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GUNS AND PUBLIC HEALTH: EPIDEMIC OF VIOLENCE OR PANDEMIC OF PROPAGANDA?

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"[Knowledge is neither good nor evil, but takes its character from how it is used.]
In like manner, weapons defend the lives of those who wish to live peacefully,
and they also, on many occasions kill [murder] men, not because of any
wickedness inherent in them but because those who wield them do so in an evil
way." [\[1\]](#)

I. Introduction

Predictably, gun violence, particularly homicide, is a major study topic for social scientists, particularly criminologists. [\[2\]](#) Less predictably, gun crime, accidents, and suicide are also a topic of study among medical and public health professionals. Our focus is the remarkable difference between the way medical and public health writers treat firearms issues and the way social scientists treat those issues. Examination of the literature produced by medical and health writers reveals why their conclusions on firearms diverge so radically from those of criminological scholarship. We focus on that literature's anomalies both for their own sake and because that focus allows us to explore some of the more important policy and legal issues of gun control.

II. The Public Health Agenda

In 1979 the American public health community adopted the "objective to reduce the number of handguns in private ownership," the initial target being a 25% reduction by the year 2000. [\[3\]](#) Based on studies, and propelled by leadership from the Centers for Disease Control and Prevention (CDC), the objective has broadened so that it now includes banning and confiscation of all handguns, restrictive licensing of owners of other firearms, and eventual elimination of

firearms from American life, excepting (perhaps) only a small elite of extremely wealthy collectors, hunters, or target shooters. This is the case in many European countries. [\[4\]](#)

In this connection, the term "gun control" needs some clarification. That term could mean no more than noncontroversial measures to prohibit gun misuse or gun possession by high risk groups. In the literature we are analyzing, however, "guns are not . . . inanimate object[s], but in fact are a social ill," and controlling them implies wholesale confiscation from the general public so as to radically reduce gun availability to ordinary people. [\[5\]](#) This goal parallels the goals of political lobbying groups such as Handgun Control, Inc. and the National Coalition to Ban Handguns. [\[6\]](#) In fact, the public health agenda to drastically reduce availability goes beyond those groups. Handgun Control, Inc. (HCI) seeks only to ban gun ownership for self-defense, but would allow licensed sportsmen to have both handguns and long guns for purely sporting purposes; [\[7\]](#) the Coalition to Stop Gun Violence (CSGV) would allow people to have long guns and limited access to handguns for sporting purposes. [\[8\]](#)

Perhaps surprisingly, neither medical and health writers nor the journals which publish their writing seem embarrassed by their agenda's close relationship to political lobbying organizations. On the contrary, exhortations to "[s]peak out for gun control" are seen as part of an admirable tradition of political advocacy by doctors and other health professionals in support of political measures designed to improve public health. [\[9\]](#) In that spirit, writers in such journals strongly avow the need for active political advocacy, for concerted action with anti-gun groups, and for open support of their political initiatives. [\[10\]](#) Throughout this Article we shall use the phrase "anti-gun health advocacy literature" as a shorthand for medical and public health publications having this focus or agenda. [\[11\]](#)

Health advocates see no problem reconciling such an openly political agenda with the demands of scholarship. After all, guns are hateful things for which no decent purpose is imaginable, certainly not self-defense. [\[12\]](#) Society's need to radically reduce gun availability is an inarguable truth to which there can be no legitimate opposition. Arrayed against the beneficent alliance of health advocates and anti-gun political advocates are only sinister "powerful lobbies that impede constructive exploration of the full range of social options" [\[13\]](#) by nefarious machinations, including racist propaganda cunningly designed to exploit white Americans' irrational fears of crime. [\[14\]](#)

The outward forms of scholarship must be observed, but the academic ideal of scholarly detachment is inapplicable. This is a struggle between modern enlightenment and, at best, morally obtuse and intellectually benighted atavism. There is no time for arid, academic discussion; the need for gun control is too urgent to require--or allow--equivocation, doubt, debate, or dissent. [\[15\]](#)

The continued advocacy of long-overdue gun control is a constructive long-term approach to [reducing violence]. We reason that the time has come for government and citizens to begin a reasoned dialogue on the "why not" of gun ownership. If the conduct of youth [sic] and the need for harmony of humans with Nature is valuable to health and civilization, the world's most powerful country may not find justification for an armed citizenry. [\[16\]](#)

Moreover, there is no point to discussion, detached reflection, or dissent in a struggle between the forces of light and darkness. Evidence or perspectives that might induce skepticism or produce delay are per se invalid inventions of the Neanderthal racist gun lovers. [17]

The foregoing attitudes are central to the anomalies we find in reviewing the health advocacy literature against gun ownership. This literature exists in a vacuum of lock-step orthodoxy almost hermetically sealed from the existence of contrary data or scholarship. Such contrary data and scholarship routinely go unacknowledged; at best, they are evaded by misleading association with the sinister forces of the gun lobby. [18] With rare exception, reference citations in the anti-gun health advocacy literature are to other writings in that same literature. If the universe of sources thus circumscribed does not yield appropriate anti-gun data, editorials are cited as data without noting that they are mere expressions of editorial opinion. [19] On occasion, health advocates cite publications by partisan anti-gun groups for purported factual data--often without clear warning to readers of the group's partisan affiliation. [20] The health advocates do so knowing that the data is subject to contradiction by non-partisan, scholarly sources. [21] In contrast, when health advocate literature mentions a claim from a gun lobby source against firearms, that origin is noted conspicuously. Far from concealing or ignoring the potential for bias as health advocates do with anti-gun lobby claims, pro-gun bias is deemed to render pro-gun claims specious per se. [22]

To use Florian Znaniecki's frame of reference, the anti-gun health advocacy literature is a "sagecraft" literature in which partisan academic "sages" prostitute scholarship, systematically inventing, misinterpreting, selecting, or otherwise manipulating data to validate preordained political conclusions. [23] Consciousness that one represents the forces of light against those of darkness can overwhelm not only the canons of scholarship but even the ordinary demands of personal honesty and integrity. Given the urgent needs of political advocacy, academic health sages all too often feel no compunction about asserting falsehoods, fabricating statistics, and falsifying references to counterfeit support for them. [24]

Assuming the speciousness and atavistic, insidious malignancy of all opposition to gun control, health advocacy periodicals need not waste space or time on evaluating such views. The statement by the president of the American College of Epidemiology is typical when he declares gun ownership the "primary cause" of murder and then calls for research on the subject. [25] Indeed, whether guns "cause" violence, rather than being only instruments of violence, is among the cardinal, and most mooted, issues in the gun control debate. [26] For what it is worth, two decades of research and analysis have led most criminologists to discard the idea of guns as a cause of crime--something that results in crime by previously law-abiding, responsible adults--in favor of noting their role in facilitating crime by criminals, and in making those crimes worse or better. [27]

Consider the evaluation offered jointly by epidemiologist David N. Cowan and sociologist David J. Bordua in a panel presentation at the 1994 annual meeting of the American Society of Criminology. [28] Having noted methodological and other errors in the *New England Journal of Medicine* article discussed in depth later in this Article, Cowan and Bordua point out that support for severely restrictive gun laws has been expressed by the *New England Journal of Medicine* [29] as well as

by the American Medical Association in its house organ, *JAMA*; by the American Public Health Association in the *AJPH*; the American Academy of Pediatrics in *Pediatrics*; and the American Trauma Society in *Trauma*. [30]

A review . . . reveals several consistent patterns. First, the literature cited is almost always that published by medical or public health researchers. Little is cited from the criminological or sociological field. Second, reports with findings not supporting the position of the journal are rarely cited. Finally, several assumptions are presented as fact: that there is a causal association between gun ownership and the risk of violence, that this association is consistent across all demographic categories, and that additional legislation will reduce the prevalence of firearms and consequently reduce the incidence of violence.

Incestuous and selective literature citations may be acceptable for political tracts, but introduces an artificial bias into scientific publications. Stating as fact associations which may be demonstrably false is not just unscientific, it is unprincipled. [31]

The question of advocacy based on political beliefs rather than scientific fact raises the further questions of the proper scope of medical and public health concern. . . .

. . . .

It would be strange indeed to expect the medical/public health system to not advocate for health. In the case of firearms, however, the advocacy seems to have *preceded* the health related research. [32]

In sum, health leaders see violence as a public health crisis and the firearm as something akin to an infectious disease. For example, one author characterized guns as "a virus that must be eradicated." [33] Their views receive wide exposure because, unlike criminology and other social scientific journals, medical and health periodicals announce the appearance of their articles on firearms with press releases describing their anti-gun conclusions. This follows the health advocate sages' avowed intention to promote the idea that firearm ownership is an evil and that its elimination is a desirable and efficacious means of reducing violence. [34]

III. The Verdict Of Criminological Scholarship

Since the 1960s, health advocate sages have written a vast and ever-increasing amount of anti-gun advocacy literature. [35] But the view thus promulgated is strikingly different from the view concurrently emerging from criminological research and scholarship. The divergence was not as clear twenty-five to thirty years ago as it is today. In the 1960s, criminological opinion was dominated by writers who felt more or less as the anti-gun health advocacy writers do today. [36] As two of the most influential of those 1960s writers subsequently admitted: "In the 1960s, there was literally no scholarship on the relationship between guns and violence and the incidence or consequences of interpersonal violence, and no work in progress." [37]

Serious criminological research began in the 1970s and has been pursued more intensively and extensively ever since. [38] The results of that research may surprise lay persons, given the

exposure which the popular press has accorded the anti-gun health advocacy literature. Consider the description by Gary Kleck, the leading researcher in this area, of the effect his--and others--research had on his own attitudes: [\[39\]](#)

Up until about 1976 or so, there was little reliable scholarly information on the link between violence and weaponry. Consequently, everyone, scholars included, was free to believe whatever they liked about guns and gun control. There was no scientific evidence to interfere with the free play of personal bias. It was easy to be a "true believer" in the advisability of gun control and the uniformly detrimental effects of gun availability (or the opposite positions) because there was so little relevant information to shake one's faith. When I began my research on guns in 1976, like most academics, I was a believer in the "anti-gun" thesis, i.e. the idea that gun availability has a net positive effect on the frequency and/or seriousness of violent acts. It seemed then like self-evident common sense which hardly needed to be empirically tested. However, as a modest body of reliable evidence (and an enormous body of not-so-reliable evidence) accumulated, many of the most able specialists in this area shifted from the "anti-gun" position to a more skeptical stance, in which it was negatively argued that the best available evidence does not convincingly or consistently support the anti-gun position. This is not the same as saying we know the anti-gun position to be wrong, but rather that there is no strong case for it being correct. The most prominent representatives of the skeptic position would be James Wright and Peter Rossi, authors of the best scholarly review of the literature. [\[40\]](#)

[Subsequent research] has caused me to move beyond even the skeptic position. I now believe that the best currently available evidence, imperfect though it is (and must always be), indicates that general gun availability has no measurable net positive effect on rates of homicide, suicide, robbery, assault, rape, or burglary in the U[nited] S[tates]. This is not the same as saying gun availability has no effects on violence--it has many effects on the likelihood of attack, injury, death, and crime completion, but these effects work in both violence-increasing and violence-decreasing directions, with the effects largely canceling out. For example, when aggressors have guns, they are (1) *less* likely to physically attack their victims, (2) *less* likely to injure the victim given an attack, but (3) *more* likely to kill the victim, given an injury. Further, when *victims* have guns, it is less likely aggressors will attack or injure them and less likely they will lose property in a robbery. At the aggregate level, in both the best available time series and cross-sectional studies, the overall net effect of gun availability on total rates of violence is not significantly different from zero. The positive associations often found between aggregate levels of violence and gun ownership appear to be primarily due to violence increasing gun ownership, rather than the reverse. Gun availability does affect the rates of *gun* violence (e.g. the gun homicide rate, gun suicide rate, gun robbery rate) and the fraction of violent acts which involve guns (e.g. the percent of homicides, suicides or robberies committed with guns); it just does not affect total rates of violence (total homicide rate, total suicide rate, total robbery rate, etc.). [\[41\]](#)

Scholars engaged in serious criminological research into "gun control" have found themselves forced, often very reluctantly, [42] into four largely negative propositions. First, there is no persuasive evidence that gun ownership causes ordinary, responsible, law abiding adults to murder or engage in any other criminal behavior--though guns can facilitate crime by those who were independently inclined toward it. Second, the value of firearms in defending victims has been greatly underestimated. Third, gun controls are innately very difficult to enforce. [43]

The difficulty of enforcement crucially undercuts the violence-reductive potential of gun laws. Unfortunately, an almost perfect inverse correlation exists between those who are affected by gun laws, particularly bans, and those whom enforcement should affect. Those easiest to disarm are the responsible and law abiding citizens whose guns represent no meaningful social problem. Irresponsible and criminal owners, whose gun possession creates or exacerbates so many social ills, are the ones most difficult to disarm. A leading English analyst's pessimistic view has been summarized as follows: "[I]n any society the number of guns always suffices to arm the few who want to obtain and use them illegally" [44]

Therefore, the fourth conclusion criminological research and analysis forces on scholars is that while controls carefully targeted only at the criminal and irresponsible have a place in crime-reduction strategy, the capacity of any type of gun law to reduce dangerous behavior can never be more than marginal. [45] Contrast this conclusion to the health perspective that "guns are not . . . inanimate object[s], but in fact are a social ill," [46] and to the conclusion from a recent Wisconsin State Legislative Reference Bureau summary:

It is difficult to make rational decisions in an atmosphere where absolute moral values are assigned to an inanimate object. A gun, while powerful and often destructive, is no more than a tool controlled by the person who uses it. . . .

. . . .

Gun control legislation focuses on regulating access to firearms, but the availability of guns is only one of many factors contributing to crime. Any measures that attempt to restrict access to firearms without reference to drugs, poverty with its attendant lack of educational and employment opportunities, clogged courts and overcrowded prisons are bound to have only marginal effects on firearm crime. [47]

IV. Fear and Loathing as Social Science

In stark contrast to this nuanced, sophisticated assessment, the spirit animating the health advocacy literature on firearms is illuminated by the frank admission of one outspoken advocate of its political agenda, Dean Deborah Prothrow-Stith of the Harvard School of Public Health: "My own view on gun control is simple. I hate guns and I cannot imagine why anyone would want to own one. If I had my way, guns for sport would be registered and all other guns would be banned." [48] A review of the anti-gun health advocacy literature suggests that such unconstrained, unabashed emotive bias helps account for many of its anomalies and for the remarkable difference in tone and conclusion from the criminological scholarship on firearms issues.

Anti-gun health advocates seem blind or unconcerned about the danger that their emotions may preclude rational evaluation of gun ownership. Psychiatrist Emmanuel Tanay, who admits that he loathes guns to the point of being unable to look upon or touch them with equanimity, asserts that gun ownership betokens sexual immaturity or neuroticism. [49] As evidence of this, Dr. Tanay asserts that gun owners actually "handle . . . with obvious pleasure" these horrid objects which so repulse him, that collectors "look after" their collections, and that owners "clean, polish and pamper" their guns. [50] "The owner's overvaluation of his gun's worth is an indication of its libidinal value to him." [51]

Further, Dr. Tanay invokes Freud's purported view of the sexual significance of firearms in the interpretation of dreams. [52] Invoking Freud is particularly ironic because Freud's comments were not directed at gun ownership. Insofar as Freud addressed the matter at all, he seems to have equated fear and loathing of guns with sexual immaturity and neuroticism. [53] We are emphatically not endorsing Freud's view as either applicable to Dr. Tanay or explanatory of his views. Our concern is with the effect fear and loathing of guns has on the intellect, not on the libido. The effect on Dr. Tanay is that he cannot recognize how gun collectors' tastes might differ from his own or how they might comprehend passages from Freud; in fact, he is unable to read them without imposing a meaning almost opposite of what they actually say.

Dr. Tanay is by no means the only anti-gun health advocate to exhibit such an emotion-based reading disability (or "gun-aversive dyslexia" as we shall hereinafter call it). Dr. Arthur L. Kellermann, one of the most prolific and influential health advocate sages, cites as supporting his view "that limiting access to firearms could prevent many suicides" an article expressly concluding the opposite. [54] An article in the *Journal of the American Medical Association (JAMA)* alleges: "Research examining the effectiveness of gun control in specific locales suggests that it can reduce violence." However, the authors cite articles whose only relevance is in support of the opposite conclusion. [55] Another *JAMA* article attributes increased homicide to increased cocaine use and gun availability among New York City minority teenagers. [56] The article cites actual evidence to show increased cocaine use, but its citations, supposedly showing increased firearms availability, indicate the reverse. [57]

We do not suggest that these gun-aversive dyslexic errors have any great importance in and of themselves. Their importance lies in what they, and innumerable other errors we document, collectively say about the effect of having advocacy deemed (even hailed as) a norm, while scholarship receives only lip service. Error becomes endemic when the corrective effects of dissent and criticism are excluded. Lest our comments seem strident and extreme, recall that this is peer-reviewed literature. Each of the articles cited in the preceding paragraph were peer-reviewed, as were almost all of the other articles we cite. How did errors of easily establishable fact--that a source is cited for something opposite to what it says--slip past reviewers? The short answer is that intellectual sloppiness prevails when political motivations reign and sagecraft displaces scholarship.

Worse yet, peer review, and the general process of criticism, actually exacerbates error in the atmosphere of intellectual lockstep which prevails among health advocates. For instance, it was not enough for the *JAMA* reviewer of Dean Prothrow-Stith's book that it unreservedly avowed her hatred for guns. [58] He reproached not her emotionalism, which he fervently endorses, but

rather the lack of more space devoted to teaching health advocates how to mobilize support for laws to rid our society of these evil objects. [59] An atmosphere in which criticism in general, and peer review in particular, comes from only one perspective not only allows error, but promotes it.

Recall how the CDC's principal researchers on firearms and violence characterized firearms as having "a central role in interpersonal violence." [60] This exemplifies the tendency of grossly inaccurate hyperbole slipping through any kind of editorial review process so long as it supports health advocacy's anti-gun bias. It could rightly have been said that guns are used in 60-65% of the approximately 23,000 murders committed annually. [61] But, though murder is the gravest form of "interpersonal violence," numerically it is only a small part of that category and guns are used in less than 13% of the 6.7 million rapes, robberies, and assaults. [62] Locutional sloppiness and hyperbole reign in health advocacy literature, where advocacy has displaced scholarship and the only allowable peer review or criticism is that which arraigns authors for underemphasizing the baleful effect guns have on society.

V. A Nosology of Health Sage Error

The abysmal quality of the anti-gun health advocacy literature may be explained by six conceptually discrete factors: intellectual and locutional sloppiness; intellectual confusion; ignorance of criminological or other facts; fraudulent omission of material fact, or statement of part of the fact calculated to deceive by the suppression of the whole; [63] overt misrepresentation of facts; and what we call gun-aversive dyslexia--a reading disability engendered by a fear and loathing of guns so profound that health advocate sages who encounter adverse facts may be honestly unable to comprehend them.

Though these six aspects are conceptually discrete, they often run together in the health advocacy literature, so that it is not always easy to clearly distinguish them from each other and to disentangle their mutually exacerbating effects. Consider the exhortation by Judith Dolins and Katherine Christoffel for health advocates to "educate" the public to believe there is no constitutional impediment to banning and confiscating guns because "the Second Amendment does not guarantee the right to personal ownership of firearms. Legal decisions, including those of the Supreme Court, have repeatedly ruled in favor of this interpretation, and *none of the existing tens of thousands of [gun control] laws . . . has ever been ruled unconstitutional.*" [64] Particularly since neither author is a lawyer, it is impossible to disentangle how much of this view results from overt deception and how much represents gun-aversive dyslexia, confusion, ignorance, locutional sloppiness, or a combination of these. To give them the benefit of the doubt, it is very possible that Dolins and Christoffel do not understand what is implied by the Supreme Court's allowing ordinary citizens standing to raise the Second Amendment without being members of the Army or National Guard; [65] of the Court's express recognition that the term "right of the people" used in the First, Second, and Fourth Amendments is to be construed *in pari materia* as denoting the rights of citizens against government; [66] or of the Court's several listings of the Second Amendment interchangeably with other Bill of Rights provisions as illustrative of explicitly guaranteed personal rights. [67]

Dolins and Christoffel may also plausibly not know of the distinction between dictum and holding [68] or that all but eight states have constitutional guarantees of the right to arms which are independent of the Second Amendment and under which gun laws can be and have been invalidated. [69] Likewise, when Christoffel asserted that, "[w]ell-informed legal scholars agree that [gun bans] are indeed constitutional [under the Second Amendment]," she may not have known that the verdict of modern constitutional scholarship is overwhelmingly to the contrary. [70]

Another passage from Dolins and Christoffel illustrates the difficulty of distinguishing how much a particular health advocacy assertion is attributable to deception and what may be gun-aversive dyslexia. In the first of two consecutive sentences, Dolins and Christoffel try to discredit the individual-right view of the Second Amendment by ascribing it to the sinister forces of "[t]he gun lobby." [71] The next sentence invokes the same specter to discredit two uncongenial sets of criminological data discussed by social scientists whom Dolins and Christoffel cite, but wilfully mischaracterize as follows: "*Gun supporters* contend that widespread gun ownership has helped to curb the increasing rates of violence and crime, although most *epidemiologists* interpret the evidence as unconvincing." [72] We have added emphasis to highlight the labels falsely bestowed on both sides in this dispute. On the one hand, the "epidemiologists" whose support Dolins and Christoffel invoke are not "epidemiologists," or health professionals, at all. They are criminologists, just as are the social scientists whose findings they reject. This distinction is important because as we emphasize later in this Article, no health advocate sage has had the moral courage to even attempt to come to grips with either of the data sets involved here. Dolins and Christoffel's mendacious reference quoted earlier is the only mention of one of these data sets in the entire health advocacy literature; the other set is almost never mentioned. [73]

It is no less an overt misrepresentation to label the three scholars who published those two data sets "gun supporters." All three are liberal Democrats, two of them holders of endowed chairs in sociology who do not own firearms and do not urge that others do so. Labelling them "gun supporters" has the advantage not only of demeaningly misrepresenting their position, but of suppressing two embarrassing, yet material, facts. First, each of these "gun supporter" social scientists began his research as a believer in the health advocacy indictment of guns, but was reluctantly forced to conclude: "The more deeply we have explored the empirical implications of this indictment, the less plausible it has become." [74]

Second, the contention that widespread gun ownership deters violent crime is not a personal opinion of Professors James D. Wright and Peter Rossi. The work that Dolins and Christoffel cite is a report that Wright and Rossi produced stating the results of the survey that they conducted for the National Institute of Justice (NIJ) among 2,000 felons incarcerated in state prisons across the United States. [75] Wright and Rossi reported that 34% of the felons said that they personally had been "scared off, shot at, wounded, or captured by an armed victim"; [76] 69% said that they knew at least one other criminal who had also; [77] 34% said that when thinking about committing a crime they either "often" or "regularly" worried that they "[m]ight get shot at by the victim"; [78] and 57% agreed with the statement, "Most criminals are more worried about meeting an armed victim than they are about running into the police." [79]

Dolins and Christoffel do not, because they cannot, deny that this is what the felons said. Though Dolins and Christoffel find the felons' answers highly uncongenial, to label Wright and Rossi "gun supporters" for honestly reporting those answers is misleading, tendentious, and defamatory. To fully comprehend the deceptiveness of the entire passage quoted from Dolins and Christoffel, it is necessary to recall that the Wright and Rossi data set is entirely separate, and separately published, from the work by Gary Kleck that Dolins and Christoffel link with it. Linking them allows Dolins and Christoffel to claim falsely that both data sets have been analyzed and rejected. One work that Dolins and Christoffel cite does reject Kleck's views, but it makes no mention of the Wright and Rossi data set. [80] The work that Dolins and Christoffel cite reviews Kleck respectfully and without any demurral. [81] In reviewing Wright and Rossi's data, this other work seeks to put them in perspective, but does not reject them as "unconvincing." [82] In contrast, it gives a far more negative appraisal of a study on which Dolins and Christoffel rely to assert the foolishness of defensive gun ownership. Of course, this negative appraisal is not mentioned by Dolins and Christoffel. [83]

Our examples from Dolins and Christoffel and others may explain, if not justify, the anti-gun health advocacy literature's refusal to deal with uncongenial data and views. True scholarship normally requires that opposing data and views be expressly cited and refuted. What point is there in anti-gun health advocate sages discussing opposing views when their gun-averse dyslexia precludes them from accurately perceiving the meaning of data or perspectives about guns which are inconsistent with their own view?

VI. The Valor of Ignorance [84]

A recent interview with Dr. Robert Tanz of Children's Memorial Hospital in Chicago is as illuminating as Dean Prothrow-Stith's frank avowal of the stark hatred which underlies her anti-gun advocacy. Dr. Tanz and his colleague at Children's Hospital, Dr. Katherine Christoffel, "plan to do to handguns what their profession has done to cigarettes . . . turn gun ownership from a personal-choice issue to a repulsive, anti-social health hazard." [85]

Because the validity of this goal is severely undercut by Professor Gary Kleck's research on the defensive value of firearms, the interviewer asked Dr. Tanz about that research. It should be noted that there is legitimate controversy--among criminologists--about aspects of Kleck's work in this area. Based on an exhaustive data analysis, Kleck concludes that guns are more often used by victims to defend themselves each year than misused by criminals to commit crimes. [86] This conclusion rests on consistent results in ten surveys yielding estimates of the numerical frequency of defensive gun use. Yet inconsistent data are obliquely found in a different survey vehicle which, however, was not specifically designed to address defensive gun use. To the extent that these data do address that issue, they yield figures of less than 100,000 defense uses per year, far below Kleck and Gertz's figures of two million or more. This disparity is emphasized by Kleck's primary critic, Duke University economist Philip J. Cook, who feels that there are "persuasive reasons for believing that the [other survey vehicle] yields total incident figures that are much too low while Kleck's survey(s) may yield total incident figures that are much too high." [87]

Some criminologists agree with Cook. [88] Others accept Kleck's data, [89] as do we and as does at least one who challenges another aspect of Kleck's findings. [90] For the purpose of this Article, who is right does not matter. Even the most scrupulous attention to the canons of scholarship cannot guarantee that every conclusion is noncontroversial and error-free; where relevant data are partial and conflict, even the most competent scholars may reach inconsistent conclusions. What the canons of scholarship do demand, in order to minimize the likelihood of error (much less "sagecraft"), is what Cook's critique of Kleck did: cite Kleck, describe what Kleck says, and proceed to criticize. If only the health advocacy literature against firearms were so scrupulous and forthright.

