plaintiff must still prove causation of injuries according to the civil standard of a balance of probabilities³⁷. The Court also held that in certain circumstances, the evidence may justify an inference of causation where it is apparent that the negligence may have materially contributed to the development of an injury. In *Lawson v. LaFerriere³⁸*, the Supreme Court of Canada stated that there is no compensation for injuries based upon loss of a chance, i.e., where it is only possible that an injury flowed from the negligence or where, absent the negligence, there was a chance that the risk of injury may have been averted.³⁹

In *Rothwell v. Ray*⁴⁰, the Ontario Court of Appeal provided clarification of the plaintiff's burden in proving causation, especially where there may be controversy underlying the issue of scientific causation, as is the case with ETS. In that case, the Court held that the plaintiff must meet both a general and specific test of causation. In the former, there must be evidence proving on a balance of probability that the event flowing from the alleged negligence *can* cause the injury complained of. Only if this onus is met, does the Court go on to consider the second test of whether the negligence alleged *did* cause the injury complained of in the particular case.

However, in a recent decision of the Newfoundland Court of Appeal⁴¹ the Court held that negligence may be found "if the evidence adduced is such that, in the absence of evidence to the contrary, a reasonable inference can be made that the tortious acts of the defendant substantially contributed to the injury".⁴²

Wherever along the causation spectrum the analysis would fall, however, it is clear that the greatest bar to a potential plaintiff would lie in proving that it was the act or omission of the physician that caused or contributed to the harm from ETS exposure.

³⁸ [1991] 1 S.C.R. 541.

40 (1990) 76 D.L.R. (4th) 280.

⁴² *Ibid*. at 50.

³⁷ Recent medical negligence decisions have applied the "robust and pragmatic" approach to causation adopted by the Supreme Court in *Snell* v. *Farrell* (1990), 72 D.L.R. (4th) 289. See *Dann* (*Litigation Guardian of*) v. *Chiavaro* (30 May 1996), Docket No. 2854/88, [1996] O.J. No. 1912 (Q.L.) (Gen. Div.); Joyal v. Starreveld (1996), 37 Alta. L.R. (3d) 19 (Q.B.); *Briffett* v. *Gander & District Hospital Board* (1992), 326 A.P.R. 271 (Nfld. T.D.) aff'd (1996), 428 A.P.R. 271 (C.A.).

³⁹ The 'loss of chance' analysis eventually rejected in *Lawson* was a Franco-Belgian idea employed in Quebec because of its similar civil law system. The reasoning employed by the Supreme Court confirmed that the rules of causation are the same in Quebec as in common law jurisdictions. The court held that, if the 'loss of chance' produced *real damage* (i.e., if a cancer patient lost his chance at a cure via misdiagnosis and suffered mentally as a result), then the *damage* (i.e. the mental distress) could be compensated for. Conversely, if all that was lost was a 'chance', the court was in no position to 'pro-rate' an award based on that lost chance, unless the chance rose to the level of likelihood on the balance of probabilities.

⁴¹ Taylor v. Hogan (1994), 370 A.P.R. 37 appeal allowed with respect to amount of damages [1998] N.J. No. 14.

ii. Proximity:

The requirement of proximity is based on the general principle of negligence law that a defendant is only liable for those injuries which were a reasonably foreseeable result of the defendant's acts or omissions. "Reasonably foreseeable" injuries in this context have been defined as including those consequences which would occur to the mind of any reasonable physician, which he or she would not brush aside as far-fetched.⁴³

iii. Speculative Injuries:

Courts are increasingly being asked to deal with "speculative" injuries, where exposure to toxic substances such as ETS has created the *possibility* of some future disease such as cancer. Compensation for such injuries that cannot be proved at the time of trial has been provided on the basis of increased risk of cancer, fear of cancer and future disease risk coupled with some present harm.

On the present state of tort law in Canada, plaintiffs must prove on a balance of probabilities that the physician's negligence did cause some injury to the plaintiff. In the absence of such proof, a claim based entirely upon speculation or chance, will fail. Where, however, a plaintiff establishes that a physician's negligence has caused some injury, a Court may award damages on the basis of future events or complications, the occurrence of which does not meet the threshold test of probability, where such future events are a reasonable or substantial possibility. Canadian courts have not, however, gone as far as American courts in awarding compensation on the basis of a possibility of future occurrence.

Some American courts have provided compensation for increased risk of cancer upon proof of a reasonable medical certainty that the disease will result, ⁴⁴ while others have implied a willingness to award damages for future risk of cancer based on a showing of a greater than 50 percent probability of developing the disease.⁴⁵ Other American courts appear more willing to award damages, at least against manufacturers, for a present fear of future cancer developing than for the risk of developing such a disease. Under this head of damages, a plaintiff may be required to show that: (a) there is a serious fear of cancer; (b) the fear was caused by exposure to some substance for which the defendant is responsible; and (c) the fear of contracting cancer because of such exposure is reasonable (i.e. there is a scientifically valid basis to conclude that the risk is substantial).⁴⁶ Finally, some courts have validated an approach closely akin to a

⁴³ See, for example, *Zamparo* v. *Brisson*, (1981) 120 D.L.R. (3d) 545 (Ont. C.A.); *Leonard* v. *Knott*, [1980] 1 W.W.R. 673 (B.C.C.A.).