One of the ultimate goals of scholarly writing is to provide readers with the full information necessary to review the matter and to make up their own minds. Returning to Dr. Tanz, it is clear that he has no place in this debate--no basis for forming an opinion, much less for commenting on the debate--because he "acknowledges that he has never read a word Kleck has written," [91] nor does he claim even to have read Kleck's critics. Yet Dr. Tanz unhesitatingly informed the interviewer that Kleck's figures are wildly exaggerated, that the actual number of defensive uses is "only about 80,000" annually. [92]

Dr. Tanz is also apparently ignorant of the now established fact that the very survey data he embraces against Kleck confirms a different Kleck finding which would equally appall Dr. Tanz, if only he knew of it. These data show that, far from defensive gun use endangering them, gun-armed victims who resist robbery or rape are injured far less often than either those who resist with other weapons or than those who submit. [93] Gun-armed victims are also much less likely to be robbed or raped than those who take Handgun Control's advice never to resist: "[T]he best defense against injury is to put up no defense--*give them what they want*, or run." [94]

It bears emphasis that Kleck and others who have discussed these facts add various caveats, the most important of which is that a gun is not a magic wand that renders resistance successful and risk-free regardless of the circumstances. [95] Rather, a handgun is precisely analogous to a fire extinguisher. Each is a tool which provides an option for action--an option which may be exercised or not, depending on what the circumstances dictate.

VII. Issues, Data, and References "Missing in Action"

Professor Kleck's research findings on the utility of defensive gun ownership first appeared in February, 1988. [96] That research, and Kleck's later elaboration of it, is appraised by one of Kleck's sometime critics as "[t]he definitive study in this area." [97] Health advocates are aware of the importance of the issue of defensive gun use. [98] What then accounts for their never citing and refuting the "definitive study" from 1988 until 1991, when Professor Cook's critical response became available for counter-citation? [99] On the rare occasions that Kleck's work is cited, it is always done so in a negative context and followed with the statement that it has been discredited. [100]

Note also the continued lack of citation when health sages discount defensive gun ownership to Kleck's findings that gun-armed victims who resist felons are roughly 50% less likely to be injured than those who submit and 67% less likely to be injured than those resisting with some

other kind of weapon. [101] What accounts for this failure to cite an aspect of Kleck's findings which are not just unchallenged but are actually confirmed by the alternative survey vehicle that sages find so appealing when it contradicts Kleck? [102] Could it be that the health advocacy literature will not disclose any data or issue which supports the value of armed self-defense until and unless it can be "balanced" by the appearance of some contrary study which supposedly refutes it?

We are not, incidentally, suggesting that health advocate sages join their allies in the anti-gun lobby in counseling victim submission to rapists and other felons. While anti-gun health advocates freely counsel that victims not keep a firearm to defend self, home, or family, [103] what victims should do if attacked is yet another issue missing in action from the health advocacy literature. [104]

Incidentally, to suppress knowledge of Kleck's "definitive study," health sages went beyond mere fraudulent nondisclosure of its existence in the years before they had Professor Cook to cite against Kleck. They overtly misrepresented that "there is no evidence to support the [value of guns for] self-defense argument." [105] At the time this falsehood was uttered, other empirical evidence to the contrary was available, and it was upon these sources that Kleck's 1988 study was based. [106] A scrupulous regard for the truth would have forced the health sages we just quoted to write: There is little scientific evidence congenial to our position, [107] and the best available evidence tends to show that guns are effective devices for protection. (This assessment remains fair, incidentally, whether one accepts the Kleck and Gertz findings of approximately two million defensive gun uses annually or the adverse Cook and Green evaluation of only some hundreds of thousands).

Even now when the health sages have Cook's work to counteract Kleck, health sages who discuss defensive gun use virtually never cite Kleck's "definitive study in this area." Writing in 1993, Mercy and Rosenberg admitted the continuing importance of the question, "How frequently are guns used to successfully ward off potentially violent attacks?" Nevertheless, they failed to cite Kleck, whose studies directly address that question. [108] Equally misleading is the following from a 1993 article by Teret and Wintemute, which failed to cite Wright and Rossi, Kleck, or the other studies discussed previously: "[Gun lobby or manufacturer a]dvertisements often portray a handgun as a necessary possession for the protection of oneself and one's family. However, data do not support this claim." [109]

Doubtless Mercy and Rosenberg, and Teret and Wintemute, would seek to excuse their suppression of the existence of contrary scholarship on the ground that they subscribe to Cook's views. The first difficulty with this is that only portions of Kleck's work have even been challenged. The rest of Kleck's work, along with the findings of the NIJ Felon Survey, has never been controverted. [110] The second difficulty is that Cook's disagreement with Kleck on a particular issue does not repeal the normal standards of scholarly discourse--quite the reverse. The normal standards of scholarly discourse demand that health sages do what Cook did: cite Kleck and explain why they think he is wrong. If they do not have the space to address the issue at length, cite Kleck and Cook, declare their agreement with Cook, and let their readers decide for themselves. The health sages will not follow even these rudiments of scholarly discourse because the health advocacy political agenda requires that the existence of contrary scholarship

or views be suppressed or misrepresented to readers as deriving from the dark forces of the gun lobby.

This leads to a more general point about the *persona non grata* status in the health advocacy literature of the entire corpus of Kleck's work, not just his research on defensive gun use. Over the past fifteen years, Kleck has been the most important and prolific social science researcher in the area. In 1993, the American Society of Criminology bestowed its highest award on *Point Blank*, declaring it the single most important contribution to criminology in the past several years. [111] American and foreign reviewers hail the book as a prerequisite to scholarly research or discussion of the issues; even scholars who disagree with Kleck's views call *Point Blank* the essential reference work, the "indispensable" text "for anyone concerned about guns and violence." [112] Professor Wright, co-author of 1981 and 1983 reviews that previously held sway as the authoritative work on the criminology of firearms, freely concedes that *Point Blank* eclipses those reviews. [113]

So what does it say about the integrity or reliability of the health sages that we can find no citation to *Point Blank* by a health advocate writing about firearms issues and virtually no citation to the rest of the vast corpus of Kleck's scholarly research? [114] Insofar as Kleck is cited, health advocates deem that they have refuted his findings without exposing any actual flaws or by just stating that Kleck questions the efficacy of gun control. [115] The anti-gun editors who print such refutations presumably accept them as condemning Kleck's work per se and without need for further discussion, much less for allowing Kleck or any scholar who agrees with him to argue its merits.

Returning to the example of Dr. Tanz, we see at least a limited defense for his disinclination to read anything adverse to his emotional bias against firearms. Perhaps his failure to read *Point Blank* is occasioned by the assumption that Kleck would simply shirk the evidence Dr. Tanz prefers to credit. Reasonable though such an assumption is to one whose ideas of scholarship are conditioned by the health advocacy literature, it is inaccurate as to the criminological literature in general and as to Kleck in particular. Kleck meticulously analyzes every major article in the health advocacy literature which preceded its publication; *Point Blank*'s reference section cites at least twenty-five medical or health publications. [116]

VIII. Unnatural Selection

Another exception to Kleck's *persona non grata* status in the health advocacy literature is particularly striking because it is the proverbial "exception that proves the rule." Despite Dolins and Christoffel's false characterization of Kleck as a Neanderthal "gun supporter," he is actually a liberal Democrat, a member of the ACLU and Amnesty International, but not a member of any pro-gun group. [117] In fact, Kleck has angered the gun lobby by recommending gun controls that it opposes. Long before the Brady Bill, he supported a much more sweeping background check than provided for by the bill. [118] Significantly, of all Kleck has written about firearms, this recommendation of a control is one of only two positive citations his work has received in the health advocacy literature. [119]

It is noteworthy that this positive citation of Kleck in the health literature appears in an entire chapter devoted to firearms issues in a health advocacy book. [120] Given the available space, it is at once ironic and typical that the chapter's authors found no room for the more major points in Kleck's work as a whole--or even just in the Kleck article that they cited. To see why Kleck's major work is avoided, it is necessary only to quote from the abstract to the cited article:

All of the following assumptions [of anti-gun advocacy] were found to be substantially at variance with the evidence: (1) Guns are five times deadlier than the weapons most likely to be substituted for them in assaults in which guns are not available [if a gun ban made guns unavailable to criminals]. (2) The sight of a gun can elicit aggression . . . (3) If guns are made more expensive, more difficult to obtain, or legally risky to own, people will do without them. (4) Guns are useless for self-defense . . . and have no deterrent effect on criminals. (5) Homicides are largely "crimes of passion" committed by otherwise law-abiding citizens not distinguishable from other people. Therefore, control must be directed at all gun owners rather than select criminal subgroups. [121]

Because most of these insupportable assumptions are present in the health advocacy chapter on firearms, the failure to mention Kleck's (or any other) counter-showing is once again striking, yet all too typical of what passes for scholarship in the sagecraft literature of anti-gun health advocacy.

What can be said about the intellectual integrity or even the competence of the health advocacy literature when it ignores and excludes the most important researcher's vast body of publications? The ironic and amusing effect of ignoring the premier researcher and the definitive work is that the health literature is sometimes as sloppy about noncontroversial matters as it is intellectually dishonest about controversial ones. [122]

As to the Kleck article recommending waiting periods, note that the co-author of that article was University of Illinois sociologist David J. Bordua. [123] As discussed previously, health sages dismiss his research as "racism" when they find its results uncongenial. [124] How fortunate it is that Professor Bordua's alleged racism is not a bar to their citing his work when it recommends more gun control. (The sincerity of the health sages' concern with racism may be further questioned in light of the health literature's lack of discussion of racism as an historical purpose or effect of anti-gun laws and the discriminatory application thereof. [125])

Next, recall how Dolins and Christoffel evaded uncongenial aspects of work by two other major contributors to the firearms literature, falsely characterizing them as "gun supporters." [126] The fact is that Professors James D. Wright and Peter H. Rossi, who hold endowed chairs in sociology at Tulane and the University of Massachusetts, respectively, are both liberal Democrats who neither own guns nor belong to the NRA. Their work has been funded by the National Institute of Justice, not the gun lobby. [127] Their review of the literature on the criminology of firearms was the basic text in the area until superseded by *Point Blank* a decade later. [128]

Despite its enormous bulk, health advocacy literature has no comprehensive summary like the Wright and Rossi summary or *Point Blank*. Since citing *Point Blank* is inconceivable, health sages (including even Dr. Christoffel) sometimes find themselves forced to cite Wright and Rossi for some point that cannot otherwise be documented. It is truly wondrous how the need to cite Wright and Rossi transforms those discreditable "gun supporters" into credible, reliable scholars. [129] In yet another example of gun-aversive dyslexia, Dr. Sloan cites Wright and Rossi as supporting the belief that "restricting access to handguns could substantially reduce our annual rate of homicide." [130] Wright and Rossi had indeed evaluated that belief, but their appraisal was: "It is commonly hypothesized that much criminal violence, especially homicide, occurs simply because the means of lethal violence (firearms) are readily at hand, and thus, that much homicide would not occur were firearms generally less available. *There is no persuasive evidence that supports this view.*" [131] Two years later, an NRA employee criticizing a new Sloan article noted Wright and Rossi's highly adverse view of the prior Sloan article. [132] Sloan and his co-authors responded that "Wright's long held views on the issue of gun control are also well-known, and their criticism was predictable." [133] Yet, of course, if those "long held" views were "well-known" to them two years before, their attribution of the opposite view to Wright and Rossi crosses the line from mere gun-aversive dyslexia to affirmative misrepresentation.

The quotation from Wright and Rossi in the preceding paragraph is the centerpiece from the abstract to the *Executive Summary* of their NIJ-funded literature evaluation. [134] Naturally, the health advocacy literature on firearms never mentions that quote or the general conclusions which the quote expresses. Readers who get their information from the health sages will never know of the specific findings, or even the general conclusions, of Wright and Rossi's NIJ *Literature Evaluation* or of the highly adverse implications of that *Evaluation* for the health advocacy position on firearms. [135]

In this connection, we note Teret and Wintemute's brief mention, in a 1993 article, of prior reviews of scholarship and literature on the criminology of firearms. [136] The NIJ *Literature Evaluation* and *Point Blank* are far and away the most important such reviews, but Teret and Wintemute chose not to share that fact (or any knowledge of either review) with their readers. Instead of Wright and Rossi, they cite an obscure, generally anti-gun, 1978 review which is only ninety pages long and which has gone virtually uncited since the 600 page Wright and Rossi review appeared in 1981. [137] Instead of the 500 page *Point Blank* from 1991, they mention a nine page review done for the AMA in 1989, which of course comes to generally anti-gun conclusions. [138]

Health advocates are understandably uncomfortable with the criminological scholarship represented by Wright, Rossi, Kleck, Bordua, and others--almost allergic to it, in fact. Yet should they not have a better response than just concealing this enormous body of contrary scholarship from their readers? It is trite, but apparently necessary, to say that if the health advocates have some meaningful answer to the criminologists' conclusions, they should forthrightly describe those conclusions and tell their readers what is wrong with them.

IX. "Sagecraft" and Scholarship

Though he has not read Kleck, Dr. Tanz has read--and highly recommends--a study published in the *New England Journal of Medicine* which extols strict Canadian gun control. [139] The study was a simplistic comparison of homicide rates in Vancouver to those in Seattle. [140] Being largely or completely ignorant of the vast body of competent contradictory research, health advocacy journals routinely cite this simplistic study for the shibboleth of the health advocacy faith, that a "lack of availability of guns can decrease the propensity for people to commit violent acts, both toward others and themselves [, resulting in] an absolute reduction in the rate of penetrating trauma." [141] Dr. Tanz does know that opposite conclusions were reached in one of the few skeptical articles a medical or health journal has published, namely Brandon Centerwall's exhaustive comparison of national homicide data from Canada and the United States. [142] Because of the conclusions reached by the Centerwall piece, however, it remains yet another uncongenial study Dr. Tanz apparently never bothered to read before closing his mind. [143]

Presumably Dr. Tanz is unaware that the rosy conclusions he prefers about Canadian gun control have been discredited in other Canadian studies. [144] The fact that Dr. Tanz chooses to rely on conclusions he likes based on data from just two cities in the United States and Canada, while having no interest in the contrary conclusions dictated by national data comparisons, speaks for itself. Being intellectually indefensible, such a choice can only be explained, not justified; the only explanation is that it is "result-oriented," that is, dictated by Dr. Tanz's emotional bias in favor of reaching anti-gun results regardless of the evidence. Regrettably, the health advocacy literature against firearms is just as consistently result-oriented. It is sagecraft literature in which academic "sages" prostitute scholarship, systematically inventing, misinterpreting, selecting, or otherwise manipulating data to validate preordained conclusions.

Dr. Tanz's preference for two-city data that supports his view over two-nation data which refute it is typical. That same intellectually indefensible, politically motivated choice has been made three times: first, by the authors of the two-city comparison (who are among the most prominent of the health advocate sages); second, by the *New England Journal of Medicine*, which published the article in spite of its inferior data; and third, by the anti-gun health advocacy community ever since. Professor Centerwall has kindly consented to allow us to quote the following personal communication:

[Dr. John Sloan, one of the authors of the two-city comparison,] and I were both affiliated with the University of Washington [School of Public Health, where Centerwall still teaches] at the time that [Sloan] was working on his study comparing Seattle and Vancouver and I on my study comparing the United States and Canada. We were aware of each other's work. Shortly before he began writing his paper, I gave him a copy of my [manuscript], so *he was familiar with it in detail before he prepared his own work.* [145]

We have added emphasis to the foregoing to highlight the sagecraft issue. Under normal standards of scholarly integrity, Dr. Sloan would have responded by either dropping publication efforts for his study or by citing Centerwall therein and then explaining why his results were meaningful and valid despite their contradiction by a vastly larger, more meaningful data set. However, the sagecraft ethics prevailing among health advocates on gun issues allowed Dr. Sloan et al. to solve their problem more simply, if not more elegantly. They simply published

their article and neglected to inform readers that a larger and more geographically diverse data set yielding contrary results existed.

Professor Centerwall's very different attitude toward scholarship is indicated by the fact that his article expressly called the two-city comparison to his readers' attention and then explained why its defective methodology and inferior data set invalidated its results. [\[146\]](#) Professor Centerwall has privately noted:

By coincidence [Sloan] and I independently submitted our respective manuscripts to the *New England Journal of Medicine* at the same time. Therefore, the editors had both manuscripts before them on the table, at least metaphorically, and perhaps literally. Thus both [Sloan] and the editors of the *New England Journal* knew that there was another study which flatly contradicted Sloan's findings and conclusions, yet Sloan chose not to acknowledge the existence of that study in his paper and the editors of the *New England Journal* did not require him to make reference to it. I might add that it is common for the *New England Journal* to publish two articles on the same subject back-to-back in the same issue when it seems opportune to do so. They have even published back-to-back articles which have flatly contradicted each other. Therefore, accepting one article in no way precluded accepting the other. [\[147\]](#)

Predictably, the *New England Journal of Medicine* rejected the Centerwall study, published the Sloan piece, and did not even require that Sloan and his co-authors mention Professor Centerwall's uncongenial findings. The Centerwall article was belatedly published in the *American Journal of Epidemiology*, albeit under the unprecedented condition that an anti-gun author be invited to formally comment in response. Of course, none of the hundreds of anti-gun articles and editorials published by health advocacy periodicals over the past 30 years has required, or received an invited commentary by either a pro-gun or a neutral scholar. Indeed, only one pro-gun commentary has even appeared in that period of time out of all the hundreds of articles addressing gun issues in these supposedly scholarly periodicals. [\[148\]](#)

Note that Professor Centerwall is yet another non gun owner, non "gun supporter," whose research forced him to conclusions he did not desire. His comments should have particular interest for any health advocates who can rise above gun-aversive dyslexia:

If you are surprised by my findings, so am I. I did not begin this research with any intent to "exonerate" handguns, but there it is--a negative finding, to be sure, but a negative finding is nevertheless a positive contribution. *It directs us where not to aim public health resources.* [\[149\]](#)

Other research has led Centerwall to link high violence rates to the effects of children watching television. Predictably, health advocate sages who concur with Centerwall on that point have no difficulty citing his work to that effect--even in the same works in which they ignore the uncongenial findings of his two-nation handgun homicide study in favor of citing the congenial findings of the Sloan two-city study. [\[150\]](#) Ironically, the June 10, 1992 issue of the *Journal of the American Medical Association*, devoted to the issue of violence, included a piece from

Centerwall on television as a cause of violence. [151] Many of the other articles were devoted to firearms violence. [152] Of course, none cited the Centerwall piece, or even mentioned any view other than the health advocacy shibboleth that more-guns-mean-more-murder-and-strict-gun-control-means-less-murder. The remainder of this Article will contrast the health advocacy literature's deceitful promotion of this shibboleth to the overwhelmingly adverse results of the criminological evidence.

X. International Disinformation

In a book published over twenty years ago, anti-gun activist Robert Sherrill derisively commented that no debate over gun policy would be complete without a plethora of brief, often inaccurate, and invariably contradictory, references to foreign gun laws and crime rates. [153] The information necessary to avoid many such errors is available in an analysis of foreign gun laws, policies, and crime which received the American Society of Criminology's Comparative Criminology Award in 1992. [154] Predictably, we have been unable to find a citation to that book in the health advocacy literature. [155]

A. Sloan's Vancouver-Seattle Comparison

References to foreign gun laws and their supposedly miraculous reductive effect on crime appear endlessly in the health advocacy literature. [156] The quality of this literature ranges from ignorant and simplistic to half-truth to deliberate misinformation. Lest this assessment seem harsh, compare a Canadian criminologist's evaluation of the Sloan two-city comparison. [157] Lamenting that all too often gun control "studies are an abuse of scholarship in that they invent[], select[], or misinterpret[] data in order to validate their a priori conclusions," [158] Professor Gary Mauser of Simon Fraser University adds that a "particularly egregious example" is *Handgun Regulations, Crime, Assaults and Homicide*, by John Sloan and his associates, which appeared in Volume 319 of the *New England Journal of Medicine* in 1988. [159]

Note that, entirely independent of the contradictory result from Centerwall's far superior data base (or Sloan's failure to mention it), Sloan's two-city comparison is methodologically worthless, patently invalid, and entirely insufficient to justify its conclusions. As Professor Kleck commented on National Public Radio's "All Things Considered":

There were only two cities studied, one Canadian, one U.S. There are literally thousands of differences across cities that could account for violence rates, and these authors just arbitrarily seized on gun levels and gun control levels as being what caused the difference. It's the sort of research that never should have seen the light of day. [160]

Of course, neither Sloan nor any other health advocacy sage has even acknowledged criticism from scholars like Mauser and Kleck. Consistent with the health advocacy themes noted earlier, criticism of the article is attributed to the NRA and portrayed as part of its sinister attempts to stifle legitimate scholarly research. [161]

B. Israel and Switzerland: Murder and the Availability of Guns

As David Kopel's prize-winning international studies show, no consistent correlation exists between gun laws or gun ownership rates and high murder, suicide, or crime rates across a broad spectrum of nations and cultures. [162] No doubt health advocates believe that the coincidence of severe anti-gun laws and low violence rates in some foreign nations is a matter of cause and effect. The gun laws, crime, and history of foreign lands are arcane matters not likely to be within the health advocates' ken. Moreover, the health advocates' ignorance of the criminological literature and allergy to neutral analysis or works that might contain uncongenial facts precludes their discovering a fact that undercuts their simple-minded faith in foreign gun laws: such laws cannot have caused the low European homicide rates because those rates long preceded the laws. [163]

The health advocate sages are, however, at least dimly aware of international data which contradicts their shibboleth that gun availability causes high homicide and suicide rates. The shibboleth is contradicted when it turns out that "low violence rates appear in Switzerland and Israel which encourage (even require) gun possession by their entire citizenry." [164] Health advocate sages evade those uncongenial facts by including Switzerland and Israel when listing nations "that have strict handgun laws [and] report negligible deaths by handguns." [165]

This is a classic example of deception by half-truth. It is certainly true that Switzerland and Israel do have "negligible deaths by handguns." [166] It is also true that Israel has a license requirement to buy and own a gun (any gun, not just handguns). [167] By providing only half of the story, health sages create a false impression of handgun unavailability, thereby counterfeiting support for their shibboleth whose subject is gun availability, not the existence of any particular regulatory scheme. Gun licensing does not, as is implied, equate to the gun scarcity their shibboleth deems the indispensable prerequisite to low homicide rates. Outside of the licensing system, Switzerland and Israel routinely lend guns to millions of civilians. [168] For those desiring to own guns, licensure is available on demand to every law-abiding, responsible adult. Swiss law allows, while Israeli law and policy actively promote, widespread carrying of handguns to maximize the likelihood that armed civilians will be present in public places. [169] As an Israeli criminologist notes, Israeli murder rates are "much *lower* than . . . in the United States. . . . despite the *greater availability* of guns to law-abiding [Israeli] civilians." [170]

The reason relatively few Israelis own guns is because any law-abiding, responsible, trained Israeli who needs a sub-machine gun, or a handgun, just draws it out of the local police armory, unlike in the United States, where fully automatic weapons have been illegal or severely controlled since the 1930s, and the importation and sale of even semi-automatic weapons is now prohibited. [171] Unlike the United States, where carrying a concealed handgun is almost universally illegal, in Israel if you legally possess a firearm (by loan or licensure) you

are allowed to carry it on your body (concealed or not concealed). The police even recommend you carry it, because then the gun is protected from thieves or children. The result is that *in any big crowd of citizens, there are some people with their personal handguns on them (usually, concealed).* [172]

Swiss law is very similar. [173] American massacres in which dozens of unarmed victims are mowed down before police can arrive astound Israelis [174] who note

what occurred at a Jerusalem [crowd spot] some weeks before the California MacDonald's massacre: Three terrorists who attempted to machine-gun the throng managed to kill only one victim before being shot down by handgun-carrying Israelis. Presented to the press the next day, the surviving terrorist complained that his group had not realized that Israeli civilians were armed. The terrorists had planned to machine-gun a succession of crowd spots, thinking that they would be able to escape before the police or army could arrive to deal with them. [175]

C. Fraudulent Suppression of the Steep Decline in Fatal Gun Accidents

The health advocate shibboleth posits a simple, simplistic, patterned relationship between guns and social harms: More guns equal more homicide, suicide and fatal gun accidents--and stricter gun control equal fewer such tragedies. But this shibboleth is diametrically contradicted by the decline in accidental gun fatalities since the late 1960s. An unparalleled increase in handgun ownership coincided not just with no increase in fatal firearms accidents, but with a steep decline. The thirteen years from 1967 to 1980 saw the addition of more new handguns to the American gunstock than had been bought in the preceding sixty-seven years of the twentieth century; and the seven years from 1980 to 1986 saw the addition of half as many more new handguns as were bought in the century's first sixty-seven years. [176] Yet those same twenty years saw fatal gun accidents steadily decline from 2,896 in 1967 to 1,452 in 1986, even as population substantially increased. [177]

In sum, over those twenty years the per capita fatal gun accident rate decreased by two thirds, though the handgunstock grew 173%, from 27.8 million to 63.9 million. In the years since 1986 fatal gun accidents have remained stable at approximately 1400-60, despite continued large increases in both the handgunstock and the population. [178] Later in this article we note the correlation of this steady twenty-year decline with the steady displacement over that period of the long gun by the much safer handgun as the weapon kept loaded for defense in American homes and businesses. But for now we focus not on the cause of the decline, but on health advocacy's lack of interest in that cause or in the decline itself. For now we treat the cause as unknown (though not unknowable) so as to explore what the health advocates' uninterest reveals about their claim of studying gun issues out of a single-minded concern to preserve human life.