⁴⁴ See, for example, *Sterling* v. *Velsicol Chemical Corp.*, 855 F.2d 1188, 1204 (6th Cir. 1988).

⁴⁵ R.L. Eshelman, "Speculative Damages and Toxic Torts: Good Intentions Make Bad Law" (1999) 41(5) For the Defense 17 at 21, discussing *Hagerty* v. *L&L Marine Services, Inc.*, 788 F.2d 315 (5th Cir. 1986).

⁴⁶ See Deleski v. Roymark Industries, Inc., 819 F.2d 377 (3d Cir. 1987); see also Adams v. Johns-Manville Sales Corp., 783 F.2d 589 (5th Cir. 1986).

traditional emotional distress analysis, holding that when a plaintiff can demonstrate some existing harm from a defendant's actions, damages for increased risk of cancer are available. For example, in the asbestos realm, it has been held that a plaintiff could recover for future risks that "reasonably are to be expected to follow, so far as human knowledge can foretell".⁴⁷

(d) Contributory Negligence

Where more than one party is at fault for the patient's injuries, the doctrine of contributory negligence applies. Legislation in each province and territory permits the court to determine the degree of responsibility of each party for the injury.⁴⁸ In the context of medical treatment, patients have certain responsibilities including a duty to provide information,⁴⁹ to follow instructions,⁵⁰ and generally to act in their own best interests.⁵¹ In their interactions with physicians they are expected to meet the standard of care of a reasonable patient. If they do not, and the breach of this standard is the factual and proximate cause of their injuries, they are contributorily negligent. Pursuant to these principles, where a patient is advised of the dangers of exposing his or her child to ETS but fails to take any steps to minimize the risks, he or she may be held to be contributorily negligent for injury suffered by the child.

It should be noted that parents have a fiduciary duty to act in the best interests of their children and will be held to the standard of a reasonable parent. In circumstances where a child claims against a physician for negligent treatment, it would be open to either the child or the physician to claim over against the parents on the basis that the parents' conduct caused or contributed to the child's injury.

IV Environmental Tobacco Smoke (ETS)

(a) Exposure to ETS

ETS constitutes one of the most, if not the most, serious sources of indoor air pollution in North American homes. ETS diffuses quickly throughout buildings under most conditions, and generally persists as an environmental pollutant long after smoking has ended.⁵²

⁵⁰ See Crossman v. Stewart (1977), 5 C.C.L.T. 45 (B.C.S.C.).

⁵¹ *Moore* v. *Large* (1932), 46 B.C.R. 179 at 183 (C.A.).

⁴⁷ See Anderson v. W.R. Grace & Co., 628 F.Supp. 1219 (D.Mass. 1986).

⁴⁸ See, for example, *Negligence Act*, R.S.O. 1990, c. N.1.

⁴⁹ See *Leadbetter* v. *Brand* (1980), 37 N.S.R. (2d) 581 (T.D.). Duty in this sense is not used as the source for an independent tort (i.e. a physician can't sue a patient because the patient fails to meet the duty), but rather as the source for a finding of contributory negligence. This 'duty', in other words, is owed by the patient to him- or herself.

⁵² U.S. Environmental Protection Agency, *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*, EPA/600/6-90/006F (Washington, D.C.: Office of Research and Development, Office of Air and Radiation, December 1992).

There is no doubt that exposure to ETS is widespread, especially among children:

Several recent large population surveys have illustrated that a sizeable proportion of the U.S. population is regularly exposed to ETS. A recent study by the U.S. National Center for Health Statistics (NCHS) found that among adults, 20 percent of never-smokers and 23 percent of former smokers were regularly exposed to ETS at home and/or work. In another very large NCHS survey it was determined that 43 percent of US children aged 2 months to 11 years lived in homes with at least one smoker and that 37 percent of adult nonsmokers either lived in homes with at least one smoker or reported ETS exposure at work.⁵³

In addition, the U.S. Centers for Disease Control reports that almost 90 percent of households with children allowed smoking in the home, and that one third of adult smokers had children in their homes.⁵⁴ The American Council on Science and Health concludes that at "at least 15 million children are exposed to ETS in the home on a regular basis".⁵⁵ Scaling these figures for Canada, it can be assumed that between one and two million children in Canada face this level of exposure.

⁵³ ACSH, *Environmental Ttobacco Smoke: Health Risk or Health Hype?* (New York, American Council on Science and Health, May 1999) at p. 10-11.

⁵⁴ Centers for Disease Control and Prevention, "State-specific prevalenceof cigarette smoking among adults, and children's and adolescents' exposure to environmental tobacco smoke" 46 MMWR 1038 (Vol. 44, 1997); similar statistics have been reported for Canada (only 19% of homes free from ETS: National Clearinghouse on Tobacco and Health, "ETS in Home Environments" (1999)).

⁵⁵ ACSH, *supra* at p. 11.

(b) Some Factors Affecting ETS "Knowledge Issues"

Another important fact about ETS for the purposes of this opinion is that persons exposed to ETS may tend to 'under-report' their own exposure. Some people, for instance, who report no exposure to ETS in fact show low concentrations of cotinine in their urine, indicating that they have, indeed been exposed.⁵⁶ Also, there is now evidence emerging to suggest that parents may under-report the degree to which they are exposing their children to smoke, and that a high percentage of pregnant women who tell their doctors that they have quit smoking have in fact not.⁵⁷ Even among pregnant women who quit smoking, the majority restart after giving birth⁵⁸.

The president of the Australian Medical Association was quoted as saying that some smoking mothers were being "criminally irresponsible" by placing their own concerns above those of their children.⁵⁹

As will be discussed later, many smokers (and some non-smokers) believe that the risks of ETS are exaggerated, and most are unaware that particular problems (such as ear infections in children) may be related to smoking. This persists despite increasing coverage in the popular media.⁶⁰

(c) Health Effects of ETS in Children - Scientific Awareness

Second hand smoke contains more than 4,000 substances, more than 40 of which are known to cause cancer in humans or animals and many of which are irritants⁶¹. It has been linked with lung cancer, heart disease, and a series of conditions of particular concern to children including:

- respiratory tract infections such as pneumonia and bronchitis;
- reduced lung function and symptoms of respiratory irritation;

⁶¹ See Appendix B, *infra*.

⁵⁶ R. Bono and R. Russo, "Involuntary exposure to tobacco smoke in adolescents: urinary cotinine and environmental factors", 51 *Arch. Environ.*. *Health* 127 (Vol. 2 1996).

⁵⁷ Prof. Judith Lumley, from La Trobe University's Centre for Mothers and Children's Health, reported to a conference of the Australian Medical Association that urine tests reveal that up to 49 percent of women who said they had stopped smoking during pregnancy lied: Sarah Dent, "Butt out for babies", *Herald Sun* 05/25/99.

⁵⁸ B.L. Frankowski et al. "Advising Parents to Stop Smoking: Pediatricians and Parents' Attitudes" 91 *Pediatrics* 296 (February, 1993).

⁵⁹ Following reports of Australian women deliberately smoking while pregnant to reduce the size of their babies and reduce birth pains: Sarah Dent, *supra*.

⁶⁰ M. Eilas, "Half of kids lung ailments tied to adults' smoking", *USA Today*, February 3, 1998, *Reuters*, "US study links child illness to second-hand smoke", February 2, 1998.

- ear infections;
- cause or aggravation of asthma;
- SIDS

While this paper does not purport to be a thorough review of the scientific evidence regarding ETS-related disease, for the purposes of this opinion it is necessary to briefly review the ailments most commonly associated with ETS.

i. Serious Infectious Illnesses:

Among children 3 to 59 months of age, ETS has been associated with an almost fourfold increase in risk of developing a serious infectious illness requiring hospitalization.⁶²

ii. Lower Respiratory Tract Infections Such as Pneumonia and Bronchitis:

There is an enormous amount of support in the medical literature for the proposition that the statistical link to lower respiratory tract disorders is in fact causal,⁶³ particularly among very young children.⁶⁴ This has been recognized as a serious problem by the American Academy of Pediatrics.⁶⁵

One comprehensive review of the medical studies on the subject by Strachan and Cook found that children exposed to ETS at home were 57 percent more likely than nonexposed children to contract lower respiratory tract illnesses during the first three years of life.⁶⁶ 16% of all lung infections in children below the age of five can be attributed to ETS exposure.⁶⁷

⁶² A.T. Berg, E.D. Shapiro, and L.A. Capobianco "Group day care and the risk of serious infectious illnesses". 133 *Am J. Epidemiol.* 154 (1991).

⁶³ Margolis, Keys et al, "Urinary cotinine and parent history (questionnaire) as indicators of passive smoking and predictors of lower respiratory illness in infants" 23 *Pediatr. Pulmonol.* 417 (1997).

⁶⁴ P. Nafstad, Kongerud et al., "The role of passive smoking in the development of bronchial obstruction during the first 2 years of life" 8 *Epidemiology* 293 (1997).

⁶⁵ American Academy of Pediatrics, Committee on Environmental Health, "Environmental Tobacco Smoke: a hazard to children" 99 *Pediatrics* 639 (Vol. 4 1997).

⁶⁶ D.P. Strachan and D.G. Cook, "Health effects of passive smoking, 1. parental smoking and lower respiratory illness in infancy and early childhood" 52 *Thorax*. 905 (1997).

⁶⁷ J. DiFranza and R. Lew, "Morbidity and mortality in children associated with the use of tobacco products by other people" 97 *Pediatrics* 560 (1995).

iii. Other Respiratory Symptoms:

The Strachan and Cook article noted that nonspecific respiratory symptoms, such as wheezing, chronic cough, chronic phlegm and breathlessness were also "significantly" related to ETS exposure.⁶⁸

Children under general anaesthesia may have an increased risk of airway complications according to the degree of their ETS exposure.⁶⁹

iv. Middle Ear Disease and Effusion:

Middle ear effusion and infection is the most frequent cause of deafness in children, and the most common reason for surgical hospitalization of young children.⁷⁰ Causal relationships have been established between ETS exposure and an increased frequency and duration of episodes of middle-ear effusion, or the presence of fluid in the ear.⁷¹

It is variously estimated that between 8 and 33 percent of middle-ear effusion cases can be attributed to exposure to ETS. Strachan and Cook⁷² summarise the increased risks for ETS at 38 percent for recurrent otitis media (middle ear infections) and 48 percent for middle ear effusion.

v. Asthma:

ETS has been statistically linked with the exacerbation of pre-existing asthma in children, including increased severity of symptoms⁷³ and impaired recovery during hospitalization.⁷⁴

⁷⁰ ACSH, *supra*, page 12.