Were health advocates rationally concerned about preserving human life, a two-thirds decline in fatal gun accidents should have been of great interest to them. Even in the absence of such concern, any honest scholarly proponent of the health advocacy shibboleth would be deeply interested in a phenomenon that diametrically contradicts that shibboleth. The interest should have been particularly intense and urgent for scholars motivated not by academic curiosity alone, but also by concern to preserve human life. After all, there must be some explanation for a two-thirds reduction in accidental gun deaths, and particularly for it's coinciding with a 173% increase in handguns. If that mysterious explanation could be determined, it might suggest strategies to reduce gun suicide or gun murders as well. [179] This potential should especially have attracted health advocates; for, as we shall see, they have a penchant for combining statistics of gun fatality by suicide, homicide and accident into one homogeneous group, as if the three were related or homogeneous phenomena.

Of course, upon investigation it might turn out that no ready explanation can be found for the decline in gun accidents. Or, if an explanation is determinable, it might not be helpful in curbing gun murders and/or suicides. But the possibility that investigation could be fruitless does not explain, much less justify, the health advocates' total lack of interest in pursuing such an investigation--the fact that the decline itself has gone virtually unmentioned and that there has been no focus at all on its implications in the health advocacy literature against guns. [180]

This total disinterest has an interesting implication of its own. Without denying that health advocates do care about reducing gun death, their disinterest in the twenty-year decline in accidental death implies that their concern is severely compromised by their hatred of guns. Though avowing a deep and single-minded concern to save lives, they seem interested only in ways of doing so which involve reducing access to guns. At least we can think of no other reason for their total lack of interest in finding out how and why accidental gun death could decline by two thirds over a period when the handgunstock was increasing by 173%.

Health advocacy's negativity about firearm safety training confirms our reasoning. The NRA's commitment to reducing accidents is expressed in decades of support for safety training, both in the home and for hunters. [181] Most recently, the NRA has devoted large resources to the "Eddie Eagle" program on firearms safety education for children, which is praised by the National Safety Council [182] and even the vehemently anti-gun, anti-NRA *Washington Post*. [183] But the only "safety training" anti-gun advocates unreservedly approve is teaching that guns are evil and that no one should have them. [184] Some admit the "Eddie Eagle" program promotes safety, yet they reject it because it was originated by the NRA. [185] Health advocates worry that gun safety training may convey the wrong message: It may lead young people to think guns and gun ownership a legitimate aspect of American life; it may even promote among children a desire to own guns when they grow up. [186]

No doubt health advocates genuinely desire that gun death be reduced. But that desire is constantly compromised by a hatred of guns which precludes serious consideration of any option other than reducing gun ownership as a way of reducing firearms fatalities. Consider the typical, and typically disingenuous, ratiocination given by Dolins & Christoffel for ignoring the potential of safety training: "Data showing that this strategy is effective are scanty, however." [187] Notice how opposite the lesson Dolins & Christoffel draw is to the lesson they would draw if their concern for saving lives were not overridden by their desire to ban guns. An unalloyed concern to save lives would cause them to find in a lack of data on the life-saving potential of safety training a basis to recommend study of that potential. But Dolins & Christoffel see the lack of data only as an excuse to dismiss that potential, focussing only on proposals to reduce gun ownership instead.

Of course, Dolins & Christoffel never tell their readers that some unknown factor has caused a two-thirds decline in accidental fatalities to coincide with a 173% enormous increase in handguns. For all Dolins & Christoffel know, this radical reduction in deaths is attributable to safety training. But they are not interested in having that explored or in their readers considering any program for saving lives except those involving reduced gun availability. Dolins & Christoffel ostentatiously lament accidental gun deaths among children--while, again, not informing their readers of the steady decline in such deaths. Again, Dolins & Christoffel don't

know whether that steady decline is attributable to increased safety training, nor are they interested in finding out. Their interest is in milking the highly emotive issue of dying children for all it is worth as an argument for reducing handgun availability to ordinary citizens. [\[188\]](#)

Again, we do not doubt that health advocates are sincerely concerned with reducing gun accident fatalities, and especially with saving children's lives. Why then is firearms safety training discussed so negatively in the health advocacy literature, to the extent that it is discussed at all? Again, the only hypothesis that seems to fit the facts is that the authors' overriding agenda of reducing gun ownership compromises their deep concern with saving lives (and especially children's lives).

We return to the issue of accidental death in a few pages. But now we want to consider homicide and suicide, these being the other elements of the simplistic pattern health advocates postulate: that more gun availability results in more homicide, suicide and gun accidents while strict gun control will result in fewer such tragedies.

D. No Observable Pattern in International Homicide and Suicide

As discussed *infra*, the shibboleth is also refuted by a decline in domestic American homicide correlating to the vast increase in gun ownership during the 1970s and 1980s. To mask the embarrassing downward trend in murder, the health sages began massaging the statistics by combining homicide and suicide in one joint figure. This produced an "Intentional Homicide" rate which, once again, they claimed to have been caused by widespread gun ownership. [\[189\]](#)

But this combined homicide-suicide approach embarrasses the health advocacy shibboleth in another way which requires avoidance through yet another statistical manipulation. Anti-gun advocates like to compare American homicide rates to those of low violence European nations as "proof" that strict European gun laws reduce homicide. Of course, when we remember that low European violence rates long preceded strict gun laws, what the comparison proves is that countries that differ in culture and institutional and socio-economic arrangements are likely to have different violence rates. By the same token, though the United States suicide rate actually exceeds its homicide rate, European suicide rates are still much higher. These much higher suicide rates further confirm that the decisive factors in the social harms associated with guns are culture and other issues more fundamental than the mere availability of some particular kind of weaponry. So anti-gun advocates offer simplistic international homicide rate comparisons but never international suicide rate comparisons--despite the fact that they may also emphasize American suicide rates and attribute those to widespread gun ownership. [\[190\]](#)

The example of health sage Susan Baker is especially apt. She originated the idea of combining suicide and homicide in discussing American statistics, thereby both inflating the gun death total and concealing the fact that American homicide was declining as handgun ownership increased. Why then when Professor Baker uses cross-national comparison to support the anti-gun shibboleth does she abandon her own supposedly preferable combined suicide-homicide creation and revert to the homicide-only approach? In arguing that restrictive gun laws reduce homicide she points out that Denmark's murder rate is about seven deaths per 100,000 population lower than the United States. [\[191\]](#) If she had compared suicide rates, however, she would have found

the Danish rate much higher; and had she compared the nations' combined homicide-suicide rates according to her own method, she would have had to admit the Danish combined rate was almost 50% higher than the American. [\[192\]](#)

Curious about what would happen if Professor Baker's approach of a combined homicide-suicide rate were used in making international comparisons, we constructed an International Intentional Homicide Table. The Table is based on 1987 data from The Statistical Abstract of Israel, an article by Killias which gives averages for many countries for the years 1983-1986, [\[193\]](#) and data on other nations from the latest year available in the *U.N. Demographic Yearbooks* for 1985 and 1991. [\[194\]](#)

Table 1
International Intentional Homicide

<i>Country</i>	<i>Suicide</i>	<i>Homicide</i>	<i>TOTAL</i>
Rumania	66.2	N.A.	66.2 (1984)
Hungary	39.9	3.1	43.0 (1991)
Finla	28.5 (1991)	2.86	31.4
Denmark [195]	28.7	.70	29.4 (1984)
Denmark	24.1	4.8	28.9 (1991)
France	20.9 (1991)	4.36	25.3
Austria	23.6	1.6	25.2 (1991)
Switzerland	24.45	1.13	25.58
Belgium	23.15	1.85	25.0
West Germany	20.37	1.48	21.85
U.S. (1985-88) [196]	12.5	8.3	20.8
Luxembourg	17.8	2.9	20.7
Norway	15.6 (1991)	1.16	16.76
Canada	13.94	2.6	16.54
New Zealand	14.7	1.8	16.5 (1991)
Australia	11.58	1.95	13.53
England-Wales*	8.61	.67	9.28
Scotland*	10.5	1.7	12.2 (1991)
Israel*	8.0	1.0	9.0

How well do the results in this Table comport with the health advocacy shibboleth that more access to guns means more homicide and suicide while strict gun laws reduce each? Of eighteen nations for which figures were readily available, the United States ranks below the median when suicide and homicide rates are combined. [197] The United States combined homicide-suicide rate is less than half the homicide-suicide rate in gun-banning Hungary and less than one-third the suicide rate alone of gun-banning Rumania. [198] Such firearm-intensive countries as Australia and New Zealand rank very low on the table, and the lowest rate is for Israel, a country that actually encourages and requires almost universal gun possession. [199]

In short, Professor Baker's combined suicide/homicide approach does not serve the health advocates' political agenda if applied in comparing the United States to gun banning countries health advocates cite as models for American policy. So, it is only when they discuss United States figures that Professor Baker and the other health sages combine murder and suicide figures.

Reviewing the entire health advocacy literature on guns and suicide, we have been unable to find even one reference to the much greater suicide rates in gun-banning European countries (or the much lower rates in Israel). A fortiori, that literature never discusses why gun-banning countries have so much more suicide if the more-guns-means-more-suicide shibboleth is correct. Sloan and his co-authors followed their ludicrous two-city homicide comparison with an (unintentionally) hilarious comparison of suicide rates in the two cities. [200] Completely unfazed by the fact that the Canadian city had the higher suicide rate, Sloan emphasized that it had a lower suicide rate for one sub-group, adolescents and young men. [201] This, they solemnly intone, is due to lax United States gun laws and more gun availability. [202]

This brings us to an issue health advocacy articles stressed during the 1980s: the poignant phenomenon of suicide among young males, the rate of which was supposed to be increasing as a result of increasing firearm availability. [203] Naturally, no health advocate mentioned that suicide among teenagers and young adults has reportedly been increasing throughout the entire industrialized world. [204] By the same token, readers of health advocacy articles blaming American suicide increases in these groups on guns will never learn that while suicide among American males aged fifteen to twenty-four increased 7.4% in the period 1980-1990, the increase in English suicide for this group was over ten times greater (78%), "car exhaust poisoning [being] the method of suicide used most often." [205]

Despite recent increases in youth suicide, the population sub-group most likely to shoot themselves is elderly men. [206] We take leave to doubt that any health advocate is wise enough to decide for a seventy-six year old man in failing health whether he should live or die. Such philosophical considerations are never mentioned by health sages asserting the more-guns-mean-more-suicide shibboleth, nor is modesty about their own wisdom likely to find favor with sages who are confident enough of it to promote their policy prescription for American society through a literature of deceit.

Setting aside the philosophical issue, it is pragmatically arguable that, if guns are unavailable, people who are serious enough about killing themselves to use a gun will find some other way. [207] On the other hand, some suicide may occur impulsively because of the immediate

availability of a deadly mechanism to a person who might not have completed the act, given time for reflection. The intellectual desert inhabited by anti-gun health advocates is epitomized by their failure, and perhaps inability, to cite the strongest empirical showing for gun control as a means of reducing suicide. They apparently do not know of this study because it was done by Gary Kleck, whose work they compulsively avoid. [208] Suicide is a serious issue. It deserves serious, scholarly discussion, rather than use as a political football by unscrupulous propagandists grasping at any opportunity to make a case for their preordained agenda.

Finally, consider the implications of the International Intentional Homicide Table for the health advocacy shibboleth that strict-gun-laws-mean-low-homicide-rates. [209] The observable pattern which would exist if that were true simply does not exist. Denmark, whose strict anti-gun laws Professor Baker praises, has almost four times more homicide than Switzerland and more than four times more homicide than Israel. [210] Switzerland's very gun-restrictive neighbor, Germany, has about 25% more homicide (and 50% more than Israel). [211] Germany's very gun-restrictive neighbor, Belgium, has over 20% more homicide than Germany; and their mutual, very gun-restrictive neighbor Luxembourg has over 100% more homicide. [212] England, with its much ballyhooed anti-gun strictness, has the lowest homicide rate of all, but Scotland, with exactly the same laws, has almost three times as much homicide as England and much more than Israel or Switzerland. [213]

These statistics are not intended to, nor do they, prove that strict gun laws "cause" homicide. What they do reinforce is the four conclusions set out earlier in this Article in the Part entitled "The Verdict of Criminological Scholarship." [214] Gun ownership by responsible adults is not the cause of the social problems associated with guns; the cause of those problems is gun possession by criminal and irresponsible people. Disarming criminal and irresponsible people is a highly desirable goal, but it is not reasonable to anticipate any more success than the law has had in preventing or deterring these people from violent acts. In every society the number of guns suffices to arm those who desire to misuse them.

XI. Gun Availability, Social Harms, and Fraudulent Non-Disclosure

Leaving the international statistics, we turn now to American statistics. Here again, to sustain the health advocacy shibboleth, sages routinely suppress facts and truncate, select, or even falsify statistics and data. They must doctor the statistics because a full and accurate rendition would not show an easily observable, consistent, and coherent pattern of more guns mean more murder, suicide, and accident.

A. Fraudulent Suppression of Declining Accidental Gun Fatalities

One fact that is never mentioned in health advocacy articles on fatal gun accidents is that a vast increase in handgun ownership coincided with a dramatic decrease in accidental gun fatalities. Over the twenty year period 1967-1986, the number of handguns increased 173% (from 27.8 million to 63.9 million), while the fatal gun accident rate decreased by almost two-thirds. [215] This remarkable decrease goes pointedly unnoted in the health advocacy literature because it

triply embarrasses the health advocate sages' political agenda. First, to acknowledge the decrease would undercut their reliance on the danger of gun accidents as a reason for opposing gun ownership. Second, it might lead to well-justified skepticism about their claim that increasing gun availability causes increasing rates of murder and suicide. Third, admitting the remarkable decline in fatal gun accidents might prompt inquiry into the correlative phenomenon that occurred during the same years: the handgun's replacement of the long gun as the weapon kept for defense in American homes and stores. Handgun prohibition advocates argue that their program would reverse that trend, causing Americans to return to long guns for home and office defense--weapons the advocates erroneously think "safer" than handguns. [216] Necessarily, the effect of such a large scale reversal would be to greatly increase accidental fatalities. If kept loaded and ready for rapid defensive deployment, long guns are both more likely to accidentally discharge and much deadlier when discharged than loaded handguns. [217] Moreover, a long gun is much more difficult to secure from children.

The comparative dangers between long guns and handguns are demonstrable from a simple comparison of the available figures which break down by gun type involvement in fatal gun accidents. Though 90% or more of the firearms kept loaded at any one time are handguns, handguns are involved in less than 14% of the accidental gun fatalities. [218] Estimates show that if the 85.2% of loaded handguns in American homes in the year 1980 had been long guns instead, the number of fatal gun accidents would have more than quadrupled, from 1,244 to approximately 5,346. [219] Consequently, 4,100 more lives per year would be lost in accidental shootings in the home. [220]

Table 2
National Safety Commission
Gun Accident Statistics [221]

<i>Year</i>	<i>Total</i>	<i>Hand-gun</i>	<i>Shot-gun</i>	<i>Rifle</i>	<i>Unspeci-ied [222]</i>	<i>Percent Hand-Guns [223]</i>
1991	1441	255	163	94	929	50%
1990	1416	251	160	73	942	51%
1989	1489	231	175	86	997	47%
1988	1501	202	185	93	1021	42%
1987	1440	206	178	105	951	42%
1986	1452	183	190	108	971	37%
1985	1649	190	215	113	1131	37%
1984	1668	225	214	118	1111	40%
1983	1695	209	260	132	1094	35%
1982	1756	219	232	127	1178	38%

1981	1871	224	273	140	1234	35%
1980	1955	288	283	129	1255	41%
1979	2004	311	254	145	1294	44%
1979-91	21337	2984	2782	1463	14108	41%

B. Fraudulent Suppression of the Decline in Accidental Child Gun Death

To help promote their gun control agenda, health advocate sages have long harped on the emotionally charged issue of child death by gun accident. [224] Multiple reasons dictate their failure to acknowledge the steep decline in such tragedies. Admitting the decline would, in and of itself, undercut their political agenda. Worse, it could hoist health sages on their own emotional petard. What if someone were inspired to ask whether the proposal to ban handguns might reverse the decline and cause many more children to die in gun accidents? Finally, by suppressing any mention of the decline, health advocate sages leave themselves free to continue fabricating statistics to exaggerate the number of child deaths--falsehoods which, but for their tragic subject matter, would be comic in their wild inconsistency. [225]

Using exaggerated figures allows health advocate sages to capitalize on the emotionalism of childhood fatalities and thereby evade legitimate questions about their proposal to ban and confiscate handguns as a means of reducing such tragedies. We offer the following questions which, of course, are never mentioned in the health advocacy literature on children and guns: If so sweeping a measure as confiscating 230 million firearms is justified because some 273 children under age fifteen die in firearm accidents annually, is the less intrusive measure of banning child bicycles justified by the death of three times as many children in bicycle accidents annually? [226] If confiscating over 80 million handguns is justified because approximately fifteen children under age five die in handgun accidents annually, is a ban on cigarette lighters justified by the fact that four times as many children in that age group die from playing with them annually?

Consider the fact that over 400% more children under age fifteen die in drownings than in gun accidents; [227] twenty times as many children under age five drown in bathtubs and home swimming pools as are killed in handgun accidents. [228] Few people need a bathtub (as opposed to a shower stall) or a swimming pool. If the tragedy of accidental childhood gun fatalities justifies confiscating over 80 million handguns, or all of the more than 230 million firearms, do the much greater numbers of tragic childhood drownings justify a licensing system under which only the disabled and others who show they "truly need" a bathtub or swimming pool will be allowed to have them? [229]

C. Fraudulent Suppression of Gun Ownership-Homicide Comparison Data

Since the mid-1960s, the total American gunstock has massively increased. [230] To some extent this increase may represent no more than the increase in disposable income that has massively

spurred sales of consumer products generally. But the enormous increase in handguns particularly seems to reflect a widespread fear of crime. This is not to say that handgun sales can be correlated with crime rates which, since the mid-1960s, have risen and fallen erratically and inconsistently in various states and cities, and in the nation as a whole. There is no reason to think that gun buyers are motivated by, or even aware of, changes in homicide rates as such, much less changes in the rates of rape, robbery, and burglary, which have risen and fallen with no consistent relationship to each other or to homicide statistics. What ordinary people are aware of are the crimes that underlie the statistics. For instance, as of 1980 the burglary rate was such that about one in ten houses was burglarized each year. [231] Even assuming that the burglary rate had decreased to one in twenty over the ensuing decade (which it did not), many people who know nothing about the rate might nevertheless be impelled to buy handguns as a result of the experience of being burglarized or knowing others who had been burglarized. Of course, fears that impel firearms purchases may be prompted by media sensationalism in the reporting of individual crimes, even in comparatively low crime areas.

In sum, while the demand for guns to be used for protection is stimulated by generally high crime rates, it does not vary greatly in response to changes or trends in the crime rate. If crime rates remain generally high, many potential victims will want guns for protection, regardless of whether crime rates are modestly rising or modestly falling or remaining steady on a year-to-year basis or over a period of years.

Table 3
Gunstock Increases Over A Twenty-Year Period

<i>Gunstock Increases 1973-1994</i>		<i>Total Gun Stock</i>	<i>Guns Per 1,000 People</i>	<i>Homicide Rate</i>
1973	<i>Handguns</i>	36,910,819	175.9	9.4 per 100,000 people [232]
	<i>All Guns</i>	122,304,980	610.3 [233]	
1992 [234]	<i>Handguns</i>	77,626,552	304.3	8.5 per 100,000 people
	<i>All Guns</i>	221,851,212	869.7	
1994 [235]	<i>Handguns</i>	82,350,383	315.9	Homicide Rate Unavailable
	<i>All Guns</i>	231,243,491	887.0	

In contrast, if the health advocates' more-guns-mean-more-murder shibboleth were true, massive increases in guns should translate into massive increases in murders. The 110.2% increase in handgun ownership in the twenty year period 1973-1992 [236] might not have resulted in a full 110.2% increase in murders, but if guns really were the "primary cause" of murder, [237] or just "one of the main causes," the 110.2% increase in handguns, and the 73.3% increase in guns of all types, should have been accompanied by a consistent, marked increase in murders as predicted by health advocacy sages who bewailed those increases in gun ownership.

At the very least, the murder rate should have increased somewhat. However, there was no consistent and marked increase in the murder rate. In 1973, the American firearm stock totaled 122 million, the handgun stock was 36.9 million, and the homicide rate was 9.4 per 100,000 people. [238] At the end of 1992, twenty years later, the firearm stock had risen to 221.9 million, the handgun stock had risen to 77.6 million, but the homicide rate was 8.5--or 9.5% lower than it had been in 1973. [239] The percentage of murders committed with firearms decreased as well. In 1973, 68.5% of murders were committed with guns. [240] Fifteen years later, after Americans had purchased almost as many new firearms as they had in the preceding seventy-three years, 62.8% of homicides were committed with guns. [241]

Note that we are not suggesting, as pro-gun fanatics might, that increased gun ownership caused reduction in homicide or other violence. Our focus is the health advocacy shibboleth that guns are the primary cause of murder, and that more guns, particularly more handguns, mean more murder. The data examined so far do not bear this out. Is it just a coincidence that the gun ownership-murder rate comparative data are never mentioned in the health advocacy literature, or that its implications are never discussed there? Or does this nondisclosure reflect the implications of the criminological conclusion we noted earlier that gun ownership by noncriminals does not cause crime, and is not a source of social harm, even though firearms in the hands of criminals do facilitate crime? [242]

In presenting the 1973-1992 data, we are not suggesting that the homicide rates steadily declined during that period. In the years 1973 to 1977 the homicide rate first rose to 9.8 per 100,000 people in 1974, then dropped to 8.8 in 1977. [243] The rate then steeply rose to its highest point ever, 10.2 in 1980. [244] Five years later, in 1984, it had dropped 22.5% to 7.9. [245] Then in 1986, it began rising again with some fluctuation, to its 1992 level of 9.3. [246] As for homicides committed with guns, over the twenty year period they fell as low as 58.7% in 1985, but then rose back to 68.5% by 1992. [247]

In sum, over a twenty year period of unparalleled increase in guns, homicide rates were erratic, unpatterned, and completely inconsistent with the shibboleth that doubling the number of guns, especially handguns, would increase homicide rates. Geographic and demographic studies of homicide are equally inconsistent with the health advocacy shibboleth. [248] For instance, studies trying to link gun ownership to violence rates find either no correlation or a negative one. [249] Once again, these are facts that readers who rely solely on health advocacy literature will never learn. Nor will they be exposed to the following:

When used for protection, firearms can seriously inhibit aggression and can provide a psychological buffer against the fear of crime. Furthermore, the fact that *national patterns show little violent crime where guns are most dense* implies that guns do not elicit aggression in any meaningful way. Quite the contrary, these findings suggest that high saturations of guns in places, or something correlated with that condition, inhibit illegal aggression. [250]

XII. Shibboleth Diverts Attention from Actual Causes

Likewise never discussed in the health advocacy literature against firearms is the fact that the homicide rate among whites has steadily fallen since 1980. [251] The apparent increase in American homicide from the mid-1980s to the present is due to a steady fall in white homicide being offset by a vast increase in homicide in drug-ridden, poverty-stricken inner cities. Inner city and minority youth homicide is a regular theme in the anti-gun health literature. [252] Of course, health sages never acknowledge that per capita gun ownership is far lower among African Americans than among whites. [253] Mentioning that fact would both discredit their shibboleth that gun availability causes homicide and support the leading English criminological analyst's pessimistic view that "in any society the number of guns always suffices to arm the few who want to obtain and use them illegally." [254]

In sum, increased firearm availability to honest, responsible people--of any race--does not cause increased violence. Neither is lower firearm availability to such people associated with lower violence. Taken together or separately, data on firearm availability for the nation as a whole, and for discrete geographic or demographic sub-populations, discredit the shibboleth that the possession of guns is the primary cause of murder. The actual causes of murder--other than competing in the murderous drug trade--are hopelessness, poverty, and a lack of substantial employment opportunities. Studies suggest that rates of homicide and other violence among blacks are no greater than those of similarly situated whites. [255] In that connection, consider the following: "Fixating on guns seems to be, for many people, a fetish which allows them to ignore the more intransigent causes of American violence, including its dying cities, inequality, deteriorating family structure, and the all-pervasive economic and social consequences of a history of slavery and racism." [256] In this context, we note a Marxist criminologist's suggestion that the function, or at least the effect, of gun control advocacy is diverting attention from urgently needed social and political change. [257]

XIII. A Critique of Overt Mendacity

A 1989 article in the *Journal of the American Medical Association* approvingly quoted a CDC official's assertion that his work for the Centers for Disease Control and Prevention involved "systematically build[ing] a case that owning firearms causes death." [258] The CDC official later claimed that *JAMA* had misquoted him and offered the only repudiation of the anti-gun political agenda we have found in a health advocacy publication, characterizing it as "anathema to any unbiased scientific inquiry because it assumes the conclusion at the outset and then attempts to find evidence to support it." [259]

Unfortunately, that is precisely what CDC is doing. Indeed, this has subsequently been avowed by the prior official's successor. [260] Even more unfortunately, CDC and other health advocate sages build their case not only by suppressing facts, but by overt fraud, fabricating statistics, and falsifying references to support them. [261] The following are but a few of the many examples documented in a recent paper co-authored by professors at Columbia Medical School and Rutgers University Law School.

The first instance represents a lamentable exception to our generalization that comparisons of gun ownership and murder rates through the 1970s and 1980s find no place in the health advocacy literature. [262] Some health sages go so far as to overtly misrepresent that murder

rates increased over that period, and then correlate this misrepresentation with the same period's steadily increasing gun ownership so as to lend spurious support to their more-guns-mean-more-murder shibboleth. Thus, a 1989 Report to the United States Congress by the CDC stated that "[s]ince the early 1970s the year-to-year fluctuations in firearm availability has [sic] paralleled the numbers of homicides." [263] We leave it to the readers of this Article to judge how a 69% increase in handgun ownership over the fifteen year period from 1974 to 1988 could honestly be described as having "paralleled" a 14.2% decrease in homicide during that same period. [264]

Understandably, the CDC Report offered no supporting reference for its claim of parallelism. However, the inventive Dr. Diane Schetky, and two equally inventive CDC writers--Gordon Smith and Henry Falk--in a separate article actually do provide purportedly supporting citations for the claim that "[h]andguns account for only 20% of the firearms in use today, but they are involved in the majority of both criminal and unintentional firearm injuries." [265] The problems with this claim are that the claim is false in every respect and that the citations are fabrications. The purpose of the claim is to exaggerate the comparative risks of handguns vis-a-vis long guns so as to fortify the cause of handgun prohibition and avoid admitting the major problem we have already addressed--that, because handguns are innately far safer than long guns, if a handgun ban caused defensive gun owners to keep loaded long guns instead (as handgun ban advocates and experts concur would be the case), thousands more might die in fatal gun accidents annually. [266]

The only citation given by either Schetky or Smith and Falk to support their claim that handguns comprise only 20% of all guns, yet are involved in 90% of gun accidents and crime, is the FBI's *Uniform Crime Reports*. [267] Understandably, no page citations are given, because the citations are simply falsified. As anyone familiar with the *Uniform Crime Reports* knows, they provide no data on gun ownership, and thus no comparative data on handgun versus long gun ownership. Nor do the *Uniform Crime Reports* provide data on accidents in general, thus no data on gun accidents, and thus no comparative data on the incidence of handgun accidents versus long guns accidents. Schetky, Smith, and Falk could have found data on these matters in the National Safety Council's *Accident Facts*, but those data would not have suited their purpose because these statistics do not support the point they sought to make.

Furthermore, the *Uniform Crime Reports* give no data on the number of persons injured in gun crimes or the number of such injures in handgun crimes versus long gun crimes. They do give such data for gun murders, but even those data do not support Schetky's claim that 90% are committed with handguns. [268] Every one of the other purported statistics given by Schetky, Smith, and Falk is not only wrong, but wrong in only one particular direction. Each false statistic errs in supporting their point, whereas an accurate rendition of the statistic would not have done so. It is, of course, elementary that innocent mistakes tend to be random and to balance each other rather than all erring in favor of the position for which they are presented.

Another instance of overt mendacity involves the remarkable Dr. Sloan. Giving him the benefit of the doubt, we classified other mischaracterizations by him as gun-averse-dyslexia. It strains even that generous category, however, to so classify an inability to accurately read and describe one's own articles. The gravamen of the Sloan two-city comparison discussed previously was that the strict 1978 Canadian gun law caused Vancouver to have less homicide than Seattle,

where any responsible adult can buy a handgun. [269] But as an NRA representative pointed out in a critical letter to the *New England Journal of Medicine*, the authors had made no effort to determine how Canadian homicide had changed since adopting the law. [270] In fact, the homicide rate had not fallen, but rather it had risen slightly, with handgun use unchanged at about one-eighth of homicides. Sloan tried to extricate himself from this embarrassment by mendaciously asserting that the "intent of our article was not to evaluate the effect of the 1978 Canadian gun law." [271] Readers may judge for themselves how well that squares with the article's actual conclusion: "[R]estriction of access to firearms . . . is associated with lower rates of homicide." [272] Health advocate readers have certainly understood the significance of the article to be that it "demonstrated the beneficial effect of [Canada's] tighter regulation" of firearms. [273]

It is misleading to suggest that, heavily politicized though it is, the anti-gun health advocacy literature commonly exhibits overt mendacity, as opposed to fraudulent misleading by half-truth and suppression of material facts. Overt mendacity is not infrequent, however, and numerous examples will be documented in the next section and in the balance of this Article.

XIV. The Myth That Murderers Are Ordinary Gun Owners

The case for reducing firearm availability to ordinary people rests on two interrelated myths endorsed explicitly and implicitly in the health advocacy literature on firearms. First is the myth that "most [murderers] would be considered law-abiding citizens prior to their pulling the trigger." [274] Second is the myth that "most shootings are not committed by felons or mentally ill people, but are acts of passion that are committed using a handgun that is owned for home protection." [275] From these myths other falsehoods follow: that firearms availability to ordinary citizens is the "primary cause" of murder, [276] that murder would radically decrease if ordinary citizens were deprived of those guns, and that it is unnecessary to worry much about the enforceability of gun bans because, even if criminals will not disarm, the law abiding will--and they are the ones committing most murders.

The problem is that it simply is not true that previously law abiding citizens commit most murders or many murders or virtually any murders. Thus, disarming them would not, and could not, eliminate most, many, or virtually any murders. Homicide studies show that murderers tend not to be ordinary law-abiding citizens, but rather extreme aberrants. [277] The great majority of murderers have life histories of violence, felony records, and substance abuse. [278] These facts are so firmly established that they even appear in medico-health discussions of violence, [279] yet they are never discussed in connection with the health advocate sages' mythology about ordinary citizens murdering relatives and acquaintances with guns.

Looking only to official criminal records, data over the past thirty years consistently show that the mythology of murderers as ordinary citizens does not hold true. Studies have found that approximately 75% of murderers have adult criminal records, [280] and that murderers average a prior adult criminal career of six years, including four major adult felony arrests. [281] These

studies also found that when the murder occurred "[a]bout 11% of murder arrestees [were] actually on pre-trial release"--that is, they were awaiting trial for another offense. [282]

The fact that only 75% of murderers have adult crime records should not be misunderstood as implying that the remaining 25% of murderers are non-criminals. The reason over half of those 25% of murderers don't have adult records is that they are juveniles. [283] Thus, by definition they cannot have an adult criminal record. Juvenile criminal records might well show these murderers to have extensive serious criminal records. "The research literature on characteristics of those who murder yields a profile of offenders that indicates that many have histories of committing personal violence in childhood, against other children, siblings, and small animals." [284] Though juvenile criminal records are not generally available, they occasionally become known in connection with some high-profile cases. In one recent case which generated nationwide publicity, a five-year-old boy was thrown from a fourteenth story window by two other boys because he had refused to steal candy for them. [285] Police revealed that both killers, ages ten and eleven, had prior arrests for theft, aggravated battery, and unlawful use of a weapon. [286] At the time of the murder, one of the perpetrators was supposed to be confined to his home on a weapons conviction. [287]

The anti-gun health advocacy literature avoids the fact that murderers tend to be extreme aberrants by just falsifying the facts. A truly startling example, because it contradicts his own writings, is that of the CDC's point man for gun prohibition, Dr. Mark Rosenberg. [288] Dr. Rosenberg, director of the CDC's National Center for Injury Prevention and Control, recently extolled the CDC's hope to create a public perception of firearms as "dirty, deadly--and banned." [289] To mislead readers into blaming firearms for crime rather than criminals, Dr. Rosenberg actually goes so far as to claim that "most of the *perpetrators* of violence are not criminals by trade or profession. Indeed, in the area of domestic violence, most of the perpetrators are never accused of any crime. The victims and perpetrators are *ourselves--ordinary citizens*, students, professionals, and *even public health workers*." [290] A comparison of this statement to Dr. Rosenberg's other statements reveals its falsity. In the same work, Dr. Rosenberg stated: "Violence is foreign to the lives of most public health professionals." [291] In another article, Dr. Rosenberg recognized that "[m]ost family homicides involve spouses and occur after a series of prior assaultive incidents." [292]

We do not suggest that all statements promoting this mythology in the health advocacy literature constitute conscious misrepresentations. Some reflect only a combination of ignorance and intellectual confusion. For instance, Jeremiah Barondess comments in *JAMA*:

In relation to the contention that homicide by firearms is carried out by established felons, the Federal Bureau of Investigation has reported that of the 15,377 reported firearm-related murders in 1992, a total of 7505 fell under the category of "other than felony type," such as "romantic triangle, arguments over money or property, other arguments"; *thus*, many who kill for the first time are not felons until they commit the act. [293]

But for the tragic seriousness of the subject matter, this comment would be truly hilarious as an example of class-based myopia. It is evident that the image the term "argument" conveys to

Barondess et al. is a heated disagreement between doctors. It seems entirely to have escaped Barondess and his co-authors that "argument" may mean something very different when it occurs among young men in areas where the willingness and capacity to employ extreme violence is respected, where young men raised in violent families live in an environment whose most attractive employment opportunities are in the violent drug trade. [294] These are young men who "believe that to survive, one must be tough, be willing to fight, carry a gun, and be willing to shoot it." [295] They are young men who "engage in high-risk activities partly because they believe their chances of living beyond age thirty are slim anyway" [296] and who participate in "often deadly battles over respect," [297] which is of heightened concern to them because they are "deprived of [any] legitimate opportunities to acquire symbols of status." [298] The same intellectual confusion characterizes Jeffrey B. Kahn's claim that "most firearm-related violence is being committed" not by criminals, but "by relatives and friends of victims and in the course of arguments." [299]

Their myopia leads Barondess and Kahn to the unexamined and absurd assumption that felons don't have friends, relatives, or acquaintances, and don't engage in "romantic triangle[s], arguments over money or property, [or in] other arguments." [300] Only by indulging in that absurd assumption could they falsely conclude that the murderers in the study were ordinary citizens "who kill[ed] for the first time [and were] not felons until they commit[ted] the act." [301] Kahn and Barondess fall into this absurdity only by ignoring the studies which describe terms like "acquaintance homicide" and murder in the course of "romantic triangle[s], arguments over money or property, other arguments." [302] These are not previously law-abiding people killing each other, but abusive men killing women they have savaged on many prior occasions, or gang members and drug dealers killing each other. [303] But for their gun-averse dyslexia, Kahn and Barondess could have discovered these well-established facts about homicide by just reviewing studies in their own discipline. [304]

As for child abusers and wife batterers, Dr. Rosenberg correctly observes that many are never arrested. That is yet another reason why 25% of murderers don't have a record, though most domestic murderers do have prior records. [305] Although Dr. Rosenberg is correct that most child abusers and wife batterers are never arrested, he is as wrong factually as he is morally to minimize child abuse and wife beating as essentially normal behavior engaged in by "ordinary citizens, students, professionals, and even public medico-health workers." [306] Those abusers who eventually murder resemble other murderers in that they are highly aberrant individuals with life histories of substance abuse and brutalizing family members, often in irrational outbursts of violence.

[T]here are significant differences between men who commit [domestic] partner homicide and men in the general noncriminal population. For instance, men who kill their [domestic] partners are more often drug abusers, are more prone to abuse alcohol and are intoxicated more often, and are more frequently given to [prior verbal] . . . threats and [physical violence] than are other men. [307]

In 90% of domestic homicide cases, the police had been called to the same address at least once within the preceding two years; the median number of prior police calls to the same address was

five during that period. [308] A leading analyst of domestic homicide has noted that "[t]he day-to-day reality is that most family murders are preceded by a long history of assaults." [309]

It is difficult to avoid the conclusion that anti-gun health advocates suppress and misrepresent these facts because the facts are embarrassing to the anti-gun argument for two reasons. First, laws are already in place to prevent gun ownership by felons, drug abusers, and juveniles. Sensible though these laws are, in practice they have proven only marginally effective. To reiterate the obvious, murderous aberrants see little reason to obey laws which prohibit gun ownership. The failure of these laws suggests that it is senseless, and indeed counterproductive, to strain police resources further by committing them to enforcing a gun ban against the general populace, which does not misuse guns anyway. Second, since owning guns does not cause ordinary people to murder--and certainly doesn't cause them to rob, rape, or burgle--it is difficult to identify and justify the basis for confiscating their property and depriving them of the freedom to choose to own arms for the defense of self, home, and family. [310]

XV. "Gun Ownership as a Risk Factor for Homicide in the Home"

This is the title of a 1993 article whose authors include several of Sloan's co-authors on the Vancouver-Seattle comparison discussed previously. [311] The 1993 article having, like its predecessor, appeared in the *New England Journal of Medicine*, we refer to it as *NEJM-1993*. This article is particularly appropriate for a detailed critique of the anti-gun position because it has received widespread publicity [312] and voluminous citation in the health advocacy literature. [313] Moreover, *NEJM-1993* continues a long series of widely publicized health advocacy studies and would be more appropriately cited in a statistics text as a cautionary example of multiple statistical errors.

Statistical analyses are used to reach conclusions in the face of certain types of uncertainty. Uncertainty results from such factors as inherent variation in the subjects being studied, the effects of many other influences, both known and unknown, and limited resources which restrict the amount of data that can be collected and studied. Statistical analyses may result in erroneous conclusions for a variety of reasons, some acceptable, others not. In this discussion, we shall ignore errors in recording data and of calculation, because though unacceptable, these errors have become less common with the use of computers and statistical analysis programs. However, many other types of errors can occur and are of grave concern when the conclusions will be used to make important policy decisions. In any case, use of flawed statistical studies may lead to fatal consequences.

A. When What You See Is Not Necessarily What You Get

We assume here that the statistical analysis program on the computer performs the calculations of the statistical analysis correctly, although this is not always true. Moreover, data entry errors are sufficiently common to require careful checking by the analyst to catch them. However, neither calculation errors nor data entry errors will be biased in favor of any particular agenda the analyst may have.

More serious methodological concerns involve errors by the analyst which relate to a conscious or unconscious agenda. The analyst is responsible for choosing the correct type of analysis, for ensuring that the assumptions in the statistical analysis are met, and for confirming that the results are described correctly. When errors occur in any of these areas, the conclusions reached can be partially or completely wrong even in the absence of any other errors. While the presence of these errors in a study does not guarantee that the conclusions are invalid, the conclusions are then unsubstantiated, and the scientific impartiality of the analyst may be called into question. Errors are of particular concern when they occur in such a manner as to facilitate conclusions which confirm the previous positions of the analyst.

It is seldom possible to conduct a scientific study in which only the effects to be tested are operating to compel a particular conclusion. The statistical field of "Experimental Design" is concerned with methods which detect the effects to be studied even when other effects are operating. [314] Failure to separate the effects to be studied from extraneous effects leads to the unintentional "confounding" [315] of extraneous effects with the effects to be studied. The resulting conclusions, then, are not based on tests of the effects being studied. Rather, they reflect some unknown combination of those effects and extraneous effects confounded with them. Thus, the hypotheses supposedly being studied are not in fact being studied. Hence, what you see is not what you get.

B. Purpose and Design of NEJM-1993

The hypothesis allegedly under study by *NEJM-1993* was "whether keeping a firearm in the home confers protection against crime or, instead, increases the risk of violent crime in the home." [316] Simplistically described, the study compares a sample of households in which homicide occurred to a supposedly similar sample in which they did not. [317] It finds that the households where homicide occurred were more likely to have contained guns. [318] From this finding, it concludes that guns are more of a danger than a protection. [319]

The study utilized data from three urban counties where homicide occurred in the home during chosen time periods. [320] As a comparison with these homicide cases, a control was selected for each homicide victim. [321] These control subjects were matched to the homicide victim with respect to sex, race, age, and neighborhood of residence. [322] The authors then obtained additional kinds of information by reading police or other official reports relating to the homicide cases, by interviewing another occupant of the household where the homicide occurred (a case-proxy), and by interviewing either the control subject or another occupant of the control subject's household (a control-proxy). [323]

C. Study Design Exaggerates Risks of Defensive Gun Ownership

The data presented in *NEJM-1993* does not show that even one homicide victim was killed with a gun ordinarily kept in that household. Indeed, the indirect evidence indicates that most of the homicide victims in the study were killed using guns not kept in the victim's home: 70.9% of the homicide victims were killed by people whose relationship to the victim [324] indicates that the killer did not live in the victim's household, and thus presumably used a gun not kept in the victim's household.

Incidentally, we do not mean to deny that it may be relevant that the murder household had a gun even though that gun had no direct involvement in the murder, but the nature of that relevance compromises *NEJM-1993's* conclusions about the supposed risk of home gun ownership. What if it turns out that people who are at higher risk of being murdered are more likely to own guns than those at lesser risk? This is not only intuitively plausible, but it is also supported by the finding in some high density urban areas that victims of homicide and other severe violence tend to be engaged in criminal activity, including drug activity, or have criminal records. [325] If these higher risk people own guns more often, *NEJM-1993's* conclusion that murder victims owned guns at a higher rate than the control group of non-victims does not at all prove that owning a gun is risky. On the contrary, far from showing that the murder victims were at higher risk because they were more likely to own guns, the comparison may only demonstrate that they owned guns because they were at higher risk than the members of the supposedly comparable control group. We take up this point in the next section.

The study's authors make a tacit assumption by consistently using of the word "victim," and by asserting that "violent crime in the home" is being considered. [326] The authors assume that the victim of the crime and the victim of the homicide are the same person. However, the deceased may actually have been the attacker, and thus the homicide should have been considered a benefit rather than a risk. The cases in which the "offender" is listed as "Police officer" seem likely to fall under this misleading classification, as does even the categorization of "Police" as "offender." [327]

D. Inadequate Consideration of High Risk Career Criminality

The authors of *NEJM-1993* were aware of the problem that the homicide cases in their study might contain a disproportionate number of high risk people. In an attempt to avoid the problem, they tried to compare the homicide cases to the controls to see if there were differences in a variety of risk factors, including drinking and drug problems, histories of domestic violence, whether the home was owned or rented, and particularly emphasizing gun ownership. [328] *NEJM-1993* then reports differences in the presence of these risk factors as being associated with an increase in the risk of homicide. [329]

In this connection, note that gun ownership, the supposed risk factor *NEJM-1993* emphasizes, was far from the most strongly associated with being murdered. Drinking and drug problems, a history of family violence, living alone, and living in a rented home were all greater individual risk factors associated with being murdered than gun ownership, based on the study's results. [330] Even so, it is clear that other risk factors, such as the number of criminal associates or frequency of high risk or criminal activity, were not taken into account. These factors, and others which are ignored in this study, have had their effects combined with the effects of the risk factors supposedly being studied, thus resulting in inadvertent statistical "confounding." An "association" due to these ignored confounding factors would be more accurately described as a "spurious association." Proper statistical design requires an effort to identify all risk factors and to take the relevant ones into account by properly collecting the data and choosing the appropriate statistical analysis. To the contrary, *NEJM-1993* simply did not do this adequately. Thus, the study's strongly worded conclusions about the included factors are not warranted. For instance, although the authors accounted for whether any member of either the homicide victim

household or the control group had been arrested, the authors failed to account for the seriousness of the crime for which the arrest was made, for conviction of the crime, for whether the specific murder victim had been arrested or convicted of a crime, or for other high risk activity or gang affiliations of any member of the household.

These issues are particularly important because criminological studies indicate that the overall population may be divided into three categories: (1) the overwhelming majority, who are law-abiding citizens; (2) a minority of people who commit infrequent or trivial crimes; and (3) "career criminals" who commit the majority of crimes, especially the more serious ones. [331] It may plausibly be postulated that a group containing more career criminals will have both a higher rate of gun ownership and a greater likelihood of being murdered than a supposedly similar control group of people who commit relatively less frequent and less serious crimes. If so, that is a confounding factor which would produce a spurious association between owning a gun and being murdered.

This leads us to a more fundamental problem with the entire *NEJM-1993* study design. Let us suppose that the data problems arising from the comparison of the murdered group to the control group had all been solved. Still, the cases involve high-risk households unrepresentative of the general population. The controls, having been drawn from atypically high violence geographical areas, are unrepresentative of the general population. Therefore, there is no formal research basis for applying any conclusions from this study regarding the effects of gun ownership to the general population. [332] Nonetheless, *NEJM-1993* reaches unqualified conclusions and presents them as applying to the general population. [333]

E. False Minimization of Sampling Bias

Whenever only a portion of a phenomenon is studied, the conclusions reached may be in error if the portion selected for study is not representative of all of the cases. One way to avoid this error, called a "bias," is to scrupulously include all of the cases in the study. The authors of *NEJM-1993* are aware of this, and claim: "To minimize selection bias, we included all cases of homicide in the home. . . . High response rates among case proxies (94.6 percent) and matching controls (80.6 percent) minimized nonresponse bias." [334]

Unfortunately, a rather different picture emerges from close examination of the numbers. During the time period selected, 444 cases of homicide in the home were reported in the counties studied. [335] Nineteen of the 444 cases were dropped from consideration because the authors deemed murder-suicides and multiple homicides as a single event, and included only one homicide per event. [336] Five additional homicides were dropped for reasons relating to reporting or death certificate change. [337] The remaining cases account for the 94.6% of the total cases that the authors state were left in the study. [338] An additional 7% were dropped because of failure to interview the proxy, and 1% more due to failure to find a control. [339]

This left 388 matched pairs, or only 87.4% of the cases. This lower percentage is not mentioned by the authors, though they do give the individual drop percentages, thereby downplaying the cumulative effect and the possible biases which could result. The authors were unable to obtain complete data on all of the matched pairs, but the multivariate statistical analysis used requires

complete data. Therefore, 72 of the 388 matched pairs had to be excluded in the final multivariate analysis. [340]

The end result is that only 316 matched pairs were used in the final analyses, representing only 71.2% of the 444 homicide cases. [341] It is very difficult, therefore, to accept *NEJM-1993*'s claim of having examined "all cases" in an analysis that was actually based on 71.2% of the cases. We hasten to add that this does not prove that there was any selection or response bias in this study. It shows only that there was ample room for such biases to act. It also shows that the authors avoided coming to grips with this issue and presented the data in a manner which would mislead the readers into thinking that little or no such bias existed.

Further analysis of the 28.8% of the cases which were dropped might shed some light on whether, and to what extent, *NEJM-1993* is compromised by the existence of such biases. Nevertheless, the senior author refuses to make these data available to others for reanalysis. [342]

F. Control Group Selection Did Not Assure Comparability

The validity of *NEJM-1993*'s conclusions depends on the precise matching of the control group with the homicide cases, except, of course, for the occurrence of a homicide. The importance of proper control selection cannot be overemphasized where medical or policy implications are at stake. Use of an inappropriate control can lead to erroneous conclusions, and perhaps to harmful practices: "It is thus, for want of an adequately controlled test, that various forms of treatment have in the past, become unjustifiably, even sometimes harmfully, established in everyday medical practice" [343] The need for the control groups to differ only with respect to the factor being studied is called an "obviousness" because it is so glaringly obvious. [344] In *NEJM-1993*, however, the control group fails to match the cases in important ways. The incomplete matching produced a control group which was not representative of the counties studied, and therefore further decreased the inferences which can be legitimately drawn from the data of this study.

While the study did match the control group to the case group using several categorizations such as sex, race, age, and neighborhood of residence, this matching method selected controls which were not necessarily matched with the case group on other important factors. The control selection involved random selection of households that were at least a "one-block avoidance zone" away from the case homicide. [345] The matching criteria did not include any lifestyle or related indicators. A number of lifestyle indicators, referred to as "behavioral factors," were studied, [346] but the large differences between the cases and the control group for these factors invariably shows more substance abuse and other problems in the cases than in the controls. This indicates that matching was not done for these lifestyle indicators. Other lifestyle indicators, such as single parent versus two parent homes, were not included in the study or are not shown in the article.

If the selected population is composed of subpopulations which differ in homicide rates, the matching control must come from the same subpopulation as the case which it is supposed to match. This could happen with the matching method *NEJM-1993* used only if the subpopulations

were settled in distinct and different large geographic areas. These areas would have to be larger than one-block in size because of the avoidance method used. How much larger is hard to tell, since the study does not reveal how far outside the zone it was necessary to travel to find a matching control who would agree to cooperate.

In any event, risk subpopulations are not distributed in such a coarse-grain manner. Criminal residences and crime areas which define the homicide risk subgroup factors, such as drug use and drug dealing, violent criminal events, and violently abusive family relationships, are often fine-grained in their distribution. Differences exist in areas within a city, but there is population heterogeneity within these areas. [347] Choosing a control group living one or more blocks away will not assure matching with respect to the subpopulation.

Of particular interest here is the small, violent, high-risk subpopulation that may be disproportionately represented in the homicide cases. The chances are good that the controls with which they will be matched will come from the much larger nonviolent, or less violent, subpopulations, producing a "spurious association." [348]

The control group may or may not differ from the homicide cases in another central characteristic. The conclusion that gun ownership is a risk factor for homicide derives from the finding that 45.4% of the homicide case households owned a gun, but only 35.8% of the control households owned one. [349] Whether that finding is accurate, however, depends on the truthfulness of control group interviewees in admitting the presence of a gun or guns in the home. [350] The question, therefore, becomes whether much confidence can be reposed in the truth of persons asked about gun ownership by a surveyor.

The authors of *NEJM-1993* admit that "[u]nderreporting of gun ownership by control respondents could bias our estimate of risk upward." [351] They realize that this is a critical point, but they conclude that there is no underreporting. [352] Predictably, they do not mention the fact that false denial of gun ownership by survey respondents has long been deemed a major problem with calculating the true size of American gun ownership. Nor do they cite Professor Kleck's exhaustive discussion of this issue. [353]

The authors of *NEJM-1993* justify their dismissal of the problem of underreporting by noting that "a pilot study [conducted by four of the *NEJM-1993* authors plus one other person] of homes listed as the addresses of owners of registered handguns confirmed that respondents' answers to questions about gun ownership were *generally* valid." [354] It is reasonable to ask what "generally" means. In the pilot study, 97.1% of the families listed as the location of a registered handgun admitted to having guns in the home, either at the time or recently. [355] Superficially this appears to be an impressive record of openness. It becomes less impressive, however, when the numbers are placed in full perspective. Seventy-five homes were chosen from new handgun registration records. [356] Due to false addresses and other difficulties, only fifty-five could be found, and of these, only thirty-five consented to the interview. [357] These families are unrepresentative in an even more significant respect. These are people who have chosen to let the government know that they own guns, and who have undergone a governmental approval process. To learn that this sample is willing to admit the same facts to survey interviewers can

tell us nothing about gun owners in general, let alone about the lower income gun owners in *NEJM-1993*.