⁷¹ M. Iversen and L. Birch et al., "Middle-ear effusion in children and the indoor environment: an epidemiological study" 40 *Arch. Environ. Health* 74 (1985); C.E. Adair-Bischoff and R.S. Sauve, "Environmental tobacco smoke and middle-ear disease in preschool-age children" 152 *Arch. Pediatr. Adolesc. Med.* 127 (1998); R.A. Etzel, E.N. Pattishall et al., "Passive Smoking and middle-ear effusion among children in day care". 90 *Pediatrics* 228 (1992); D.P. Strachan and M.J. Jarvis, "Passive Smoking, salivary cotinine concentrations, and middle-ear effusion in 7 year old children." 298 *Br. Med. J.* 1549 (1989).

⁷² D.P. Strachan and D.G. Cook, "Health effects of passive smoking, 4. Parental smoking, middle-ear disease and adenotonsillectomy in children" 53 *Thorax*. 50 (1997).

⁷³ M.L. Winkelstein, A. Tarzian et al., "Parental smoking behaviour and passive smoke exposure in children with asthma" 78 *Ann. Allergy Asthma Immunol.* 419 (1997).

⁷⁴ R.S. Abulsohn, B.H. Morray, et al., "Passive smoke exposure impairs recovery after hospitalization for acute asthma". 151 *Arch. Pediatr. Adolesc. Med.* 35 (1997).

⁶⁸ Ibid.

⁶⁹ E.T. Skolnick, M.A. Vomvolakis et al., "Exposure to environmental tobacco smoke and the risk of adverse repiratory events in children receiving general anesthesia" 88 *Anesthesiology* 1144 (1998).

In addition, studies involving asthmatic children suggest an increased absorption of ETS chemicals such as nicotine, suggesting that asthmatic children are more susceptible to other ETS-related ailments as well.⁷⁵ When parents quit smoking in the presence of children with asthma, the severity of the symptoms significantly declines.⁷⁶

vi. Other Ailments:

Having a mother who smokes has been demonstrated as a strong independent risk factor for meningococcal meningitis.

ETS is also being increasingly linked to Sudden Infant Death Syndrome, although scientific agreement with respect to the causality of the relationship has yet to develop. A good summary of the literature can be found in the ACSH publication:

The available evidence suggests that infants of smoking mothers are at increased risk of SIDS independent of other known risk factors, including low birthweight and gestational age. The published literature does not permit a definitive conclusion, however, as to whether the increased risk is related to exposure to tobacco smoke during pregnancy (*in utero exposure*), following birth (postnatal exposure), or both. Thus, at present there is not enough direct evidence to support postnatal exposure to ETS alone as a risk factor for SIDS.⁷⁷

However, it has been estimated that 35 percent of SIDS deaths are due to maternal tobacco use.⁷⁸ Whether or not this use was pre- or postnatal (or both) will only be legally relevant in rare cases. It is an accepted fact that parental smoking is the most significant cause of SIDS, also known as 'crib death' or 'cot death'.⁷⁹

ETS has been reported to alter the ratio of total cholesterol to HDL cholesterol in adolescents.⁸⁰ Although this has not been substantially linked with childhood disease, children with ailments exacerbated by poor lipid profiles may be in danger.

⁷⁵ J.M. Knight, C. Eliopoulos, et al., "Pharmacokinetic predisposition to nicotine from envioronmental tobacco smoke: a risk factor for pediatric asthma". 35 *J. Asthma* 113 (1998); ACSH *supra* at 12-13.

⁷⁶ A.B. Murray and B.J. Morrison, "The decrease in severity of asthma in children of parents who smoke since the parents have been exposing them to less cigarett smoke". 91 *J. Allergy Clin. Immunol.* 102 (1993).

⁷⁷ ACSH, *supra* at page 13.

⁷⁸ J. DiFranza and R. Lew, "Effect of maternal cigarette smoking on pregnancy compliations and sudden infant death syndrome" 40 *J. Family Practice* 385 (1995).

⁷⁹ Lancet, October 1997.

⁸⁰ J. Feldman, I.R. Shenker, R.A. Etzel et al., "Passive smoking alters lipid profiles in adolescents". 88 *Pediatrics* 259 (1991).

The American Academy of Pediatrics says that "exposure during childhood to environmental tobacco smoke may also be associated with development of cancer during adulthood".⁸¹

(d) Degree of Scientific Consensus

Although numerous studies have been conducted to measure the relationship between ETS and lung cancer and/or coronary heart disease in adults exposed, the statistical relationships have been weaker than those discussed with respect to childhood elements. The lack of consensus⁸² on these particular issues is mentioned here only because there are frequent statements made in the media and elsewhere about the 'controversy' surrounding the effects of ETS.⁸³ The effect of exposure to ETS with respect to the risk of lung cancer and heart disease can indeed be said to remain the subject of controversy. However, it would be a mistake to carry this conclusion into the area of the childhood ailments discussed above, where the relationships are far better established and have received acceptance in the scientific community.

In 1986 the National Research Council and the U.S. Surgeon General's Office released independent reports linking ETS with many of the childhood ailments referred to here. That same year, the International Agency for Research on Cancer (IARC) designated tobacco smoke (direct smoke and ETS) as human carcinogens. In 1992 the U.S. Environmental Protection Agency described ETS as a 'class A carcinogen' on the same legal footing as asbestos. Other medical groups that have published warnings about the health effects of ETS on children include⁸⁴:

- Canadian Institute of Child Health
- American Academy of Otolaryngology-Head and Neck Surgery
- Cook Children's Physician Network
- The World Health Organization
- National Health and Medical Research Council

⁸³ A controversy driven largely by tobacco industry and lobby group denials: G. Cooper, "Living with a smoker can kill you", *The Independent*, 12 March 1998, page 1; G. Cooper, "Tobacco Barons Refuse to Back Down in Passive Smoking Battle", *The Independent*, 12 March 1998 page 5.

⁸⁴ This is of course a tiny sample. More to the point is the fact that we have been unable to discover any reputable scientific or public health body which maintains that the dangers from second-hand smoke are exaggerated. See also organizations listed in Appendix A.

⁸¹ American Association of Pediatrics "Environmental Tobacco Smoke: A Hazard to Children" *Pediatrics* 1997; 99(4): 639-642.

⁸² Although even this degree of controversy may be overstated here. It must be pointed out the WHO and others have reported a "global scientific consensus [that] passive smoking does cause lung cancer and other diseases.": World Health Organization, "Passive smoking does cause lung cancer, do not let them fool you" (Press Release, March 9 1998).

• American Academy of Pediatrics

It is possible that further publications on the issue of ETS have been delayed or shelved because of the threat of litigation by the tobacco industry. The EPA and the NHMRC reports on ETS were each subjected to protracted legal challenges.

The American Academy of Pediatrics published its Policy Statement on ETS ("A Hazard to Children") in April, 1997. Included in it were the recommendations of the Academy, the first two of which concern us here:⁸⁵

- 1. Pediatricians should take smoking histories from parents and guardians of children.
- 2. Pediatricians should inform parents about the health hazards of passive smoking and provide guidance on smoking cessation.

Although these recommendations are not legally binding, they would likely be admissible in court as an indication of the degree of knowledge and care expected of a reasonable pediatrician as determined by a consensus of his or her peers. Similarly, the Canadian Medical Association has included in its policy statement these suggestions, which while endorsing a stronger role for physicians in smoking cessation do not explicitly stress the harms of ETS:

Canadians perceive physicians to be a highly credible source of information on tobacco and other health risks. Physicians can discourage tobacco use by practising systematic clinical tobacco interventions, which may include:

- routinely counselling children and youth against starting to smoke or chew tobacco;
- taking advantage of "teachable moments," such as pregnancy or respiratory illness, to empathetically motivate smokers to quit;
- asking each patient about current smoking status and readiness to change; and
- offering personalized care to smokers, which may include setting a target quit date and offering behavioural counselling and nicotine-replacement therapy.

The CMA recommends that clinical tobacco intervention be recognized as an essential part of medical care and a core medical service. Nicotine replacement has been established as an effective therapy for smoking cessation and should be made affordable for patients who require it⁸⁶.

(e) Health Effects of ETS in Children - Public Awareness

⁸⁵ The remainder of the recommendations dealt with lobbying efforts and the importance of the physician setting a good example by not smoking him- or herself: AAP, *supra*.

⁸⁶ Canadian Medical Association, "Tobacco and Health" Policy Paper, January 15, 1997.

Health Canada surveys suggest a strong public awareness of the harms of smoking, with nine out of ten Canadians aged 15 and over believing that smoking is harmful to both smokers and non-smokers⁸⁷. Numerous recent surveys have demonstrated, however, that the public is much less informed of both the magnitude of the risk from ETS exposure and the nature of the specific risks involved. For example:

A survey of parents and extended family members found that only 20% are aware that ear infections in children and SIDS may be related to ETS exposure or parental smoking⁸⁸

Similarly, a survey of attitudes and behaviour related to ETS found that a significant proportion - one-half of smokers and one-third of non-smokers -- feel that the danger of ETS exposure to non-smokers is exaggerated.⁸⁹

A large survey of child care workers found that approximately 20% of caregivers in non-regulated settings believe that people who care for children have the right to decide for themselves whether or not they want to smoke around children⁹⁰.

In a New South Wales survey, over a quarter stated that parents should not be prevented from smoking in cars when travelling with children⁹¹. The Canadian Clearinghouse on Tobacco and Health reports that:

Those who believe that children are at greater risk from ETS exposure (75% of parents and relatives and 65% of caregivers) are more likely to restrict smoking in the home. The most common method to control ETS at home is to open a window, followed by removing ashtrays, limiting smoking to one room or area, and sending smokers outdoors. It is important to note that the latter method, although used least often (in a little over half of households), is the only truly effective method to control ETS. Parents who restrict smoking to the outdoors are more likely to be highly educated, come from non-smoking households, to be older, and have higher incomes⁹².

⁹⁰ Price Waterhouse, Assessment of Child Care Providers' Knowledge, Attitudes and Practices Towards ETS, Final Report, August 1995.

⁹¹ 311 *BMJ* 1164 (1995).