In comparison with this sample of registered gun owners, it is likely that owners of unregistered guns would be even more reluctant to admit to ownership. Among other things, it may involve admission of a criminal offense. [358] Moreover, the control group could be further biased if criminals and owners of illicit guns are more likely to refuse to be interviewed for a study such as this, let alone to admit to gun ownership. With these possible discrepancies between measures of gun ownership in the homicide case and control homes, it appears that the authors quote their own previous work in a way which overstates its strength.

To reiterate, *NEJM-1993*'s conclusions depend entirely on an accurate estimation of the control group's gun ownership. In this case, it would take only 35 of the 388 controls falsely denying gun possession to make the control ownership percentage exactly equal that of the homicide case households. If indeed the controls actually had gun ownership equal to that of the homicide case households, then a false denial rate of only 20.1% among the gun owning controls would produce 35 false denials, thereby equaling ownership. Such a false denial rate is smaller than either the "Refused consent for interview" category of the pilot study, or the "inaccurate registration data" category. [359] Therefore, the results of the pilot study are consistent with a false denial rate sufficiently high to bring the control group gun ownership rate up to a level equal to, or even higher than, the homicide case household rate, although the authors cite the pilot study to the reverse effect. [360] Neglect of the false denial rate can produce a bias large enough, by itself, to account for the entire association between gun ownership and homicide claimed in this study.

G. Inappropriate Method of Statistical Analysis

NEJM-1993's authors chose to use the Case Control Method (CCM). [361] This method is accepted in medical research as an investigatory tool with a strength in its ability to generate hypotheses, rather than as a final test of hypotheses. [362] A relevant weakness of the CCM is that it has a susceptibility to bias. [363] In the social sciences it is seldom possible to do the properly blinded, randomized, controlled studies which would be used to confirm a hypothesis. Thus, it becomes even more important to be sensitive to the possible existence of biases, and to attempt to minimize them. *NEJM-1993* makes conclusory claims about the association found between gun ownership and homicide, rather than asserting a tentative hypothesis. [364] According to the author's conclusion in the abstract, [365] "guns kept in the home are associated with an increase in the risk of homicide," and "our study confirms this association." [366] The authors' occasional qualification of their results [367] indicates that they understand the tentative nature of the results of Case Control Method studies, yet this does not appear to have tempered the presentation of their conclusions.

XVI. Conclusion

We believe we have documented an emotional anti-gun agenda in the treatment of firearms issues in the medical and public health literature. While the anti-gun editorials and articles discussed had the superficial form of academic discourse, the basic tenets of science and

scholarship have too often been lacking. We call them "anti-gun health advocacy literature" because they are so biased and contain so many errors of fact, logic, and procedure that we can not regard them as having a legitimate claim to be treated as scholarly or scientific literature.

Criminological and sociological analysis provides important, even crucial, information as to the role of firearms in violence and the utility and viability of potential gun control strategies. Virtually all of this information is ignored or affirmatively suppressed in the health advocacy literature. That literature also shows consistent patterns of making misleading international comparisons, mistaking the differences between handguns and long guns, and exaggerating the number of children injured or killed, thereby building up the emotional content. Other distortions include presenting gun ownership in such a manner as to ignore or minimize the benefits, and measuring defensive benefits purely in terms of attackers killed, rather than considering attacks deterred or attackers repelled. To the contrary, the criminological and sociological research literature demonstrates the existence of high risk groups for firearms misuse, and of the "career" criminals who commit many of the serious crimes in our society. Yet the anti-gun health advocacy literature consistently overlooks these data and attributes equal propensity to commit violent crime to all people.

The health advocacy literature exists in a vacuum of lock-step orthodoxy almost hermetically sealed from the existence of contrary data or scholarship. Such data and scholarship routinely goes unmentioned and the adverse emotional reaction of the gatekeepers of the health journals assures the elimination of contrary views from their pages. In the rare instances in which works with contrary views are cited at all, they tend to be dismissed with *ad hominem* comments, but without the presentation of evidence or analysis refuting them. The anti-gun health advocacy literature can be described with the derogatory term "sagecraft," implying that academics have gone beyond the pale. Superficialities of scientific methodology and presentation are used to counterfeit scholarship supporting an anti-gun agenda while the basics of sound research are ignored. This shameful performance implies the willing collaboration of the researchers, the journals, and the CDC as a federal governmental funding agency. While many medical and public health journals have participated in this sagecraft, the *New England Journal of Medicine* has been one of the most noticeable. It has an editorial policy which is strongly and explicitly anti-gun, has published poorly written anti-gun articles, and has excluded articles which disagree with its editorial policy. These actions forfeit its claim to be a research journal rather than just a political advocacy publication.

This indictment of the anti-gun health advocacy literature is extremely troubling in an era in which research and data are often sought as a basis for debate over guns and formulation of public policy. When emotionally based anti-gun, pseudo-scientific advocacy is presented in the guise of research, ill-founded policy decisions may ensue, wasting public resources and harming many people. The medical and public health journals need to eschew their emotionally based advocacy role in favor of presenting scientific research results.

Finally, some remark must be made on the idea of violence as an epidemic and a public health emergency. For that purpose, we are delighted to adopt recent comments by a preeminent neutral scholar in criminology, Professor James D. Wright:

And there is a sense in which violence is a public health problem. So let me illustrate the limitations of this line of reasoning with a public-health analogy.

After research disclosed that mosquitos were the vector for transmission of yellow fever, the disease was not controlled by sending men in white coats to the swamps to remove the mouth parts from all the insects they could find. The only sensible, efficient way to stop the biting was to attack the environment where the mosquitos bred.

Guns are the mouth parts of the violence epidemic. The contemporary urban environment breeds violence no less than swamps breed mosquitos. Attempting to control the problem of violence by trying to disarm the perpetrators is as hopeless as trying to contain yellow fever through mandible control. [\[368\]](#)

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[\[1\]](#) Boccaccio, *The Decameron* 686 (Musa & P. Bondanella trans., Mentor-New American Library 1982).

[2] See, e.g., Samuel Walker, *Sense and Nonsense About Crime and Drugs: A Policy Guide* chs. 10 and 13 (1994); Gary Kleck, *Point Blank: Guns and Violence in America* (1991) [hereinafter Kleck, *Point Blank*]; Gerald D. Robin, *Violent Crime and Gun Control* (1991); James D. Wright et al., *Under the Gun: Weapons, Crime, and Violence in America* (1983) [hereinafter Wright et al., *Under the Gun*]; James D. Wright & Peter H. Rossi, *Armed and Considered Dangerous: A Survey of Felons and Their Firearms* (1986) [hereinafter Wright & Rossi, *Armed and Considered Dangerous*]; see also *infra* note 43.

[3] Lois a. Fingerhut & Joel C. Kleinman, U.S. Dep't of Health and Human Servs., *Firearm Mortality Among Children and Youth*, 178 *Advance Data* 1 (1989). Significantly, Centers for Disease Control and Prevention (CDC) firearms specialist Lois Fingerhut adds: "The data presented in this report underscore these concerns." *Id.* at 6. Without substantial exaggeration, they could have added that CDC publications on firearms can be reviewed, as they will be herein, without ever finding analysis of data leading to any other conclusion. See also U.S. Dep't of Health, Education, and Welfare, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention--Background Papers* 18, 64-67, 464-65 (1979).

[4] Janice Somerville, *Gun Control as Immunization*, *Am. Med. News*, Jan. 3, 1994, at 9 (profiling health activist Dr. Katherine Christoffel and quoting approving comments by an American Medical Association (AMA) official and the CDC's Mark Rosenberg). "Guns are a virus that must be eradicated. . . . They are causing an epidemic of death by gunshot, which should be treated like any epidemic--you get rid of the virus. . . . Get rid of the guns, get rid of the bullets, and you get rid of the deaths." *Id.*; see also Deborah Prothrow-Stith, *Deadly Consequences* 198 (1991); U.S. Dep't of Health and Human Servs., *Surgeon General's Workshop on Violence and Public Health: Report 53* (1985) (recommending, among other ideas, a total ban on private possession of handguns); National Committee for Injury Prevention and Control, *7 Injury Prevention: Meeting the Challenge* 261-67 (Supp. 1989) (supplemental edition of the *American Journal of Preventive Medicine* (1989)) [hereinafter *Injury Prevention*]; Deane Calhoun, *From Controversy to Prevention: Building Effective Firearm Policies*, *Inj. Prevention Network Newsl.*, Winter 1989-1990, at 17 (praising the National Coalition to Ban Handgun's change of name to indicate its desire for a broader prohibition reflecting its "belief that guns are not just an inanimate object, but in fact are a social ill"); Marsha F. Goldsmith, *Epidemiologists Aim at New Target: Health Risk of Handgun Proliferation*, 261 *JAMA* 675 (1989); Daniel W. Webster et al., *Reducing Firearms Injuries*, *Issues in Sci. Tech.*, Spring 1991, at 73, 78.

[5] Karl P. Adler et al., *Firearm Violence and Public Health: Limiting the Availability of Guns*, 271 *JAMA* 1281 (1994); American Academy of Pediatrics, *Firearm Injuries Affecting the Pediatric Population*, *AAP News*, Jan. 1992, at 22 [hereinafter *Firearm Injuries Affecting the Pediatric Population*] (arguing for a ban on private possession of handguns); American Academy of Pediatrics, *Firearms and Adolescents*, *AAP News*, Jan. 1992, at 20; *Brady Bill Has Medicine's Support*, *Am. Med. News*, May 20, 1991, at 25 (Firearms "are one of the main causes of intentional and unintentional injury [T]he real cure for the epidemic [of violence by guns] is to eliminate its cause."); Calhoun, *supra* note 4, at 17; Judith C. Dolins & Katherine K. Christoffel, *Reducing Violent Injuries: Priorities for Pediatrician Advocacy*, 94 *Pediatrics* 638, 645 (1994) [hereinafter Dolins & Christoffel, *Reducing Violent Injuries*] (defining gun control as a process of progressively removing weapons from home environments); Harold Henderson,

Policy: Guns 'n' Poses, Chi. Reader, Dec. 16, 1994, at 8, 24 (quoting Drs. Robert Tanz and Katherine Kaufer Christoffel of Chicago on the need to change public attitudes toward guns as public attitudes toward smoking have been changed); William Raspberry, *Sick People With Guns*, Wash. Post, Oct. 19, 1994, at A23 (quoting Dr. Mark Rosenberg on his, and the CDC's, agenda to create a public perception of firearms as "dirty, deadly--and banned"); Daniel W. Webster & Modena E. H. Wilson, *Gun Violence Among Youth and the Pediatrician's Role in Primary Prevention*, 94 *Pediatrics* 617, 621 (1994) (stating that "gun manufacturers are polluting our communities").

[6] Calhoun, *supra* note 4, at 17 (noting that the "National Coalition to Ban Handguns" was renamed the "Coalition to Stop Gun Violence").

[7] Handgun Control, Inc.'s eventual goal is national gun licensing under which self-defense would not be a ground for gun ownership; only sportsmen would be allowed to own guns. Erik Eckholm, *A Little Control, A Lot of Guns*, N.Y. Times, Aug. 15, 1993, § 4, at 4 (quoting Handgun Control, Inc. Chair Sarah Brady). See discussion of HCI, CSGV, and other anti-firearms groups in Don B. Kates, *Gun Control: Separating Reality from Symbolism*, 20 *J. Contemp. L.* 353, 356-57 (1994).

[8] "The position of the National Coalition to Ban Handguns is very clear . . . [We support] ban[ning] the manufacture, sale and possession of all handguns, except for police, military, licensed security guards and pistol clubs." Michael K. Beard, Testimony on behalf of the National Coalition to Ban Handguns in Support of 8-132 Before the Committee on the Judiciary 3 (Mar. 22, 1989) (transcript on file with the *Tennessee Law Review*); see also Sam Fields, *Handgun Prohibition and Social Necessity*, 23 *St. Louis U. L.J.* 35, 51 (1979) (an article by a then-official of the National Coalition to Ban Handguns).

[9] Webster & Wilson, *supra* note 5, at 622; see also Stephen Teret, *So What?*, 4 *Epidemiology* 93 (1993); William DeJong, Book Review, 21 *Health Educ. Q.* 543 (1994) (reviewing L. Wallack et al., *Media Advocacy and Public Health: Power for Prevention* (1993)). Dr. DeJong, who teaches in the Harvard University School of Public Health, advises: "To advance the cause of public health, we need to move . . . to a new paradigm, one in which health educators focus on galvanizing political action and change." *Id.* In the same spirit he praises "[w]ork by a gun control advocate [which] shows us how researchers can choose projects that will bring attention to public policy," including the policy goal of prohibiting firearms ownership. *Id.* at 545; see also Peter Edelman & David Satcher, *Violence Prevention As a Public Health Priority*, 12 *Health Aff.* 123, 124 (1994) (emphasizing the urgent need to reduce violence and decrying unwillingness to pursue "any potentially effective interventions").

[10] See, e.g., Lester Adelson, *The Gun and the Sanctity of Human Life; Or the Bullet as Pathogen*, 127 *Archives Surgery* 659, 663-64 (1992); Adler et al., *supra* note 5, at 1281-82; Calhoun, *supra* note 4, at 17; Tina L. Cheng & Robert A. Lowe, *Taking Aim at Firearm Injuries*, 11 *Am. J. Emergency Med.* 183, 185 (1993); Katherine K. Christoffel, *Toward Reducing Pediatric Injuries from Firearms: Charting a Legislative and Regulatory Course*, 88 *Pediatrics* 294 (1991) [hereinafter Christoffel, *Reducing Pediatric Injuries from Firearms*]; Katherine K. Christoffel & Tom Christoffel, *Handguns: Risks Versus Benefits*, 47 *Pediatrics* 781, 782 (1986)

[hereinafter Christoffel & Christoffel, *Handguns*]; M. Denise Dowd et al., *Pediatric Firearm Injuries, Kansas City, 1992: A Population-Based Study*, 94 *Pediatrics* 867, 872 (1994); Jeffrey B. Kahn, *Firearm Violence in California: Information and Ideas for Creating Change*, 161 *W. J. Med.* 565, 569-70 (1994); C. Everett Koop & George D. Lundberg, *Violence in America: A Public Health Emergency*, 267 *JAMA* 3075, 3076 (1992); Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 641, 648-49; Leland Ropp et al., *Death in the City: An American Childhood Tragedy*, 267 *JAMA* 2905, 2909-10 (1992); Kenneth Tardiff et al., *Homicide in New York City: Cocaine Use and Firearms*, 272 *JAMA* 43, 46 (1994); Webster & Wilson, *supra* note 5, at 621-22; *see also supra* note 4; *infra* note 33.

[11] As used in this Article, the phrase "anti-gun health advocacy literature" does not include the very few articles on firearms topics in medical or health publications which treat the issues neutrally. *E.g.*, Robert L. Ohsfeldt & Michael A. Morrissey, *Firearms, Firearm Injury, and Gun Control: A Critical Survey of the Literature*, 13 *Advances Health Econ. and Health Servs. Res.* 65 (1992). Nor does it include articles that take a stance affirmatively supporting freedom of private choice regarding firearms ownership. *E.g.*, Edgar A. Suter, *Guns in the Medical Literature--A Failure of Peer Review*, 83 *J. Med. Ass'n Ga.* 133 (1994).

[12] Prothrow-Stith, *supra* note 4, at 198. Inexplicably, the author, who is Dean of the Harvard School of Public Health, indicates that she would allow limited gun ownership for sport, however much she disapproves of it, but not for self-defense. *Id.* As a University of Chicago health advocate put it, "The only legitimate use of a handgun that I can understand is for target shooting" *Firearms Legislation: Hearings on Oversight of the 1968 Gun Control Act Before The Subcomm. on Crime of the Senate Judiciary Comm.*, 94th Cong., 1st Sess. 628 (1974-1976) (testimony of Dr. Robert Replogle); *see also* Adler et al., *supra* note 5, at 1281-83; James A. Mercy et al., *Public Health Policy for Preventing Violence*, 12 *Health Aff.* 7 (1993); Mark L. Rosenberg et al., *Guns and Adolescent Suicides*, 266 *JAMA* 3030 (1991); Daniel W. Webster et al., *Firearm Injury Prevention Counseling: A Study Of Pediatricians' Beliefs and Practices*, 89 *Pediatrics* 902 (1992) [hereinafter *Firearm Injury Prevention Counseling*]; Daniel W. Webster et al., *Parents' Beliefs About Preventing Gun Injuries to Children*, 89 *Pediatrics* 908 (1992) [hereinafter Webster et al., *Parents' Beliefs*].

[13] J. Michael McGinnis & William H. Foege, *Actual Causes of Death in the United States*, 270 *JAMA* 2207, 2211 (1993); *see also* Diane H. Schetky, *Children and Handguns: A Public Health Concern*, 139 *Am. J. Diseases Children* 229, 230 (1985).

Dr. Jerome Kassirer, the current editor of the *New England Journal of Medicine*, not only deplores the National Rifle Association's (NRA) views on gun prohibition, but criticizes NRA lobbying on the subject as ultra vires to the NRA's historical mission as a group devoted to sports and citizen military preparedness. Jerome P. Kassirer, Book Review, 330 *New Eng. J. Med.* 373 (1994) (reviewing Osha G. Davidson, *Under Fire: The NRA and the Battle for Gun Control* (1993)). Compare his own and his predecessors' editorials urging anti-gun laws and health community lobbying for them. Jerome P. Kassirer, *Guns in the Household*, 329 *New Eng. J. Med.* 1117 (1993); Arnold S. Relman, *More Than Sutures and Transfusions*, 297 *New Eng. J. Med.* 552 (1977) (noting that the *New England Journal of Medicine* has been "squarely on the side of" anti-gun laws since at least 1968, and citing editorials going back to Franz J. Ingelfinger,

Therapeutic Action for A National Ill, 278 New Eng. J. Med. 1399 (1968)). See generally Richard W. Hudgens, *Preventing Suicide*, 308 New Eng. J. Med. 897 (1983); James A. Mercy & Vernon N. Houk, *Firearm Injuries: A Call for Science*, 319 New Eng. J. Med. 1283 (1988).

[14] Arlene Eisen, *Guns: In Whose Hands? A Portrait of Gunowners and Their Culture*, 7 Inj. Prevention Network Newsl., Winter 1989-1990, at 6. Ms. Eisen entitled one subsection "Fear and Racism Among Gun Owners," characterizing--without providing any example or supporting citation--"the veiled racism of NRA literature promoting self-defense." *Id.* at 9. She noted that "[t]he gun lobby grows fat . . . on a generalized fear and hostility toward African-American people, especially the association between African-American men and crime in the white public's mind." *Id.* at 10. See generally Deane Calhoun & Caroline Wang, *The NRA: The Myth of Protection, the Marketing of Fear*, 7 Inj. Prevention Network Newsl., Winter 1989-1990, at 3; Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 638.

[15] Compare the *Journal of the American Medical Association's* (JAMA) disparate treatment of two opposing article submissions: the April 27, 1994 issue carried an article by 19 medical professionals, seven of them teachers at medical schools, including Columbia and Cornell, urging the banning and confiscation of all handguns, federal restrictive licensing for gun ownership, and a host of other gun control laws. Adler et al., *supra* note 5. In response, thirty-nine authors, twenty-three of them teachers at medical schools, including Harvard and Pennsylvania, and two of them law professors, submitted an article arguing the other side. Edgar A. Suter et al., *Violence in America: Effective Solutions*, 84 J. Med. Ass'n Ga. (forthcoming June 1995). JAMA promptly rejected it. In 1977 JAMA did publish a critique from a pro-gun perspective. Richard B. Drooz, *Handguns and Hokum: A Methodological Problem*, 238 JAMA 43 (1977). So far as we have been able to find, it remains the only such article in any health advocacy periodical.

[16] William C. Shoemaker et al., *Urban Violence in Los Angeles in the Aftermath of the Riots: A Perspective From Health Care Professionals, With Implications for Social Reconstruction*, 270 JAMA 2833, 2836 (1993).

[17] See, e.g., Eisen, *supra* note 14, at 9 (citing David J. Bordua & Alan J. Lizotte, *Patterns of Legal Firearms Ownership: A Cultural and Situational Analysis of Illinois Counties*, 2 Law & Pol. Q. 147 (1979)) (dismissing as "racist" an uncongenial finding in a study which was co-authored by a senior professor of sociology at the University of Illinois and an assistant professor at the State University of New York's School of Criminal Justice). See also Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 648-49, 651 nn.86-89 (describing similarly uncongenial findings as coming from "Gun supporters" even though the authors are in fact distinguished social scientists, all of them liberal Democrats); see also *infra* text accompanying notes 74-79.

Yvonne D. Senturia and her fellow authors denounce the NRA as espousing what they call "conservative family values," citing an NRA employee's claim that reducing inner city violence will require education in job skills and "stable and moral" home environments. Yvonne D. Senturia et al., *The Continuing Gun Debate--Puzzling; Byzantine and Drug Abuse*, 94 Pediatrics 777 (1994) (emphasis added). Yet the need for stable, moral home environments is such a non-

partisan truism that it is invoked by even vehemently anti-gun health advocates including the CDC's James A. Mercy and Mark L. Rosenberg. James A. Mercy et al., *supra* note 12, at 8, 24. They devote a substantial portion of their article *Public Health Policy for Preventing Violence* to the baleful effects of parental criminality and neglectful, unstable, abusive, violent family environments as "pivotal influence[s]" in turning children into violent adolescents and adults. *Id.* at 20. They also emphasize the need to promote stable and moral home environments in which children are nurtured, loved and taught non-violence as a way of life. *Id.* at 19-21. For what it is worth, the authors of this Article, none of whom is politically conservative, heartily agree.

[18] The health advocacy literature's systematic suppression from its readers of the existence of any contrary scholarship is a *leitmotif* throughout this Article. Health advocates, many of them not even lawyers, much less specialists in constitutional law, declare "that the Second Amendment to the Constitution refers [only] to gun ownership by state militias and that it poses no obstacle to gun control laws because it does not guarantee the individual right to own a gun." Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 640; *see also* Calhoun, *supra* note 4, at 16; Christoffel & Christoffel, *Handguns*, *supra* note 10, at 781 (One of the authors is a lawyer.); Kahn, *supra* note 10, at 568; Mark D. Widome, *Remembering as We Look Ahead: The Three E's and Firearm Injuries*, 88 *Pediatrics* 379, 381 (1991).

The health advocacy literature does not mention even one of the contrary law review and other scholarly articles published over the past dozen years by distinguished professors of law, history, or political science, many of whom have never owned a gun and have no desire to do so. Those professors include three of the great liberal icons of modern American constitutional law, Akhil Amar, Sanford Levinson, and William Van Alstyne. However, the health advocacy literature portrays the individual rights view as the lunatic invention of wild-eyed gun nuts supported only by gun lobby propaganda. Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 648-49 ("*The gun lobby bolsters its posture by arguing that the Second Amendment . . . guarantees the right to individual gun ownership.*") (emphasis added). These authors also cited gun lobby publications. *Id.* at 648-49 nn.86-89 (commenting that "backed by forceful, well-funded lobbying and public relations efforts (but not by evidence), [the constitutional right claim] can act as a powerful deterrent to the design and implementation of effective gun control policy."). Compare the acceptance of that claim among standard texts edited, authored, or co-authored by law, history, or philosophy professors. *See* Leonard W. Levy, *Original Intent and the Framers' Constitution* 341 (1988); Joyce L. Malcolm, *To Keep and Bear Arms: The Origins of an Anglo-American Right* (1994); Akhil R. Amar, *The Bill of Rights and the Fourteenth Amendment*, 101 *Yale L.J.* 1193, 1205-11, 1261-62 (1992); Robert J. Cottrol, *Second Amendment*, in *The Oxford Companion to the United States Supreme Court* 763-64 (Kermit L. Hall et al. eds., 1992); Robert J. Cottrol & Raymond T. Diamond, *Public Safety and the Right to Bear Arms*, in *The Bill of Rights in Modern America: After 200 Years* (David J. Bodenhamer & James W. Ely eds., 1993); Robert J. Cottrol & Raymond T. Diamond, *The Fifth Auxiliary Right*, 104 *Yale L.J.* 995 (1994); Nicholas J. Johnson, *Shots Across No Man's Land: A Response to Handgun Control, Inc.'s Richard Aborn*, 22 *Fordham Urb. L.J.* (forthcoming 1995); Don B. Kates, Jr., *Second Amendment*, in *Encyclopedia of the American Constitution* 1639-40 (Leonard W. Levy et al. eds., 1986); Edward F. Leddy, *Guns and Gun Control*, in *Reader's Companion to American History* 477-78 (Eric Foner & John A. Garrity eds., 1991); Stephanie A. Levin, *Grassroots Voices: Local Action and National Military Policy*, 40 *Buff. L. Rev.* 321, 346-47 (1992); Sanford

Levinson, *The Embarrassing Second Amendment*, 99 Yale L.J. 637 (1989); Nelson Lund, *The Second Amendment, Political Liberty, and the Right to Self-Preservation*, 39 Ala. L. Rev. 103 (1987); Joyce L. Malcolm, *The Right of the People to Keep and Bear Arms: The Common Law Tradition*, 10 Hastings Const. L.Q. 285 (1983); William Marina, *Weapons, Technology and Legitimacy: The Second Amendment in Global Perspective*, in *Firearms and Violence* 417 (Don B. Kates, Jr. ed., 1984); James G. Pope, *Republican Moments: The Role of Direct Popular Power in the American Constitutional Order*, 139 U. Pa. L. Rev. 287, 328 (1990); Glenn H. Reynolds, *The Right to Keep and Bear Arms Under the Tennessee Constitution*, 61 Tenn. L. Rev. 647 (1994) (discussing extensively the Second Amendment in relation to the Tennessee Constitution); Glenn H. Reynolds & Don B. Kates Jr., *The Second Amendment and States' Rights: A Thought Experiment*, 36 Wm. & Mary L. Rev. 1737 (1995); Elaine Scarry, *War and the Social Contract: Nuclear Policy, Distribution, and the Right to Bear Arms*, 139 U. Pa. L. Rev. 1257 (1991); Robert E. Shalhope, *The Armed Citizen in the Early Republic*, 49 Law & Contemp. Probs. 125 (1986); William Van Alstyne, *The Second Amendment and the Personal Right to Arms*, 43 Duke L.J. 1236 (1994); David E. Vandercoy, *The History of the Second Amendment*, 28 Val. U. L. Rev. 1007 (1994); David C. Williams, *Civic Republicanism and the Citizen Militia: The Terrifying Second Amendment*, 101 Yale L.J. 551 (1991); John C. Yoo, *Our Declaratory Ninth Amendment*, 42 Emory L.J. 967 (1993); F. Smith Fussner, Book Review, 3 Const. Commentary 582 (1986) (reviewing Stephen P. Halbrook, *That Every Man Be Armed: The Evolution of a Constitutional Right* (1984)); Joyce L. Malcolm, Book Review, 54 Geo. Wash. L. Rev. 452 (1986) (reviewing Stephen P. Halbrook, *That Every Man Be Armed: The Evolution of a Constitutional Right* (1984)); *see also infra* notes 65-70 and accompanying text.