⁹² CCTC, *supra* at p. 3.

⁸⁷ Health Canada, *Survey on Smoking in Canada, Cycle 3, Fact Sheet #7: Exposure to Tobacco Smoke*, November 1994.

⁸⁸ Ekos Research Associates Inc. op. cit.

⁸⁹ K.S. Brown, W.S. Rickert, R. Walker, R. Cameron, "Environmental Tobacco Smoke in the Home: Attitudes, Beliefs and Actions of Smokers and Non-smokers," Waterloo: Waterloo Smoking Projects, University of Waterloo, Labstat Incorporated, 1995.

This brief glimpse at public attitudes toward the health risks posed by ETS is not meant to be a comprehensive summary of the topic. Rather its inclusion is meant to serve as a demonstration that the public, inasmuch as it may be aware of ETS related risks, is well behind the scientific community with respect to awareness of specific risks. For instance, it should be expected that a physician who is treating a child with chronic ear infections would identify ETS as a possible cause, while there is no evidence to suggest that the parent, without the intervention of the physician, is likely to come to the same conclusion.

This is in contrast to the widespread public knowledge about the risks of primary smoking; it is likely, given this general knowledge, that a physician would be under no legal obligation to make detailed disclosure to a patient on the risks of smoking, unless specifically requested. In fact, the degree of public knowledge might afford a defence to a physician who failed to give such advice to a smoker, as the deluge of information from other public sources would eliminate any impact of this omission.

V Review of the law and ETS cases

(a) **Developments in the United States**

Currently, there are no Canadian cases relating specifically to a physician's duty of care in the context of ETS effects on non-smoking parties. Thus we must argue by analogy from existing ETS suits and related litigation.

In the United States, courts have shown an increasing willingness to impose liability on both smokers and third parties (i.e. airlines⁹³, nursing homes⁹⁴ and restaurants) for exposing others to the harmful effects of ETS. Indoor workers were successfully suing their employers for failing to protect them from the effects of second-hand smoke as early as 1976.⁹⁵ In 1991, the husband of a non-smoker who died of lung cancer began a suit that first established ETS as a workplace injury eligible for compensation.⁹⁶

Also in 1991, attorney Stanley M. Rosenblatt filed the pleadings in the case of *Norma Broin, et al. v. Philip Morris, et al.*⁹⁷ The pleadings alleged that ETS caused serious injury to an estimated 60,000 non-smoking flight attendants who work or have worked for US-based airlines. Tobacco companies settled the suit for \$349 million in 1998.

⁹³ Broin v. Philip Morris, infra.

⁹⁴ D.Ward, "Nurse sues over passive smoking" The Guardian 7 May 1998 p. 4.

⁹⁵ See "Landmarks in Law", http://www.health.fi/smoke2html/Pages/Smoke2-47.html.

⁹⁶ Florida 91-49738CA (22).

⁹⁷ "Landmarks in Law", *supra*.

The *Norma Broin* case illustrates the tobacco companies' awareness of the difficulty they face with respect to all ETS litigation as compared to primary smoking cases. The industry's inability to rely on their typical defence of smokers' contributory negligence and voluntary assumption of risk has opened the floodgates for new ETS litigation. The tobacco companies' assault on the Environmental Protection Agency's report, and their assertions that the dangers of ETS remain a 'controversy', closely parallels the industry's approach in the 1950s and 60s to increasing concern about the dangers of primary smoking.

(b) The Prison Cases

The right not to be exposed to second-hand smoke began as a general issue within society, but soon was taken up by prisoners and exposure was characterized as cruel and unusual punishment. In *Helling v. McKinney*⁹⁸, the US Supreme Court set a precedent for lower courts in determining what standard would be applied when prisoners claim that their future health has been harmed by environmental tobacco inhalation. In *Helling*, a Nevada state prisoner complained that being confined in a small cell with a man who smoked five packs of cigarettes per day constituted cruel and unusual punishment contrary to the 8th Amendment to the US Constitution. The Supreme Court held in a 7 to 2 decision that inmates may have a constitutional right to be free from unreasonable risks of future health problems arising from exposure to ETS. *Helling* is important because it offered relief to the prisoner on the basis of the risk of future disease, not current disease, and found that the health risk posed by involuntary exposure to second hand smoke was "sufficiently imminent" to grant relief. The Court opined:

We have great difficulty agreeing that prison authorities may not be deliberately indifferent to an inmate's current health problems but may ignore a condition of confinement that is sure or very likely to cause serious illness and needless suffering the next week or month or year. In *Hutto v. Finney*, 437 U.S. 678, 682 (1978), we noted that inmates in punitive isolation were crowded into cells and that some of them had infectious maladies such as hepatitis and venereal disease. This was one of the prison conditions for which the Eighth Amendment required a remedy, even though it was not alleged that the likely harm would occur immediately and even though the possible infection might not affect all of those exposed. We would think that a prison inmate also could successfully complain about demonstrably unsafe drinking water without waiting for an attack of dysentery. Nor can we hold that prison officials may be deliberately indifferent to the exposure of inmates to a serious, communicable disease on the ground that the complaining inmate shows no serious current symptoms.⁹⁹

^{98 509} U.S. 25 (1993).

⁹⁹ Supra at p. 33.