[19] *See, e.g.*, Linda E. Salzman et al., *Weapon Involvement and Injury Outcomes in Family and Intimate Assaults*, 267 JAMA 3043 (1992). The authors asserted that "researchers have found no evidence of compensatory increase in homicides involving other weapons when firearm access is restricted." *Id.* at 3045. However, she cited only editorials for this proposition. *Id.* at 3047 n.19.

[20] *See, e.g.*, Schetky, *supra* note 13, at 231 (Of 11 footnotes, one is to a book by Handgun Control, Inc. chairman Nelson Shields, whose affiliation is not identified, three are to other Handgun Control, Inc. publications, and one is to a publication by yet another anti-gun lobbying group.). This lack of validation by independent references is particularly troublesome as to this author who, as we shall see, has a record of regurgitating false information from lobbying organizations and attributing it to a neutral source by fabricating a reference. *See* Injury Prevention, *supra* note 4, at 261-67 (describing, without identifying him as such, the spokesman for the National Coalition to Ban Handguns as "[o]ne researcher [who has] calculated that \$500 million a year is spent on hospital care for handgun injuries" (citing Fields, *supra* note 8)); *Firearms Injuries Affecting the Pediatric Population*, *supra* note 5, at 22 (citing publications of anti-gun foundation without noting that it is the non-profit research affiliate of Handgun Control, Inc., in whose offices it is situated).

[21] For instance, the American Medical Association Council on Scientific Affairs asserts that "assault weapons are meant to be spray fired from the hip," citing a Handgun Control, Inc. publication as authority. American Medical Association Council on Scientific Affairs, *Assault Weapons as a Public Health Hazard in the United States*, 267 JAMA 3067, 3067, 3070 n.4 (1992). The immediately preceding reference cited a neutral publication for explanation of gun

nomenclature--a publication of the Institute for Research on Small Arms in International Security, then headed by the late Edward Ezell, curator of the Smithsonian's U.S. Armed Forces Collection, a preeminent expert. *Id.* at 3070 n.3. This source directly contradicted the AMA Council's claim about spray firing assault weapons from the hip. So of course the AMA Council simply failed to mention the source's contrary statements: that such weapons are designed for aimed fire, not "spray fire," and that anyone who shoots a semi-automatic gun rapidly without aiming will rarely hit the target. *Id.* at 3067 (lacking any reference to the contradictory source).

[22] "Coming from an official spokesman for the National Rifle Association, Blackman's invective is no surprise. . . . We understand [his] need to attack this paper; it is what he is paid to do." John H. Sloan et al., *Correspondence*, 323 *New Eng. J. Med.* 136, 136-37 (1990).

[23] See, e.g., William R. Tonso, *Social Science and Sagecraft in the Debate Over Gun Control*, 5 *Law & Pol'y Q.* 325 (1983).

[24] See *Infra* Part XIII; *infra* Part XIV.

[25] Goldsmith, *supra* note 4, at 675. Compare *id.* with Mercy et al., *supra* note 12, at 11 (attributing to firearms a "central role in interpersonal violence").

[26] See generally sources cited *supra* note 2; *infra* note 43 and accompanying text.

[27] To briefly summarize the immensely complex research and literature on the effect of guns: (1) They facilitate robbery of "harder" targets like stores, which is far more remunerative than ordinary "muggings." (2) They allow the felon to dominate the situation so that crimes involving firearms result in a tiny fraction of the injuries in similar non-firearm crimes, in which a victim may have to be stabbed or bludgeoned into submission. (3) In the tiny fraction of gun crimes in which a victim is shot, the likelihood of death is far greater than when a lesser weapon is used. Thus, if firearms could be magically removed from the environment, the hypothetically likely results would be as follows: (1) The sheer number of crimes would enormously increase if criminals were to attempt to obtain the same income (although the increase would not necessarily all be in confrontation crimes like robbery). (2) The number of injured victims would enormously increase. (3) The number of deaths might decrease at least marginally. Although other weapons are less lethal, they do kill in some cases, and the increased number of woundings resulting from them would produce more deaths, thereby at least partially offsetting the reductive effect of removing gun deaths. In addition, the effect on murderous attacks by people truly determined to kill would be unclear since such people can often (but not always) substitute lesser weapons with equally deadly results.

[28] David N. Cowan & David J. Bordua, *Case-Control Study Design and Violence Research* (Nov. 3, 1994) (unpublished manuscript, on file with the *Tennessee Law Review*).

[29] See *supra* note 13.

[30] Cowan & Bordua, *supra* note 28, at 5.

[31] *Id.* at 6 (emphasis added).

[32] *Id.* at 6-7.

[33] Somerville, *supra* note 4, at 9 (quoting Dr. Christoffel with approving comment by other health advocates). The health advocacy literature describes firearms as disease "vectors," "toxins," and causes of an epidemic. *See, e.g.,* Cheng & Lowe, *supra* note 10, at 183; Paul Cotton, *Gun-Associated Violence Increasingly Viewed as Public Health Challenge*, 267 *JAMA* 1171 (1992); Raspberry, *supra* note 5, at A23; *see also* Don Colburn, *Gunshots as an Epidemic: Some Doctors Call Firearms a 'Toxin' in the Environment*, *Wash. Post: Health*, Nov. 1, 1988; Henderson, *supra* note 5, at 8, 24; Nicki Meredith, *The Murder Epidemic*, *Science* 84, Dec. 1984, at 42.

[34] Raspberry, *supra* note 5, at A23 (quoting Dr. Mark Rosenberg, who directs the CDC's National Center for Injury Prevention and Control, indicating his and the CDC's desire to create a public perception of firearms as "dirty, deadly--and banned.") *Compare id. with* Henderson, *supra* note 5, at 8, 24 (noting that Dr. Katherine Christoffel, and her colleague at Children's Hospital, Dr. Robert Tanz, "plan to do to handguns what their profession has done to cigarettes," that is "turn gun ownership from a personal-choice issue to a repulsive, antisocial health hazard.").

[35] Stephen P. Teret & Garen J. Wintemute, *Policies to Prevent Firearms Injuries*, 12 *Health Aff.* 96, 97 (1993). This article indicates that a search in a medical data base "for articles dealing with firearms, excluding literature on the clinical aspects of treating gun shot wounds" shows that by 1992 the number of articles had swelled to almost eighty per year. *Id.*

Based on an extensive review, it is estimated that today at least one firearms-related article a month appears in one of the enormous number of medical and public health journals. Interview with Professor James Boen, Associate Dean of the School of Public Health, University of Minnesota (Jan., 1994). Symposia in which entire issues of health periodicals, or major portions thereof, are devoted to reviling the evil of firearms and supporting gun bans are also common. *See, e.g.,* 9 *Am. J. Preventive Med.* (1993) (special supplement to the May-June, 1993 issue); 12 *Health Aff.* (Winter 1993); 7 *Inj. Prevention Network Newsl.*, Winter 1989-1990, at 1; 267 *JAMA* (1992); 330 *New Eng. J. Med.* (1994); 94 *Pediatrics*; *see also* American Medical Association Council on Scientific Affairs, *Firearm Injuries and Deaths: A Critical Public Health Issue*, in 104 *Public Health Rep.* 111 (1989).

[36] *See, e.g.,* Norval Morris & Gordon Hawkins, *The Honest Politician's Guide to Crime Control* 63-71 (1969); Franklin Zimring, *Is Gun Control Likely to Reduce Violent Killings?*, 35 *U. Chi. L. Rev.* 721 (1968).

[37] Franklin E. Zimring & Gordon Hawkins, *The Citizen's Guide to Gun Control* xi (1987).

[38] Gary Kleck, Address to the National Academy of Sciences/National Research Council Panel on the Understanding and Prevention of Violence (Apr. 3, 1990) (prepared statement, on file with the *Tennessee Law Review*).

[39] *Id.*

[40] *Id.* at 1-2 (citing *Under the Gun*, *supra* note 2).

[41] *Id.* at 2-3 (citations omitted).

[42] See, e.g., Chris W. Eskridge, *Zero-Order inverse Correlations Between Crimes of Violence and Hunting Licenses in the United States*, 71 Soc. & Soc. Res. 55 (1986); Hans Toch & Alan J. Lizotte, *Research and Policy: The Case of Gun Control*, in *Psychology and Social Policy* (Peter Suedfeld & Philip E. Tetlock eds., 1992); James D. Wright, *Second Thoughts About Gun Control*, 91 Pub. Interest 23 (1988) [hereinafter Wright, *Second Thoughts*].

[43] See *supra* sources cited note 2; see also David J. Bordua, *Firearms Ownership and Violent Crime: A Comparison of Illinois Counties [sic]*, in *The Social Ecology of Crime* (James M. Byrne & Robert J. Sampson eds., 1986); Steven B. Duke & Albert C. Gross, *America's Longest War: Rethinking Our Tragic Crusade Against Drugs* 113 (1993); Colin Greenwood, *Firearms Control: A Study of Armed Crime and Firearms Control in England and Wales* (1972); Don B. Kates, Jr., *Handgun Banning in Light of the Prohibition Experience*, in *Firearms and Violence* 139 (Don B. Kates, Jr. ed., 1984); Gary Kleck, *Handgun-Only Gun Control: A Policy Disaster in the Making*, in *Firearms and Violence* 167 (Don B. Kates, Jr. ed., 1984); Gary Kleck, *The Relationship between Gun Ownership Levels and Rates of Violence in the United States*, in *Firearms and Violence* 99 (Don B. Kates, Jr. ed., 1984) [hereinafter Kleck, *Gun Ownership Levels and Rates of Violence*]; Kleck, *Point Blank*, *supra* note 2; David Kopel, *The Samurai, the Mountie, and the Cowboy: Should America Adopt the Gun Control of Other Democracies?* (1992) [hereinafter Kopel, *the Samurai*]; Walker, *supra* note 2. See also Randy E. Barnett, *Bad Trip: Drug Prohibition and the Weakness of Public Policy*, 103 Yale L.J. 2593, 2617-18 (1994); David J. Bordua & Alan J. Lizotte, *Patterns of Legal Firearms Ownership: A Cultural and Situational Analysis of Illinois Counties*, 2 Law & Pol. Q. 147, 159-72 (1979); B. Bruce-Briggs, *The Great American Gun War*, 45 Pub. Interest 37 (1976); Bruce Danto, *Firearms and Their Role in Homicide and Suicide*, 1 Life Threatening Behavior 10 (1971); Bruce L. Danto, *Firearms and Violence*, 5 Int'l. J. Offender Therapy & Comp. Criminology 135, 143-45 (1979); Jo Dixon & Alan J. Lizotte, *Gun Ownership and the "Southern Subculture of Violence"*, 93 Am. J. Soc. 383 (1987); Eskridge, *supra* note 42, at 55; James B. Jacobs, *Exceptions to a General Prohibition on Handgun Possession: Do They Swallow Up the Rule?*, 49 Law & Contemp. Probs. 5 (1986); John Kaplan, *Controlling Firearms*, Address at the Fourteenth Cleveland-Marshall Fund Visiting Scholar Lecture (April 10, 1979), 28 Clev. St. L. Rev. 1 (1979); John Kaplan, *The Wisdom of Gun Prohibition*, 455 Annals Am. Acad. Pol. & Soc. Sci. 11 (1981); Don B. Kates, *The Value of Civilian Handgun Possession As A Deterrent to Crime or A Defense Against Crime*, 18 Am. J. Crim. L. 113 (1991) [hereinafter Kates, *The Value of Civilian Arms*]; Raymond G. Kessler, *The Ideology of Gun Control*, 12 J. Ideology 381 (1988) [hereinafter Kessler, *The Ideology of Gun Control*]; Raymond G. Kessler, *Gun Control and Political Power*, 5 Law & Pol'y Q. 381 (1983) [hereinafter Kessler, *Gun Control and Political Power*]; Raymond G. Kessler, *Enforcement Problems of Gun Control: A Victimless Crimes Analysis*, 16 Crim. L. Bull. 131 (1980); Gary Kleck, *Policy Lessons from Recent Gun Control Research*, 49 Law & Contemp. Probs. 35 (1986); Gary Kleck, *Capital Punishment, Gun Ownership, and Homicide*, 84 Am. J. Soc. 882 (1979); Gary Kleck & David J. Bordua, *The Factual Foundation for Certain*

Key Assumptions of Gun Control, 5 Law & Pol'y Q. 271 (1983); Gary Kleck & Miriam A. DeLone, *Victim Resistance and Offender Weapon Effects in Robbery*, 9 J. Quantitative Criminology 55 (1993); Gary Kleck & Karen McElrath, *The Effects of Weaponry on Human Violence*, 69 Soc. Forces 669, 671 (1991); Gary Kleck & E. Britt Patterson, *The Impact of Gun Control and Gun Ownership Levels on Violence Rates*, 9 J. Quantitative Criminology 249 (1993); Alan J. Lizotte, *The Costs of Using Gun Control to Reduce Homicide*, 62 Bull. N.Y. Acad. Med. 539 (1986); Alan J. Lizotte & David J. Bordua, *Firearms Ownership for Sport and Protection: Two Divergent Models*, 45 Am. Soc. Rev. 229 (1980); Mark H. Moore, *The Bird in Hand: A Feasible Strategy for Gun Control*, 2 J. Pol'y An. & Mgmt. 185 (1983); Robert J. Mundt, *Gun Control and Rates of Firearms Violence in Canada and the United States*, Can. J. Criminology 137 (1990); Douglas R. Murray, *Handguns, Gun Control Laws and Firearm Violence*, 23 Soc. Probs. 81, 88-92 (1975); Lance K. Stell, *Guns, Politics and Reason*, 9 J. Am. Culture 71 (1986); Toch & Lizotte, *supra* note 42; Wright, *Second Thoughts*, *supra* note 42, at 23.

[44] Don B. Kates, *Firearms and Violence: Old Premises and Current Evidence*, in *Violence in America* 201 (Hugh D. Graham & Ted R. Gurr eds., 1989) [hereinafter Kates, *Current Evidence*] (citing the views of Colin Greenwood, author of the seminal study of English gun control). That study has been eclipsed by David Kopel's study of gun control in England, Canada, Australia, New Zealand, Japan, and Switzerland, but Kopel endorses the same conclusions as Greenwood as to the enforceability and utility of gun laws. *See* Kopel, *The Samurai*, *supra* note 43.

[45] State of Wisconsin Legislative Reference Bureau, *The Gun Control Debate--An Update* 30 (Informational Bulletin 94-3 (Oct., 1994)) [hereinafter Wisconsin Legislative Bureau]. Similarly, Professor Gurr comments that handgun prohibition "would criminalize much of the citizenry but have only marginal effects on professional criminals." *Violence in America* 17 (Hugh D. Graham & Ted R. Gurr eds., 1989) [hereinafter *Violence in America*].

[46] *See* Calhoun, *supra* note 4, at 17.

[47] Wisconsin Legislative Bureau, *supra* note 45, at 30.

[48] Prothrow-Stith, *supra* note 4, at 198.

[49] Don B. Kates, Jr. & Nicole Varzos, *Aspects of the Priapic Theory of Gun Ownership*, in *The Gun Culture and Its Enemies* 93, 95 (William R. Tonso ed., 1990) (quoting Dr. Emmanuel Tanay).

[50] *Id.* at 96.

[51] *Id.* at 93.

[52] *Id.* at 95.

[53] Sigmund Freud & D. E. Oppenheim, *Dreams in Folklore* 33 (1958).

[54] Arthur L. Kellermann et al., *Suicide in the Home in Relation to Gun Ownership*, 327 *New Eng. J. Med.* 467 (1992) (citing Charles L. Rich et al., *Guns and Suicide: Possible Effects of Some Specific Legislation*, 147 *Am. J. Psychiatry* 342, 344 (1990) (finding, based on empirical investigation, that when deprived of guns, suicidal individuals turn to other methods--for example, leaping from great heights--so that any reduction in gun suicides is almost perfectly offset by an increase in suicide by other means)).

[55] Carol W. Runyan & Elizabeth A. Gerken, *Epidemiology and Prevention of Adolescent Injuries: A Review and Research Agenda*, 262 *JAMA* 2273, 2275 (1989) (citing two articles by Colin Loftin and David McDowall). One article by Loftin and McDowall states that "the gun law did *not* significantly alter the number or type of serious crimes in Detroit." Colin Loftin & David McDowall, *"One With A Gun Gets You Two": Mandatory Sentencing and Firearms Violence in Detroit*, 455 *Annals Am. Acad. Pol. & Soc. Sci.* 150 (1981) (emphasis added). In the second article, Loftin & McDowall explain: "Our current working hypothesis, and by far the simplest interpretation of the data, is that the Florida gun law did *not* have a measurable deterrent effect on violent crime." Colin Loftin & David McDowall, *The Deterrent Effects of the Florida Felony Firearm Law*, 75 *J. Crim. L. & Criminology* 250, 258 (1984) (emphasis added).

[56] Tardiff et al., *supra* note 10, at 43, 45. Tardiff blamed increased homicide among minority teenagers on increased availability of firearms to them, but he cited Centers for Disease Control, U.S. Dep't of Health and Human Servs., *Weapon-Carrying Among High School Students--U.S. 1990*, 40 *Morbidity & Mortality Wkly. Rep.* 681 (1991), which indicated a decline in gun carrying, not an increase. Of the other two accompanying citations, one contained no information about firearm availability while the other had no trend data. Tardiff et al., *supra* note 10, at 46.

[57] Tardiff et al., *supra* note 10, at 43.

[58] Abraham B. Bergman, Book Review, 267 *JAMA* 3089 (1992) (reviewing Prothrow-Stith *supra* note 4).

[59] *Id.*

[60] Mercy et al., *supra* note 12, at 11.

[61] Bureau of Justice Statistics, U.S. Dep't of Justice, *Selected Findings from National Statistical Series: Firearms and Crimes of Violence 2* (1994).

[62] *Id.* at 2.

[63] *I.e.*, statements of a kind which would constitute actionable fraud if made in the course of selling goods or securities rather than in supposedly scholarly writing. Compare the following standard legal definitions: First, actionable deceit includes "[t]he suppression of a fact, by one who is bound to disclose it [in this case, scholars purporting to inform readers of the results of scholarly research and analysis], or who gives information of other facts which are likely to mislead for want of communication of that fact." *Cal. Civ. Code* § 1710 (West 1985). Second, actual fraud includes "[t]he suppression of that which is true, by one having knowledge or belief

of the fact." Cal. Civ. Code § 1572 (West 1982); *see* Restatement (Second) of Torts, §§ 22-23 (1965); Restatement (Second) of Contracts §§ 160-61 (1982); *see also infra* at Parts XII-XIV.

[64] Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 647 (emphasis added).

[65] *United States v. Miller*, 307 U.S. 174 (1939) (holding that an indictment should not have been dismissed on the theory that any law regulating sawed-off shotguns necessarily violated the Second Amendment). Partisans of the states'-right-only view which Dolins and Christoffel endorse have misunderstood this holding to mean that the only firearms that the Second Amendment protects are those of the National Guard and organized state militias. The Solicitor General argued "that the right was a collective one that [only] protected the people when carrying arms as members of the state militia." 1 Robert Cottrol, *Gun Control and the Constitution* xxvii (1993). But the Court evidently did not accept that--even though the argument was unopposed because the opponents did not file a brief. Had the *Miller* court accepted the collective right argument, it would have disposed of the appeal on standing grounds, holding that because gun ownership by ordinary citizens is not protected by the Amendment, Mr. Miller was not in a position to challenge the law under it. Instead, *Miller* focused on a substantive issue which implicitly accepts that the Amendment protects individuals in possessing certain kinds of arms. The focus was whether a law regulating sawed-off shotguns involves the kind of firearms that the Amendment covers. As to that, the Court held that only possession of military-type and militarily useful weapons is protected by the Amendment. 307 U.S. at 178. This holding was based on the Amendment's reference to a militia, but the Court expressly recognized that the militia included virtually the whole male population:

The signification attributed to the term "Militia" appears from the debates in the Convention, the history and legislation of Colonies and States, and the writings of approved commentators . . . [was] all males physically capable of acting in concert for the common defense. . . . [O]rdinarily when called for service these men were expected to appear bearing arms *supplied by themselves* and of the kind in common use at the time.

Id. at 179 (emphasis added). For obvious reasons, Mr. Miller had not even attempted to show that, as a matter of fact, a sawed-off shotgun is a standard military weapon. For equally obvious reasons, absent such a showing, the Court was not in a position to take judicial notice that a sawed-off shotgun is (or is not) a military weapon. *Id.* at 178.

In summary, the Court's treatment of the issues in *Miller* accepted that individuals do have standing to invoke the Second Amendment, albeit only in behalf of conventional military-standard handguns and long guns.

[66] *United States v. Verdugo-Urquidez*, 494 U.S. 259, 265 (1990) (expressly mentioning the Second Amendment).

[67] *See, e.g.*, *Planned Parenthood v. Casey*, 112 S. Ct. 2791, 2805 (1992); *Moore v. City of E. Cleveland*, 431 U.S. 494, 502 (1977) (plurality opinion) (listing "the freedom of speech, press, and religion; the right to keep and bear arms; the freedom from unreasonable searches and

seizures" as part of the "full scope of liberty" guaranteed by the Constitution) (quoting *Poe v. Ullman*, 367 U.S. 497, 543 (1961) (Harlan, J., dissenting)).

In so doing, the Court is following the Founders, who themselves routinely made the same connection, linking the right to keep and bear arms with the freedoms of religion and speech under such joint descriptions as "private rights," "human rights," and "essential and sacred rights" (quoting Madison, Monroe, and Gallatin, respectively). For these and numerous other quotes from the 1787-91 debates see Don B. Kates Jr., *Handgun Prohibition and the Original Meaning of the Second Amendment*, 82 Mich. L. Rev. 204, 223-24 (1983).

[68] *Compare* *Quilici v. Village of Morton Grove*, 695 F.2d 261 (7th Cir. 1982) (noting in dictum that the Second Amendment is not an individual right while holding that whatever the Second Amendment means, application against a municipal ordinance is precluded by 19th century Supreme Court holdings that it applies only against the federal government) *with* *Fresno Rifle & Pistol Club, Inc. v. Van de Kamp*, 965 F.2d 723 (9th Cir. 1992) (stating that if the Second Amendment is an individual right, it is still not applicable to the states until and unless the Supreme Court overturns its 19th century holdings that the Amendment applies only against the federal government).

[69] David I. Caplan, *The Right of the Individual to Bear Arms: A Recent Judicial Trend*, 1982 Det. C. L. Rev. 789; Robert Dowlut & Janet A. Knoop, *State Constitutions and the Right to Keep and Bear Arms*, 7 Okla. City U. L. Rev. 177 (1982); Reynolds, *supra* note 18.

[70] Christoffel, *Toward Reducing Pediatric Injuries from Firearms*, *supra* note 10, at 295 (citing a popular work by two able and vehemently anti-gun scholars who have nevertheless elected not to contribute to the scholarly literature on the Amendment, Franklin Zimring & Gordon Hawkins, *The Citizens Guide to Gun Control* (1987)). Had Christoffel reviewed the scholarly literature in the decade preceding her own article, she could have added to her list of "legal scholarship" six obscure articles, two by law students, three by paid employees of the anti-gun lobby, and one by a politician. Keith A. Ehrman & Dennis A. Henigan, *The Second Amendment in the Twentieth Century: Have You Seen Your Militia Lately?*, 15 U. Dayton L. Rev. 5 (1989); Samuel Fields, *Guns, Crime and the Negligent Gun Owner*, 10 N. Ky. L. Rev. 141 (1982) (article by third year law student lobbying for the National Coalition to Ban Handguns); Dennis A. Henigan, *Arms, Anarchy and the Second Amendment*, 26 Val. U. L. Rev. 107 (1991) (written by former Director of Legal Action Project at the Center to Prevent Handgun Violence and current general counsel of Handgun Control, Inc.); Warren Spannaus, *State Firearms Regulation and the Second Amendment*, 6 Hamline L. Rev. 383 (1983) (written by Attorney General for Minnesota); Mark Udulutch, Note, *The Constitutional Implications of Gun Control and Several Realistic Gun Control Proposals*, 17 Am. J. Crim. L. 19, 25 (1989); Note, *The Second Amendment: A Study of Recent Judicial Trends*, 25 Rich. L. Rev. 501 (1991) (Stating that whatever the Amendment's actual purpose, the lower federal courts have refused to enforce it).