This case has been followed by a long line of decisions which examine at what point that right is breached. However, the issue was never fully explored because prison administrators quickly began to change smoking rules to accommodate non-smoking prisoners¹⁰⁰. Nonetheless, *Helling* marked the emergence of the 'deliberate indifference test' to address ETS 'risk of future harm' cases. Where a prison may be characterized as unwilling and unresponsive to ETS concerns, a court may find such behaviour to constitute deliberate indifference and to make prison authorities liable to injured inmates.

Of course, a prison is a unique place in that a government controls each aspect of a prisoner's life. This includes controlling, at least indirectly, how much prisoners are allowed to smoke, and to what extent non-smoking prisoners must be exposed to others' smoke. Because of this, the prison cases decided in a constitutional context are not directly on point in determining the larger ETS-related duties in society under the law of tort. However, persons who similarly have control over the movements and exposure of others, for instance parents and caregivers for the elderly, might be found liable under a similar rationale should their smoking cause injury.

(c) The Current State of Law in Canada

There is currently no legal consensus on the degree of physicians' liability when diagnosing or advising smokers on the effects of ETS on third parties. Further, the state of ETS-related litigation in Canada is several years behind that of the United States despite attempts at airline class actions similar to those found in US law.¹⁰¹ Nonetheless, some interesting trends have emerged in recent years which indicate that this type of litigation is increasing and will continue to increase in Canada.

i. Smoking Bylaws:

Increasing concern and awareness about the harmful effects of ETS on employees and patrons has led to the enactment of anti-smoking bylaws in several regions and most municipalities across Canada. Because of the restrictive nature of such legislation, the legal capacity of the enacting body and the constitutionality of the provisions have been repeatedly attacked. However, courts have never taken exception to the proof of potential harm from ETS, nor to the validity of the legislative objects. For example, in *Restaurant and Foodservices Association of British Columbia and the Yukon* v. *Vancouver (City)*,¹⁰² the Court accepted without discussion the City's rationale for the enactment of a bylaw prohibiting smoking in most indoor places. The Court specifically noted the report of the

¹⁰⁰ See for instance *Scott Benjamin W. v. D.C.* (April 3, 1998) Court of Appeals D.C. Circuit Nos. 97-7064, 97-7066, & 97-7067 (held that prisons had made good faith attempt to enforce non-smoking policies, and at any rate complaint is moot if prisoner is released unharmed before trial).

¹⁰¹ See, for example, Naval-Torres v. Northwest Airlines, [1998] O.J. No. 1717.

¹⁰² [1996] B.C.J. No. 2017, aff'd [1998] B.C.J. No. 53.

Medical Health Officer which described the reduction of ETS impacts on children and youth as a "key principle" in the justification for the bylaw. This tendency of the courts to emphasize the effects of ETS on children in smoking bylaw cases may indicate a willingness to impose an increased standard of care on physicians where a child is being exposed to ETS in the home.

Cases regarding bylaws prohibiting smoking in public places also provide a useful reference point as to when the harmful effects of ETS became widely known and accepted. Although in Canada the development of ETS-related jurisprudence has been considerably slower than in the United States, in the *Restaurant and Foodservices Association* case the City of Vancouver considered and endorsed the report of its Medical Health Officer recommending 100% smoke-free public indoor environments in December of 1994. As discussed elsewhere in this opinion, the detrimental effects of ETS were widely known in the Canadian medical and scientific communities long before that date.

ii. Family Law:

ETS has also been discussed in family disputes as a factor to consider in the determination of the best interests of the child in custody and access cases.¹⁰³ For example, in the Ontario case of *Bruce* v. *Bruce*, the court took judicial notice of the "notorious" risks of ETS to children.¹⁰⁴ Similarly, in *Cable* v. *Cable*, the court stated in its reasons that "it goes without saying that [the child] should not be around smoke".¹⁰⁵ The courts have not gone so far as to conclude that exposure of children to ETS is abusive *per se*, or indeed should be determinative of parental privileges. However, these cases provide insight into the courts' protective tendencies and their understanding of the seriousness of ETS effects on children.

The reluctance of the courts to find that exposure to ETS should be determinative of questions of child custody¹⁰⁶ itself suggests that the courts are attempting to balance the interests of the child with the difficult social reality that many otherwise capable parents are addicted smokers. It can be anticipated that as the number of smoking parents continues to decrease, judicial tolerance for those who expose children to ETS will be correspondingly reduced, and the analysis will be a 'potential for risk' analysis similar to that currently applied in cases of alcohol abuse¹⁰⁷.

¹⁰⁵ [1997] A.J. No. 1233 (Q.B.).

¹⁰³ See, for example, *S.E.J.* v. *M.C.*, [1994] O.J. No. 1786; *Bourden* v. *Casselman* (1988), 12 R.F.L. (3d) 395 (Ont. Ct.).

¹⁰⁴ [1997] O.J. No. 2031 (Ont. Prov. Ct.).

¹⁰⁶ Similar application has been reported in Australia and the United States: National Clearinghouse on Tobacco and Health, "ETS in Home Environments" 1998 (www.cctc.ca/ncth/docs/ets-home.htm).

¹⁰⁷ See for instance the decision of the Alberta Family Court in *J.B. (Re)* [1996] A.J. No. 69.