On the other side, however, she would have found thirty law review articles, about one-half by historians and law professors, including many in top law reviews, all of which exhibit the view that gun laws are not constitutional. *See supra* note 18; *see also* Bernard J. Bordenet, *The Right*

to Possess Arms: the Intent of the Framers of the Second Amendment, 21 U. West L.A. L. Rev. 1 (1990); Caplan, *supra* note 69, at 789; Robert Dowlut, *Federal and State Constitutional Guarantees to Arms*, 15 U. Dayton L. Rev. 59 (1989); Robert Dowlut, *The Current Relevancy of Keeping and Bearing Arms*, 15 U. Balt. L.F. 32 (1984); Robert Dowlut, *The Right to Arms: Does the Constitution or the Predilection of Judges Reign?*, 36 Okla. L. Rev. 65 (1983); Richard E. Gardiner, *To Preserve Liberty--A Look at the Right to Keep and Bear Arms*, 10 N. Ky. L. Rev. 63 (1982); Alan M. Gottlieb, *Gun Ownership: A Constitutional Right*, 10 N. Ky. L. Rev. 113 (1982); Stephen P. Halbrook, *Encroachments of the Crown on the Liberty of the Subject: Pre-Revolutionary Origins of the Second Amendment*, 15 U. Dayton L. Rev. 91 (1989); Stephen P. Halbrook, *The Jurisprudence of the Second and Fourteenth Amendments*, 4 Geo. Mason L. Rev. 1 (1981); Stephen P. Halbrook, *The Right of the People or the Power of the State: Bearing Arms, Arming Militias, and the Second Amendment*, 26 Val. U. L. Rev. 131 (1991); Stephen P. Halbrook, *To Keep and Bear "Their Private Arms"*, 10 N. Ky. L. Rev. 13 (1982); Stephen P. Halbrook, *What the Framers Intended: A Linguistic Analysis of the Right to "Bear Arms"*, 49 Law & Contemp. Probs. 151 (1986); David T. Hardy, *Armed Citizens, Citizen Armies: Toward a Jurisprudence of the Second Amendment*, 9 Harv. J.L. & Pub. Pol'y 559 (1986); David T. Hardy, *The Second Amendment and the Historiography of the Bill of Rights*, 4 J.L. & Pol. 1 (1987); Don B. Kates Jr., *The Second Amendment: A Dialogue*, 49 Law & Contemp. Probs. 143; Kurt F. Kluin, Note, *Gun Control: Is It A Legal and Effective Means of Controlling Firearms in the United States?*, 21 Washburn L.J. 244 (1982); Thomas M. Moncure Jr., *The Second Amendment Ain't About Hunting*, 34 How. L.J. 589 (1991); Thomas M. Moncure Jr., *Who Is the Militia--The Virginia Ratifying Convention and the Right to Bear Arms*, 19 Lincoln L. Rev. 1 (1990); Eric C. Morgan, *Assault Rifle Legislation: Unwise and Unconstitutional*, 17 Am. J. Crim. L. 143 (1990); Stefan V. Tahmassebi, *Gun Control and Racism*, 2 Geo. Mason Civ. Rts. L.J. 67 (1991).

[71] *Reducing Violent Injuries*, *supra* note 5, at 649 (citing as the "gun supporters" Kleck, Wright, and Rossi, and citing as the "epidemiologists" David McDowall et al., *Evaluating Effects of Changes in Gun Laws*, 9 Am. J. Prevent. Med. 39, 39-43 (1993)); Wisconsin Legislative Bureau, *supra* note 46).

[72] *Id.* (emphasis added).

[73] *See infra* Part VI.

[74] Wright et al., *Under the Gun*, *supra* note 2, at 320; *see also* the lengthy quotation from Professor Kleck accompanying *supra* notes 38-41.

[75] Wright & Rossi, *Armed and Considered Dangerous*, *supra* note 2, at 145.

[76] *Id.*

[77] *Id.* at 150.

[78] *Id.* at 154.

[79] *Id.* at 146 tbl. 7.1.

[80] McDowall et al., *supra* note 71, at 39-43.

[81] Wisconsin Legislative Bureau, *supra* note 45, at 5-6. The latter discussion notes that other surveys of criminals suggest that dogs deter burglaries more than guns.

[82] *Id.*

[83] *Id.* at 6 (discounting the conclusions in Arthur L. Kellermann & Donald T. Reay, *Protection or Peril?: An Analysis of Firearm-Related Deaths in the Home*, 314 *New Eng. J. Med.* 1557-60 (1986), relied on by Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 645).

[84] This topic heading is taken from Henry Lea's much-bally-hoed work of historical prediction, though of course our subject matter has no relation to his.

[85] Henderson, *supra* note 5, at 8, 22, 24. The quotations given of Dr. Tanz in this and following paragraphs of the text are from the *Chicago Reader*, pages 8, 22, and 24, respectively.

Dr. Christoffel is among the most prolific of the anti-gun health advocate sages and the most widely admired by other sages. Somerville, *supra* note 4, at 9. Dr. Christoffel's writings are referenced throughout this Article.

[86] Gary Kleck & Marc Gertz, *Armed Resistance to Crime: The Prevalence and Nature of Self-Defense with a Gun*, 85 *J. Crim. L. & Criminology* (forthcoming 1995); Kleck, Point Blank, *supra* note 2, at 101-51 (based on nine surveys).

[87] Personal communication with Professor Philip J. Cook (Dec. 20, 1994). For a full review of the debate, see Philip J. Cook, *The Technology of Personal Violence*, in 14 *Crime and Justice: A Review of Research* (Michael Tonry ed., 1991). *See also* David McDowall et al., *supra* note 71, at 39-43 (criticizing Kleck); David McDowall & Brian Wiersema, *The Incidence of Defensive Firearm Use by US Crime Victims, 1987 Through 1990*, 84 *Am. J. Pub. Health* 1982 (1994). *Compare* Kleck, Point Blank, *supra* note 2, at 101-51 (Kleck's response to criticism) *with* Kleck & Gertz, *supra* note 86.

[88] Personal Communication with Professor Gary Green, Albany State University (Dec. 20, 1994). Professor Green suggests a defensive use figure in the high hundred thousands which would equal or exceed the incidence of criminal misuse of firearms.

[89] *See, e.g., The Value of Civilian Handgun Arms*, *supra* note 43, at 113; Gary A. Mauser, *Gun Control in the United States*, 3 *Crim. L. F.* 147 (1991); Toch & Lizotte, *supra* note 42; James Q. Wilson, *Just Take Away Their Guns*, *N.Y. Times Mag.*, Mar. 20, 1994.

[90] Personal communication with Professor Alan Lizotte, State University of New York (Albany) School of Criminal Justice. *Compare* Toch & Lizotte, *supra* note 42 (accepting Kleck's figures) *with* David McDowall et al., *General Deterrence Through Civilian Gun Ownership: An Evaluation of the Quasi-Experimental Evidence*, 29 *Criminology* 541 (1991) (criticizing another aspect of Kleck's work).

[91] Henderson, *supra* note 5, at 24.

[92] Note that in the valor of his ignorance, Dr. Tanz goes beyond the opinions of Professors Cook and Green, who agree that Kleck has shown the probability of hundreds of thousands of victim defensive gun uses annually, but reject Kleck's upper figures.

[93] Kates, *The Value of Civilian Arms*, *supra* note 43, at 147-50, 166. The table reproduced at page 166 depicts Kleck's findings from analysis of 1979-1985 national data which shows the following comparative rates of injury: Only 12.1 to 17.4% of robbery and assault victims resisting with guns were injured; 24.7 to 27.3% of victims who submitted were nevertheless injured; 40.1 to 48.9% of those who screamed were injured, as were 24.7 to 30.7% of those who tried to reason with or threaten the attacker and 25.5 to 34.9% of those who resisted passively or sought to evade; 29.5 to 40.3% of those resisting with a knife were injured; 22 to 25.1% of those using some other kind of weapon were injured; 50.8 to 52.1% of those resisting bare-handed were injured. *Id.*; see Kleck, Point Blank, *supra* note 2, at 123-26.

Data from subsequent years have yielded confirming results. "A fifth of the victims defending themselves with a firearm suffered an injury, compared to almost half of those who defended themselves with weapons other than a firearm or who had no weapon." U.S. Dep't of Justice, Bureau of Justice Statistics, Guns and Crime 2 (1994); U.S. Dep't of Justice, Bureau of Justice Statistics, Selected Findings from National Statistical Series: Firearms and Crimes of Violence 8 (1994).

[I]n nearly 400,000 incidents of violence, the victim had a firearm for self-protection. In 35% of these incidents, the offender was also armed with a firearm. About *a fifth* [20%] of the victims using a gun for self-defense were injured [but a]mong victims defending themselves with a weapon other than a firearm or having no weapon, about *half* [50%] sustained an injury.

Id. (Emphasis added).

[94] Pete Shields, *Guns Don't Die--People Do* 125 (1981) (emphasis added) (a book by the former Handgun Control, Inc. Chairman); see Matthew G. Yeager, U.S. Conference of Mayors, *How Well Does the Handgun Protect You and Your Family?* (1976). In fact, running away or screaming is also far more dangerous and far less effective than resisting with a gun. Sarah E. Ullman & Raymond A. Knight, *Fighting Back: Women's Resistance to Rape*, 7 J. Interpersonal Violence 31 (1992); Sarah E. Ullman & Raymond A. Knight, Sequential Analysis of Sexual Assaults, Paper delivered at the 1993 Annual Meeting of the American Society of Criminology (Oct. 29, 1993).

[95] See Kleck, Point Blank, *supra* note 2, at 123-26; U.S. Dep't of Justice, Bureau of Justice Statistics, Guns and Crime 2 (1994).

[96] See Gary Kleck, *Crime Control Through the Use of Force in the Private Sector*, 35 Soc. Probs. 1 (1988). Significantly, as more and better evidence has accumulated since 1988, it has consistently lent further support to Kleck's position. Compare *id.* with Kleck, Point Blank, *supra*

note 2 and Kleck & Gertz, *supra* note 86. Significantly, the few health advocacy articles that do cite Kleck cite only the 1988 article.

[97] Personal communication with Professor Alan Lizotte (Aug. 1992); see David McDowall et al., *supra* note 71 (criticizing one aspect of Kleck's work).

[98] Indeed, Dr. Tanz states: "If somebody were to turn around and prove that guns save more lives than they kill, then I think we [gun-control advocates] would have to turn around and reconsider." Henderson, *supra* note 5, at 24.

[99] See *supra* note 87.

[100] See, e.g., Jerome P. Kassirer, *Correspondence*, 326 *New Eng. J. Med.* 1157, 1160-66 (1992).

[101] See discussion *supra* note 93.

[102] See *supra* notes 93-94 and accompanying text.

[103] Patti J. Patterson & Leigh R. Smith, *Firearms in the Home and Child Safety*, 141 *Am. J. Dis. Child.* 221, 223 (1987); Senturia et al., *supra* note 17; Somerville, *supra* note 4; Webster et al., *Firearm Injury Prevention Counseling*, *supra* note 12, at 906-07; Webster & Wilson, *supra* note 5, at 621; Douglas S. Weil & David Hemenway, *Loaded Guns in the Home: Analysis of a National Random Survey of Gun Owners*, 267 *JAMA* 3033, 3037 (1992).

[104] It is perhaps possible to imply advice from comments such as those of George Pickett and John J. Hanlon that in acquaintance killings--for example, by men of mates or women they desire--the "murder is almost always an act of blind rage or illogical violent passion," with the victim often being blameworthy for hostile behavior, and that "when it happens, the killer as well as the killed is the victim." George Pickett & John J. Hanlon, *Public Health: Administration and Practice* 496 (1990). The authors (predictably, both male) apparently agree with Handgun Control, Inc. that the murder should have been avoided by the woman submitting to whatever the killer desired. For the almost total contra-factuality of the authors' beliefs about homicide, see *infra* Part XIV.

Surprisingly, one of the prolific health advocate opponents of defensive gun ownership adopted a different perspective in a recent interview (though perhaps only because, feeling pressed to answer, he did so ingenuously). Asked what he would want for his own wife if she were assaulted, Dr. Arthur Kellermann responded: "If that were my wife, would I want her to have a .38 special in her hand? Yeah." A. Japenga, *Gun Crazy*, *S.F. Examiner*, *This World* (Supp.), Apr. 3, 1994, at 7, 13. *Contra* Arthur L. Kellermann & James A. Mercy, *Men, Women, and Murder: Gender-Specific Differences in Rates of Fatal Violence and Victimization*, 33 *J. Trauma* 1 (1992); Arthur L. Kellermann & Donald T. Reay, *Protection or Peril?: An Analysis of Firearm-Related Deaths in the Home*, 314 *New Eng. J. of Med.* 1557 (1986); Arthur L. Kellermann et al., *Gun Ownership as a Risk Factor for Homicide in the Home*, 329 *New Eng. J. Med.* 1084 (1993).

[105] Pickett & Hanlon, *supra* note 104, at 497; *see* Webster et al., *Reducing Firearms Injuries*, *Issues in Sci. & Tech.*, Spring 1991, at 74-75. The Webster article states:

[H]andguns are often advertised as necessities for self-protection, and that is why most handgun owners have bought them. Yet there is *little scientific evidence* to support the claims that guns are effective devices for protection. . . . [T]here are *no studies* that examine the results of resisting a robbery with a gun per se, [but] a study . . . indicated that attempts to resist [robberies in Chicago] place the victim at much greater risk of being injured or killed.

Id. (emphasis added). It bears emphasis that the study in question, like all studies reaching this result, did not differentiate gun defense from defense with less effective weapons. When gun defense cases are isolated, the results show 75% fewer victim injuries than in cases involving resistance with any other kind of weapon--and 50% fewer injuries than in cases of submission.

[106] "[S]cientific evidence," in the form of nationwide data documenting widespread defensive use of firearms, became available by the late 1970s and was repeatedly corroborated in polls of criminals and victims through the 1980s and beyond. Moreover, by 1991 when the sages quoted in the text were writing, these and other data of defensive gun use had been reviewed in at least six different academic publications preceding Kleck's 1988 *Social Problems* article. The earliest data were reviewed in James D. Wright & Peter H. Rossi, *Weapons, Crime and Violence in America: A Literature Review and Research Agenda* ch. 7 (1981) [hereinafter Wright & Rossi, *Weapons, Crime and Violence in America*] (subsequently published as *Under the Gun*, *supra* note 2) and in James D. Wright, *The Ownership of Firearms for Reasons of Self Defense*, in *Firearms and Violence* 301, 301-28 (Don B. Kates, Jr. ed., 1984). The evidence from victims was supported by the NIJ-sponsored survey among 2,000 imprisoned felons. *See supra* notes 75-79 and accompanying text. In 1985, the NIJ published a summary of these results. Kleck also summarized them in Gary Kleck, *Policy Lessons from Recent Gun Control Research*, 49 *Law & Contemp. Probs.* 35, 45 (1986). In 1986, the results of the entire survey were published in Wright & Rossi, *Armed and Considered Dangerous*, *supra* note 2, at 145, 146 tbl. 7.1, 150, 154.

[107] Health sages and other anti-gun advocates have published studies decrying defensive gun ownership. Their conclusions cannot sustain scholarly review. *See* Kleck, *Point Blank*, *supra* note 2, at 101-51; Kates, *The Value of Civilian Arms*, *supra* note 43, at 126-27, 134-39, 145-47, 156.

[108] Mercy et al., *supra* note 12, at 18.

[109] Teret & Wintemute, *supra* note 35, at 105-06.

[110] *See supra* notes 75-79 and accompanying text.

[111] Kleck was awarded the Hindelang Award at the 1993 Annual Meeting of the American Society of Criminology.

[112] Lawrence W. Sherman, Book Review, 18 *The Criminologist* 15 (1993) ("thorough scholarship and detailed critiques of the literature . . . [a]s a comprehensive reference, there is nothing like it").

"[I]f only as a resource concerning the gun control literature, this book is a necessary acquisition for [libraries] . . . and for any serious scholar working in the area." H. Laurence Ross, 98 *Am. J. Soc.* 661 (1992) (reviewing Gary Kleck, *Point Blank: Guns and Violence in America* (1991)); *see infra* note 114 (quotations from Professor Cook's review).

[113] Personal communication with Professor James D. Wright (co-author of Wright et al., *Under the Gun*, *supra* note 2, a slightly modified commercial incarnation of Wright & Rossi, *Weapons, Crime and Violence in America*, *supra* note 106).

[114] Two articles in health advocacy periodicals, though written by criminologists, attack Kleck's work of defensive firearms use. One of the very few health advocate articles we deem worth reading does cite Kleck for a particular point which it rejects. AMA Council on Scientific Affairs, *Firearm Injuries and Deaths: A Critical Public Health Issues*, *Pub. Health Rep.* 111 (1989).

A final, highly creditable, exception is that *Point Blank* was reviewed in the *New England Journal of Medicine*. Predictably, the reviewer selected was Philip J. Cook, a severe critic of Kleck's views. Unlike the health advocacy sages, Cook is a distinguished methodologist whose contributions to the criminological literature on firearms always repay a thorough reading. In addition to works otherwise cited herein, see Philip J. Cook, *The Relationship Between Victim Resistance and Injury in Non-Commercial Robbery*, 15 *J. Legal Stud.* 405 (1986); Philip J. Cook, *The Role of Firearms in Violent Crime: An Interpretive Review of the Literature*, in *Criminal Violence* 269 (Marvin E. Wolfgang & Neil A. Weiner eds., 1982).

Far from justifying Kleck's complete exclusion from health literature, Professor Cook's review of *Point Blank* should have promoted the book's use. *See* Philip J. Cook, Book Review, 330 *New Eng. J. Med.* 374 (1994) (describing *Point Blank* as a "comprehensive assessment of the evidence concerning causal links between firearms and violence . . . Kleck is encyclopedic in covering the relevant literature, noting the shortcomings of others' research and providing careful explanations of his own original contributions."). Regrettably, this critique has fallen on politically deaf ears so far as the health advocacy literature is concerned.

[115] *See supra* notes 71-91 and accompanying text; *see also* Arthur L. Kellermann, *Obstacles to Firearm and Violence Research*, 12 *Health Aff.* 142, 151 (1993); Sloan et al., *supra* note 22, at 136.

[116] Kleck, *Point Blank*, *supra* note 2, at 477.

[117] Personal communication with Gary Kleck (Aug. 1988); *see also* Kleck, *Point Blank*, *supra* note 2, at Author's Voluntary Disclosure Statement (unpaginated, precedes Table of Contents). Far from his work being underwritten by the NRA, Kleck has been criticized by that organization

for supporting gun controls that it opposes. Paul H. Blackman, Book Review, 18 *The Criminologist* 16 (1993).

In a presentation of his research to a panel of the American Political Science Association, Kleck concluded by observing:

Fixating on guns seems to be, for many people, a fetish which allows them to ignore the more intransigent causes of American violence, including its dying cities, inequality, deteriorating family structure, and the all-pervasive economic and social consequences of a history of slavery and racism. And just as gun control serves this purpose for liberals, equally useless "get tough" proposals, like longer prison terms, mandatory sentencing, and more use of the death penalty serve the purpose for conservatives. All parties to the crime debate would do well to give more concentrated attention to more difficult, but far more relevant, issues like how to generate more good-paying jobs for the underclass which is at the heart of the violence problem.

Gary Kleck, *Guns and Violence: A Summary of the Field*, Soc. Pathology (forthcoming 1995).

[118] Even as proposed, much less as enacted, the Brady Bill is limited to a background check on handgun purchases from dealers. Kleck suggests a background check that would be a prerequisite to all firearms purchases, including both long guns and handguns, both transactions between private persons and sales through dealers. Gary Kleck & David J. Bordua, *The Factual Foundation for Certain Key Assumptions of Gun Control*, 5 *Law & Pol'y Q.* 271, 294 (1983); Gary Kleck, *Policy Lessons from Recent Gun Control Research*, 49 *Law & Contemp. Probs.* 35 (1986); see Kleck, *Point Blank*, *supra* note 2, at 429-445.

[119] Injury Prevention, *supra* note 4, at 265 (citing the favorable discussion of background checks in Kleck & Bordua, *supra* note 118).

The other favorable citation to Kleck occurs in a somewhat more ambiguous context. Greg R. Alexander et al., *Firearm-Related Fatalities: An Epidemiologic Assessment of Violent Death*, 75 *Am. J. Pub. Health* 165, 168 (1985) (citing an early article by Kleck which concluded that gun ownership among responsible, law abiding adults does result in increased homicide--a conclusion Kleck later had to repudiate based on a more extensive and better analyzed data set). Compare Gary Kleck, *Capital Punishment, Gun Ownership and Homicide*, 84 *Am. J. Soc.* 882 (1979) with Gary Kleck, *The Relationship between Gun Ownership Levels and Rates of Violence in the United States*, in *Firearms and Violence: Issues of Public Policy* (Don B. Kates, Jr. ed., 1984). We note that the Alexander article scrupulously cited articles finding that gun ownership did not increase homicide as well as Kleck's early article to the contrary. We do not fault them for overlooking Kleck's repudiation of his earlier article as the later article was in a book to which they may not have had easy access. We do emphasize the failure of the health advocacy literature as a whole to cite Kleck's vast scholarly output.

[120] Injury Prevention, *supra* note 4, at 265.

[121] Kleck & Bordua, *supra* note 118, at 271.

[122] In a 1994 article, Senturia cites a 1993 source as "estimat[ing] that there are 200 million firearms in US homes," and then a 1991 source to conclude, erroneously, that this "includ[es only] 49 million handguns." Yvonne D. Senturia et al., *Children's Household Exposure to Guns: A Pediatric Practice-Based Study*, 93 *Pediatrics* 469, 469 (1994). As of 1994 this estimate is approximately 31 million low for guns of all kinds and 33.3 million low for handguns. *See infra* Table 3. The 200 million estimate for all guns was only somewhat off; Senturia and her fellow authors could have adopted it and specified that it was accurate as to 1987-88, citing Kleck's definitive figures as the latest available. Kleck, *Point Blank*, *supra* note 2, at 49-50 tbl. 2.1. But, since the proportion of all guns that are handguns is a subject of some importance, for them to give an overall gun figure based on a 1991 estimate and a much lower handgun figure from seven years earlier was inexcusable. In addition, the handgun figure was 11 million too low even for 1984 when the accumulated handgun stock exceeded 60 million and the total gunstock 186 million, a roughly one-to-three proportion of handguns to long guns, rather than the one-to-four which the Senturia figures imply. Senturia et al., *supra* note 122, at 469.

[123] Kleck & Bordua, *supra* note 118.

[124] *See supra* note 17.

[125] *But see* Robert J. Cottrol & Raymond T. Diamond, "Never Intended to be Applied to the White Population": *Firearms Regulation and Racial Disparity, The Redeemed South's Legacy to a National Jurisprudence?*, *Chi.-Kent L. Rev.* (forthcoming 1995); Robert J. Cottrol & Raymond T. Diamond, *The Second Amendment: Toward an Afro-Americanist Reconsideration*, 80 *Geo. L.J.* 309 (1990); Don B. Kates, Jr., *The Second Amendment and the Ideology of Self-Protection*, 9 *Const. Commentary* 87, 98 (1992); Don B. Kates Jr., *Toward a History of Handgun Prohibition in the United States*, in *Restricting Handguns: The Liberal Skeptics Speak Out* (Don B. Kates Jr. ed., 1979); Kessler, *Gun Control and Political Power*, *supra* note 43, at 381; Kessler, *The Ideology and Gun Control*, *supra* note 43, at 1; John R. Salter, Jr., *Civil Rights and Self-Defense*, *Against the Current*, July-Aug. 1988, at 23.

The obliviousness of American health advocates to this issue is rendered particularly ironic given awareness of it by a leading British Commonwealth gun control advocate and analyst. Discussing firearms licensing, a Macquarrie University Law professor admonishes that there is no "reason to presume that the police, in [Australia, would] be influenced by political considerations in" their administration of a gun licensing law. J. David Fine, *Issues in Firearms Control: A Critique of the 1985 New South Wales Legislation*, 18 *Austl.-N.Z. J. Criminology* 257, 265 (1985). "Still, the public ought to be assured--by the presence of laws, not simply by the words of men--that the abuses reported in this field throughout the United States are not reproduced in any Australian jurisdiction." *Id.*

[126] Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 649.

[127] Personal communication with Professor Wright (Jan. 1995); see Wright et al., *Under the Gun*, *supra* note 2, at xi; Wright & Rossi, *Armed and Considered Dangerous*, *supra* note 2, at xiii.

[128] See *supra* note 2; see also Raymond G. Kessler, Book Review, 75 *J. Crim. L. & Criminology* 314 (1984). *Under the Gun* differs from *Point Blank* in that it is purely a work of literature evaluation and does not itself contain original research. Wright and Rossi's major original research contribution is *Armed and Considered Dangerous*.

[129] Injury Prevention, *supra* note 4, at 262; Eisen, *supra* note 14, at 11 (citing *Under the Gun* for seven different points); Senturia et al., *supra* note 122, at 474, 475 (citing *Under the Gun* for survey research on reasons people own guns); Stephen P. Teret et al., *The Firearm Fatality Reporting System: A Proposal*, 267 *JAMA* 3073, 3074 (1992) (citing the separately published Executive Summary to Weapons, Crime and Violence in America, *supra* note 106).

[130] John H. Sloan et al., *Handgun Regulations, Crime, Assaults and Homicide: A Tale of Two Cities*, 319 *New Eng. J. Med.* 1256, 1256 (1988) (purportedly citing *Under the Gun*, but without supplying any specific page citation).

[131] Wright & Rossi, *Weapons, Crime and Violence in America*, *supra* note 106, at 2 (from the abstract to the Executive Summary) (emphasis added).

[132] Paul H. Blackman, *Correspondence*, 323 *JAMA* 136 (1990).

[133] Sloan et al., *supra* note 22, at 136.

[134] Wright & Rossi, *Weapons, Crime and Violence in America*, *supra* note 106, at 2.

[135] The limited exceptions include Dolins and Christoffel noting one point in a later Wright and Rossi book, the NIJ-funded felon survey. Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 648-49. As discussed previously, Dolins and Christoffel misdescribe Wright and Rossi as "gun supporters" and misstate that the point cited has been found "unconvincing" by "epidemiologists." *Id.* In addition, to our surprise, we found Wright and Rossi's NIJ *Literature Evaluation* cited twice for points that might encourage at least some skepticism. Arthur L. Kellermann et al., *The Epidemiologic Basis for the Prevention of Firearm Injuries*, 12 *Ann. Rev. Pub. Health* 17, 28-29 (1991). Another limited exception is provided by the *New England Journal of Medicine* and other health advocacy journals, which print letters to the editor (limited to 400 words and no more than three supporting references) in response to articles. To the extent possible under these constraints, critical correspondents have been able to briefly cite isolated findings from *Under the Gun*, to which the authors of the articles reply. *Supra* note 14 and accompanying text.