VI Summary and Legal opinion

Given the knowledge of the risks of cigarette smoke, both primary and secondary, there seems little doubt that individuals or organizations who now expose others to ETS, may face a successful lawsuit against them for the harm that this exposure causes.

Physicians would not be a traditional defendant in such cases as they do not expose their patients to ETS themselves. However, physicians may face exposure to a finding of liability against them arising from their doctor/patient relationship. This would certainly extend to properly diagnosing diseases that may be ETS related and in such cases, taking appropriate steps to minimize exposure to ETS in the future, such as advising smoking parents to refrain. Physicians may have a concurrent responsibility to counsel smoking patients who may be exposing others to ETS, especially in circumstances where both those exposed, such as children, and their parents are all patients of the physicians.

In our opinion, physicians ought to be aware that:

- Exposure to ETS has been linked to increased rates of lung cancer, heart disease, and other serious diseases among non-smokers.
- Exposure to ETS may cause a wide range of ailments in adults and particularly in children, including:
 - respiratory tract infections such as pneumonia and bronchitis;
 - reduced lung function and symptoms of respiratory irritation;
 - ear infections;
 - cause or aggravation of asthma;
 - SIDS

Although a precise 'threshold date' for the establishment of this awareness is impossible to ascertain without the benefit of the first legal decisions on topic, it is safe to say that, at least since 1993¹⁰⁸, physicians may reasonably have been expected to be aware of the literature linking ETS and the categories of illness discussed in Part IV of this opinion.

Since at least 1998, physicians ought to be aware:

• that parents and smokers may be under-reporting the extent to which they are exposing others to ETS;

¹⁰⁸ We believe that the 'threshold date' for certain diseases may be deemed as early as the mid-1980s. See the discussion in Part IV, *supra*, and also the survey of medical literature in Appendix A below.

- that parents or expecting parents may be reporting that they have ceased smoking, but in fact have not; and
- that individuals may be under-reporting the extent to which they are exposed to ETS.

It should be noted that the list of potential medical conditions, particularly in children, is not exhaustive and ETS remains the focus of considerable medical and epidemiological research. Conditions such as low birth weight of fetuses of smoking mothers in associated cognitive and behavioural sequelae have been postulated, but the significance of the association between these conditions and ETS exposure remain to be clarified. Physicians have an ongoing responsibility to keep up with current scientific and medical opinion regarding the ETS and to incorporate such knowledge in their diagnosis and treatment of patients as the area develops.

In our opinion, from our review of the case law and medical literature, a court is likely to conclude that in order to meet the current standard of care:

- Physicians should take smoking histories from parents and guardians of children;
- Physicians should inform parents about the health hazards of passive smoking and provide guidance on smoking cessation;
- Physicians should inform expecting parents of the dangers to the child pre-natally and post-natally;
- Physicians should inform parents who smoke of the potential dangers to the child;
- Physicians should be aware of ETS as a possible cause or risk factor in certain childhood diseases and problems, and to counsel smoking elimination as part of the response;
- Physicians must protect a child at risk should the physician become aware that the parents have not ceased smoking in the presence of the child after being advised that they must do so. Such intervention may, in extreme, and likely very rare, cases where the life or health of a child is placed seriously at risk (ie severely asthmatic children), warrant the involvement of child protection agencies.

APPENDIX A

A partial survey of the scientific and medical literature addressing the harm of ETS exposure.

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APPENDIX B

TABLE 1

Toxic and Carcinogenic Agents in Undiluted Sidestream Smoke

Type of Micrograms in Sidestream Ratio, Sidestream to Compound, Vapor Phase Toxicity Smoke per Cigarette Mainstream Smoke

Carbon Monoxide T 26,800-61,000 2.5-14.9 Carbonyl Sulfide T 2,000-3,000 0.03-0.13 Benzene C 400-500 8.0-10 Formaldehyde C 1500 50 3-Vinylpyridine SC 300-450 24-34 Hydrogen Cyanide T 14-110 0.06-0.4 Hydrazine C 0.09 3 Nitrogen Oxides T 500-2,000 3.7-12.8 N-Nitrosodemethylamine C 0.2-1.04 20-130 N-Nitrosylpyrrolidine C 0.3-.39 6-120

Compound, Particulate

Tar C 14,000-30,000 1.1-15.7 Nicotine T 2,100-46,000 1.3-21 Phenol TP 70-250 1.3-3.0 Catechol CoC 58-290 .67-12.8 o-Toluidine C 3 18.7 2-Naphthylamine C 0.07 39 4-Aminobiphenyl C 0.14 31 Benz(a)anthracene C 0.04-.2 2.0-4.0 Benzo(a)pyrene C 0.04-0.07 2.5-20 Quinoline C 15-20 8.0-11 N-Nitrosonornicotine C 0.15-1.7 0.5-5.0 NNK C 0.2-1.4 1.0-22 N-Nitrosodiethanolamine C 0.043 1.2 Cadmium C 0.72 7.2 Nickel C 0.2-2.5 13-30 Polonium-210 C 0.5-1.6pCi 1.06-3.7

C = Carcinogenic CoC = Cocarcinogenic SC = Suspected Carcinogen T = Toxic TP = Tumor Promoter NNK = 4-(methylnitrosamino)-(3-pyridyl)-1-butanone

Source: EPA