[136] Teret & Wintemute, *supra* note 35, at 101-02 (citing reports from the Comptroller General and the AMA Council on Scientific Affairs). In fairness it should be stated that, despite their brevity and obsolescence, each of these literature reviews gives a more comprehensive,

competent, and candid statement of the anti-gun position than anything to be found in the health advocacy literature except the surprisingly fair Kellermann et al., *supra* note 135.

[137] Teret & Wintemute, *supra* note 35, at 101.

[138] *Id.*

[139] Sloan et al., *supra* note 130.

[140] *Id.* at 1256.

[141] Charles Mock et al., *Comparison of the Costs of Acute Treatment for Gunshot and Stab Wounds: Further Evidence of the Need for Firearms Control*, 36 J. Trauma 516, 516 (1994).

[142] Brandon S. Centerwall, *Homicide and the Prevalence of Handguns: Canada and the United States, 1976 to 1980*, 134 Am. J. Epidemiology 1245 (1991).

[143] Three years after its publication, Dr. Tanz told the interviewer "he'd heard it was coming but didn't know it was out." Henderson, *supra* note 5, at 22.

[144] *See, e.g.*, David B. Kopel, *Canadian Gun Control: Should the United States Look North for a Solution to its Firearms Problem?*, 5 Temple Int'l & Comp. L.J. 1 (1991); Gary A. Mauser & Richard A. Holmes, *An Evaluation of the 1977 Canadian Firearms Legislation*, 16 Evaluation Rev. 603 (1992); Robert J. Mundt, *Gun Control and Rates of Firearms Violence in Canada and the United States*, 32 Can. J. Criminology 137 (1990); Charles L. Rich et al., *Guns and Suicide: Possible Effects of Some Specific Legislation*, 147 Am. J. Psychiatry 342 (1990); Brandon S. Centerwall, *Suicide and the Prevalence of Handguns: Canada and the United States, 1976-1980* (unpublished manuscript, on file with the *Tennessee Law Review*).

[145] Personal Communication with Brandon Centerwall (Dec. 1994).

[146] Centerwall, *supra* note 142, at 1245-46. Even independent of its irreconcilability with Centerwall's much better data, the Sloan article is methodologically worthless. *See infra* notes 156-61 and accompanying text.

[147] Personal Communication with Brandon Centerwall, *supra* note 145 (emphasis his).

[148] Richard B. Drooz, *Handguns and Hokum: A Methodological Problem*, 238 JAMA 43 (1977). Depending on how one wishes to count, there may be as many as three other (non-commentary) articles in health advocacy periodicals since 1965 which significantly depart from the anti-gun orthodoxy. *See* Centerwall, *supra* note 142 (a neutral comparison of handgun and non-gun homicide in Canada and the United States); Rich et al., *supra* note 144 (an evaluation of suicide rates which concludes that gun controls did not reduce them); Joseph F. Sheley et al., *Gun-Related Violence in and Around Inner-City Schools*, 146 Am. J. Diseases Children 677, 682 (1992) (article by three criminologists which, though it does not discuss gun control per se, contains a statement common among criminologists but almost unheard of in the health

advocacy literature: The problems of crime and violence "will not yield to simplistic, unicausal solutions. In this connection, it is useful to point out that nearly everything that leads to gun-related violence [including gun possession by juveniles] is already against the law. What is needed are not new and more stringent gun laws but rather a concerted effort to rebuild the social structure of inner cities.").

[149] Centerwall, *supra* note 142, at 1264 (emphasis added).

[150] *See, e.g.*, Mercy et al., *supra* note 12, at 18 n.52 (citing Sloan but not Centerwall), 23 n.64 (citing Brandon S. Centerwall, *Exposure to Television As a Cause of Violence*, in 2 *Public Communication and Behavior* 1 (George Comstock ed., 1989)).

[151] Brandon S. Centerwall, *Television and Violence: The Scale of the Problem and Where to Go From Here*, 267 *JAMA* 3059 (1992).

[152] *See, e.g.*, Lois A. Fingerhut et al., *Firearm and Nonfirearm Homicide Among Persons 15 Through 19 Years of Age*, 267 *JAMA* 3048 (1992).

[153] Robert Sherrill, *The Saturday Night Special* 176 (1975).

[154] Kopel, *The Samurai*, *supra* note 43 (providing in depth coverage of England, Canada, Australia, New Zealand, Jamaica, Switzerland, and Japan).

[155] We can find no citation, and the author, who is preparing an evaluation of that literature, tells us that he has been unable to find any citation either.

[156] *See, e.g.*, Susan P. Baker, *Without Guns, Do People Kill People?*, 75 *Am. J. Pub. Health* 587, 587 (1985); Charles M. Callahan & Frederick P. Rivara, *Urban High School Youth and Handguns: A School-Based Survey*, 267 *JAMA* 3038, 3042 (1992); Bruce R. Conklin & Richard H. Seiden, *Gun Deaths: Biting the Bullet on Effective Control*, 22 *Pub. Aff. Rep.* 1, 4, 7 (1981); Cotton, *supra* note 33, at 1172; Dolins & Christoffel, *Reducing Violent Injuries*, *supra* note 5, at 651; Lois A. Fingerhut & Joel C. Kleinman, *International and Interstate Comparisons of Homicides Among Young Males*, 263 *JAMA* 3292, 3295 (1990); Peter M. Marzuk et al., *The Effect of Access to Lethal Methods of Injury on Suicide Rates*, 49 *Archives Gen. Psychiatry* 451, 456-57 (1992); Mercy et al., *supra* note 12, at 18; Mock, *supra* note 141, at 516, 521; Leland Ropp et al., *supra* note 10, at 2905; Schetky, *supra* note 13, at 230; Teret & Wintemute, *supra* note 35, at 102; Webster et al., *supra* note 4, at 76.

[157] Gary A. Mauser, *Gun Control in the United States*, 3 *Crim. L. F.* 147 (1991). Indicative of the methodological sophistication of health advocacy sages is that, with a straight face, they actually describe as "elegant" a study drawing profound conclusions from a meager two-city data set. *See, e.g.*, Garen J. Wintemute, *Closing the Gap Between Research and Policy: Firearms*, 7 *Inj. Prevention Network Newsl.*, Winter 1989-1990, at 20, 21.

[158] Mauser, *supra* note 157, at 148.

[159] *Id.* at 148 n.3.

[160] *All Things Considered* (National Public Radio broadcast, Dec. 16, 1989).

[161] Arthur L. Kellermann, *Obstacles to Firearm and Violence Research*, 12 *Health Aff.* 142, 150-51 (1993). Amusingly, Dr. Kellermann makes these comments without bothering to inform his readers that he himself is one of the authors of the article he portrays as being so nefariously attacked by the dark forces of the NRA.

[162] Kopel, *the Samurai*, *supra* note 43; *see also* Colin Greenwood, *A Study of Firearms Control: Armed Crime and Firearms Control in England and Wales* (1972); David B. Kopel, *Gun Control in Great Britain* (1992), David B. Kopel, *Japanese Gun Control*, 2 *Asia Pac. L. Rev.* 26 (1993); Kopel, *supra* note 144; Mauser & Holmes, *supra* note 144; Mundt, *supra* note 144; Rich et al., *supra* note 144.

[163]

But these countries' low crime rates seem to have preceded the gun laws that supposedly caused them. Violence was low (and falling) in Western Europe from at least the mid-nineteenth century, but anti-gun policies only came in after World War I aimed not at crime but at the political unrest of that tumultuous era. . . . [I]f anti-gun laws explain low Japanese homicide why is the murder rate in Taiwan (where gun possession is a capital offense) higher than in the United States; and why is South Africa's rate twice that of the United States' despite some of the world's strictest anti-gun laws?

Current Evidence, *supra* note 44, at 200 (footnotes omitted); Greenwood, *supra* note 162, at 7-44.

[164] Kates, *Current Evidence*, *supra* note 44, at 200.

[165] Schetky, *supra* note 13, at 230.

[166] *Id.*

[167] Abraham Tennenbaum, *Israel Has a Successful Gun Control Policy*, in *Gun Control: Current Controversies* 248 (Charles P. Cozic ed., 1992).

[168] *Id.* at 249; *The Samurai*, *supra* note 43, at 283.

[169] Tennenbaum, *supra* note 167, at 248; Kopel, *The Samurai*, *supra* note 43, at 278.

[170] Tennenbaum, *supra* note 167, at 250 (emphasis added). Professor Tennenbaum teaches in the Department of Criminology at Bar Ilan University. Credit being due, we take the opportunity to applaud a rare occasion of health advocacy candor. An article by Kellerman et al. accurately states that "Israel and Switzerland [have] rates of homicide [that] are low despite rates of home

firearm ownership that are at least as high as those noted in the U.S." Kellermann et al., *supra* note 135, at 28.

[171] Tennenbaum, *supra* note 167, at 249; AMA Council on Scientific affairs, *supra* note 170, at 115-18. Compare Glenn H. Reynolds & Don B. Kates, *The Second Amendment and States' Rights: A Thought Experiment*, 36 Wm. & Mary L. Rev. 1737 (1995) and Don B. Kates, *Handgun Prohibition and the Original Meaning of the Second Amendment*, 82 Mich. L. Rev. 204, 249-50 n.193 (1983) with 18 U.S.C. § 922(o) (1988) and 26 U.S.C. § 5845 (1988) (comparing Swiss and Israeli laws and practices with those in the United States).

[172] Tennenbaum, *supra* note 167, at 248 (emphasis added).

[173] For a discussion of gun availability and carrying under Swiss law, see Kopel, *The Samurai*, *supra* note 43, at 278-302. See also David B. Kopel, *Peril or Protection? The Risks and Benefits of Handgun Prohibition*, 12 St. Louis U. Pub. L. Rev. 285, 299 (1993).

[174] See Abraham Tennenbaum, *Handguns Could Help*, Baltimore Sun, Oct. 26, 1991, at 9A.

[175] *Current Evidence*, *supra* note 44, at 209. Such events are not uncommon in Israel. For example:

[A] Palestinian opened fire with a submachine gun at a bus stop near the port of Ashdod today, killing one Israeli and wounding four before being shot to death by bystanders, officials said. . . .

National police spokesman Eric Bar-Chen said today's attacker, who was armed with an Uzi submachine gun, was shot and killed by a civilian and a soldier who were at the bus stop and hitchhiking post used by soldiers. Ashdod is 15 miles south of Tel Aviv and 15 miles north of the Gaza Strip.

Bar-Chen identified the gunman as a Palestinian from the Shati refugee camp in the Gaza Strip. Six ammunition clips and a knife were found on his body, he added.

Marin Independent J., Apr. 7, 1994, at A3.

[176] Kleck gives the total handgunstock figure for 1899 through the end of 1966 as 25,431,479; at the end of 1980 as 51,707,269; and at the end of 1986 as 63,859,072. Kleck, *Point Blank*, *supra* note 2, at tbl. 2.1.

[177] *Id.* at tbl. 7.1; see also *infra* Table 2.

[178] In 1986 the rate of accidental firearms deaths per 100,000 population dropped to 0.6. Though the number of deaths has slightly fluctuated since, it has never climbed beyond that rate. National Safety Council, *Accident Facts 1991* 5 (listing 1990 rate as 0.6); National Safety Council, *Accident Facts 1992* 5 (listing 1991 rate as 0.6); National Safety Council, *Accident Facts 1993* 5 (listing 1992 rate as 0.5). For post-1986 accidental fatality figures see the National

Safety Council data set out *infra* Table 2. For figures on both the handgunstock and the gunstock generally, see *infra* Table 3.

[179] Indeed, the explanation we develop *infra*--that fatal accidents have decreased because of displacement of the deadlier long gun by the safer handgun--has an important implication for homicide as well, though health advocates assiduously ignore that implication. That implication, which criminologists studying the subject have emphasized, is that handguns should not be regulated more strictly than long guns, lest criminals be diverted to the latter from the less deadly handgun.

To understand that point, remember that the primary argument for banning handguns is to save lives by forcing attackers to rely on large knives, which only kill about 2.4 percent of those they wound, rather than handguns, which are 1.31 to 3 times deadlier. But what if banning handguns led some attackers to rely on rifles, weapons which are 15 times more lethal than knives and, therefore, 5 to 11.4 times deadlier than handguns? Or shotguns, weapons so much deadlier that in medical studies they are not to be "compared with other bullet wounds. . . . [A]t close range they are as deadly as a cannon"? Of course long guns could not be used in all the circumstances in which handgun woundings now occur since long guns are much less concealable (unless sawed off). But, based on a combination of medical studies and gross ballistic comparisons, I have estimated that if a handgun ban caused only 50 percent of the wounds now inflicted with handguns to be inflicted with long guns instead, the number of dead would double--even if not one victim died in the other 50 percent of the cases in which (hypothetically) knives would be substituted!

That long guns could be substituted in 50 percent of homicidal attacks is evident from Kleck's finding that "anywhere from 54 percent to about 80 percent of homicides occur in circumstances that would easily permit the use of a long gun." Indeed if a handgun ban actually did disarm criminals long guns might be substituted in far more than 50 percent of gun crimes. In a recent National Institute of Justice survey of about 2,000 felons in ten prisons across the country 82 percent answered that "If a criminal wants a handgun but can't get one he can always saw off a long gun." That would be "easy" according to 87 percent of those felons who had often used handguns in crime and 89 percent of those who had often used shotguns. Based on these responses, Lizotte calculates that, far from saving lives, the current handgun death toll could more than triple if a handgun ban led to long gun substitution at the rates indicated. [*Under the Gun*, emphasis in original] suggests somewhat facetiously that

If someone intends to open fire on the authors of this study, our *strong* preference is that they open fire with a handgun. . . . The possibility that even a fraction of the predators who now walk the streets armed with handguns would, in the face of a handgun ban, prowl with sawed-off shotguns instead causes one to tremble."

Kates, *Current Evidence*, *supra* note 44, at 205-06 (footnotes omitted).

[180] We can find no health advocacy publication that mentions--much less discusses--the correlation between a radically rising handgunstock and a radically decline in accidental firearms death. Nor does any health advocacy publication suggest that the decline in the accidental firearms death rate requires or deserves exploration or study, or has any importance at all. Indeed, almost without exception health advocates inveigh against widespread gun ownership and discuss gun accidents without revealing to their readers the steep decline in accidental firearms fatalities over the twenty-year period from 1967 to 1986. *See, e.g.*, AMA Council on Scientific Affairs, *supra* note 35, at 113 (emphasizing unintentional gun deaths among children without giving either trend data in general or for children); Dowd et al., *supra* note 10; Kellermann et al., *supra* note 135; Patterson & Smith, *supra* note 103, at 221; Webster et al., *Parents' Beliefs*, *supra* note 12, at 902, 903, 906-07 (emphasizing child death nationally but giving no trend data); Webster et al., *Firearms Injury Prevention Counseling*, *supra* note 12; Injury Prevention, *supra* note 4, at 263-64, 266.

A rare exception--which nevertheless proves the rule--is Garen J. Wintemute, *Firearms as a Cause of Death in the United States, 1920-1982*, 27 J. Trauma 532, 533-34, 536 (1987). He does admit that accidental firearms fatalities have steadily declined throughout the twentieth century, but he treats the matter in a single sentence that assigns no importance to it and draws no implications from it. Citing no evidence at all, he denigrates safety education in general and attributes the decline to a trend of identifying suicides as such rather than as gun accidents.

[181] Personal communication from NRA Research Coordinator Paul Blackman (Feb. 1995). *See* Carl Bakal, *No Right to Bear Arms* ch. 13 (1968). Bakal's is the earliest book-length anti-gun tract. Significantly, it is also the only one which contains an extended (adverse) discussion of gun safety training and accidental gun fatalities. As gun deaths began sharply declining, anti-gun tracts began downplaying the subject; though manipulation of the emotive value of tragic accidental child deaths continues, trend data are avoided whether for such tragedies or for accidental gun deaths in general. *See, e.g.*, Jervis Anderson, *Guns in American Life* (1984); Robert Sherill, *the Saturday Night Special* (1975). The only extensive coverage of accidental death appears in Zimring & Hawkins, *supra* note 37, at 55-60. The authors do admit that "in general, the long-term trend in firearms accidental death is downward," *id.* at 60, but this is in the context of local data supposedly showing increases in death from increased handgun ownership, and claims that buying a handgun for home defense actually menaces the lives of the household residents. In a book published in 1987, the authors dramatize the dangers of gun accident by supplying four Figures, three from the 1960s. The one post-1960s Figure dramatizes child accidental handgun deaths without noting either the sharply downward trend data of such deaths or the much greater part long guns play in accidental gun death.

[182] In 1993, NRA lobbyist and First Vice President Marion Hammer received a National Safety Council Outstanding Community Service Award for originating the "Eddie Eagle" program. *American Rifleman*, March 1994, at 34; *Florida Times Union*, Nov. 2, 1994, at B2.

[183] *Wash. Post*, Jan. 7, 1992, at B5 ("A must for any parent who keeps a gun in the home.").

[184] *See, e.g.*, Deane Calhoun and Dr. Christoffel, both quoted *supra* note 4.

[185] See Cheryl Jackson, *Gun-Safety Backers Shun NRA Material*, Cleveland Plain Dealer, March 27, 1992.

Amusingly, at its 1995 annual meeting, the California Medical Association endorsed what the CMA's resolution described as "the California Department of Justice's [sic] safety instruction to children: 'If you [find a gun in some area], Stop. Don't touch. Leave the area. Tell an adult.'" Our "sic" emphasizes the deception employed by the resolution's proponents. The safety instruction is the NRA's, not that of the California Department of Justice (which has adopted it from the NRA's "Eddie Eagle" pamphlet). The resolution originally described the quoted admonition as deriving from the NRA. But when the resolution was pre-presented in that form to a county medical association, the proponents were advised that if they wanted their resolution to pass they should delete any reference to the NRA. Reworded in that fashion, the resolution was unanimously adopted by the California Medical Association. Personal communication from the resolution's primary proponent, Dr. Timothy Wheeler (March, 1995).

[186] Compare Injury Prevention, *supra* note 4, at 266; American Academy of Pediatrics Committee on Adolescence Committee on Adolescence, *Policy Statement: Firearms and Adolescents*, Jan. 1992, AAP News 20, 21 and Kellermann et al., *supra* note 135, at 19 with William W. Treanor & Marjolijn Bijlefeld, *Kids & Guns: A Child Safety Scandal* (2d ed. 1989). The Fund is a non-profit spin-off of the National Coalition to Ban Handguns.

[187] Dolins & Christoffel, *supra* note 5, at 646. See also Weil & Hemenway, *supra* note 103.

[188] It bears emphasis that Dolins & Christoffel are not unique. Rather their attitude seems general among health advocates. All of the various advocates who consider safety training dismiss it with this or some similar comment. Only one discussion notes the need for study, and the terms in which it does so are significant: "an important research question is whether the safety benefit of [safety] courses is outweighed by their ability to promote an interest in firearms, an interest which increases the number of firearms in circulation. . . ." 7 Injury Prevention, *supra* note 4, at 266. The authors piously add that increasing the number of firearms may cause more accidental injuries with guns. Of course, once again, they nowhere temper this point (or the rest of their discussion) by mentioning the coincidence of a 173% increase in handguns with a two-thirds decline in accidental fatalities over a twenty-year period.

[189] See, e.g., Susan P. Baker et al., *The Injury Fact Book 90-91* (1984); Stephen P. Teret, *Litigating for the Public's Health*, 76 Am. J. Pub. Health 1027, 1028 (1986); Stephen P. Teret & Garen J. Wintemute, *Handgun Injuries: The Epidemiologic Evidence for Assessing Legal Responsibility*, 6 Hamline L. Rev. 341 (1983).

[190] Thus, for instance, when the CDC discusses homicide alone, international comparisons are made, but whenever the CDC combines homicides and suicides, data is given only for the United States.

[191] Baker, *supra* note 156, at 587.

[192] Compare *id.* with *infra* Table 1.

[193] Killias, *Gun Ownership and Violent Crime: The Swiss Experience in International Perspective*, 1 Security J. 169, 169-74 (1990).

[194] U.N. Demographic Yearbook--1985 (1987); U.N. Demographic Yearbook--1991 (1992).

[195] We give both a 1991 and 1984 figure for Denmark because the 1984 figure would have been available to Professor Baker. *See supra* note 177.

[196] We calculated these four year averages based on the suicide rates given in Point Blank, *supra* note 2, at 262 tbl. 6.5, and the homicide rates given in Bureau of Justice Statistics, U.S. Dep't of Justice, Sourcebook of Criminal Justice Statistics--1989 365 tbl. 3.118 (1990). These years were selected because they fall within the range of years given for the other nations and because they were the latest for which *Point Blank* gives suicide rates.

[197] *Supra* Table 1. Note that, at least for countries marked with an asterisk, homicide figures do not include "political" homicides.

[198] *Id.*

[199] *Id.*

[200] John H. Sloan et al., *Firearms Regulations and Rates of Suicide: A Comparison of Two Metropolitan Areas*, 322 New Eng. J. Med. 369 (1990).

[201] *Id.* at 371.

[202] *Id.* at 372.

[203] *Id.* at 371; *see also*, Jeffrey H. Boyd, *The increasing Rate of Suicide by Firearms*, 308 New Eng. J. Med. 872, 872-74 (1983); Jeffrey H. Boyd & Eve K. Moscicki, *Firearms and Youth Suicide*, 76 Am. J. Pub. Health 1240, 1240 (1986); Calhoun, *supra* note 4, at 12; Centers for Disease Control and Prevention, *Youth Suicide in the United States, 1970-1980* 4-6 (1986); David M Eddy et al., *Estimating the Effectiveness of Interventions to Prevent Youth Suicides*, 25 Med. Care S57, S61-62 (Supp. 1987); Lois a. Fingerhut, CDC Nat'l Ctr. for Health Stats., *Firearm Mortality Among Children, Youth, and Young Adults 1-34 Years of Age, Trends and Current Status: United States, 1985-1990* (1993); Lois a. Fingerhut & Joel C. Kleinman, CDC Nat'l Ctr. for Health Stats., *Firearm Mortality Among Children and Youth* (1989); Lois a. Fingerhut et al., CDC Nat'l Ctr. for Health Stats., *Firearm Mortality Among Children, Youth, and Young Adults 1-34 Years of Age, Trends and Current Status: United States 1979-1988*, (1991); Mercy et al., *supra* note 12, at 17; Webster & Wilson, *supra* note 5, at 618.

[204] *Teenage Deaths Increasing Across Europe*, CJ Europe, Nov.-Dec. 1991, at 4.

[205] Keith Hawton, *By Their Own Young Hand*, 304 Brit. Med. J. 1000 (1992).

[206] Kleck, Point Blank, *supra* note 2, at 232.

[207] In two presumably gun-scarce environments, Sri Lanka and Fiji, suicide rates are much higher than in the United States. The use of paraquat and other agricultural pesticides which produce agonizing death is widespread. Lawrence R. Berger, *Suicides and Pesticides in Sri Lanka*, 78 Am. J. Pub. Health 826 (1988). Sri Lanka has one of the highest suicide rates in the world, 29 per 100,000 population in 1980, compared to the U.S. rate of 11.8 per 100,000. *Id.* Suicides are especially frequent among young adults, both male and female. "Compared to the US, the suicide rate for males ages 15 to 24 years in Sri Lanka is nearly four times greater; the female rate is nearly 13 times greater. The most common mode of suicide is ingestion of liquid pesticides." *Id.*; cf. Ruth H. Haynes, *Suicide in Fiji: A preliminary Study*, 145 Brit. J. Psychiatry 433 (1984).

[208] See Kleck, Point Blank, *supra* note 2, at 238-56 (discussing his own study and providing the kind of comprehensive, balanced evaluation of the entire relevant literature which will not be found even in the very best of the health advocacy literature).

[209] *Supra* Table 1.

[210] *Id.*

[211] *Id.*

[212] *Id.*

[213] At this point we need to offer a caveat as to the health advocacy literature's suppression of data and relationships. When we say something is never mentioned or discussed in that literature, we are not denying that independently knowledgeable readers might be able to ferret out parts of it. For instance, we can find tucked away in a table the fact that young, inner-city, black males have a firearm homicide rate almost 1000% greater than their counterparts in rural areas. Fingerhut et al., *supra* note 152, at 3049 tbl. 1. However, a correlative fact will not be found, much less discussed, because it casts doubt on the shibboleth. The correlative fact is that rural blacks have this far lower murder rate despite having a rate of gun ownership or availability comparable to whites--that is, a rate far exceeding that of urban blacks. Kleck, Point Blank, *supra* note 2, at 22 ("Black households in rural areas are just as likely to have a gun as white households in those areas . . ."); see *infra* note 249 (discussing black and white homicide and gun possession rates). A fortiori, there is no discussion of how these correlated facts can be squared with the more-guns-means-more-murder shibboleth.

[214] See *supra* Part III.

[215] Kleck, Point Blank, *supra* note 2, at 275, 280-81, 304. Post-1986 data show the number of fatal gun accidents remaining at around 1400-1450, despite the continued dramatic increases in both U.S. gun ownership and population. *Id.* at 306 tbl. 7.1.

[216] See, e.g., Fields, *supra* note 8, at 51. Mr. Fields, of the National Coalition to Ban Handguns, is of course correct that insofar as it was effective a handgun ban would almost

certainly result in increasing reliance on loaded long guns as defensive weapons. *See* Kleck, Point Blank, *supra* note 2, at 281.

[217] Kleck, Point Blank, *supra* note 2, at 280-81; Kates, *supra* note 171, at 261-64. The dangers are particularly great for small children; toddlers cannot operate a handgun, but can easily discharge a long gun if their parents irresponsibly keep it loaded and unsecured in the home. *Id.* at 263.

[218] *See infra* Table 2. It may be properly objected that the 14% handgun involvement figure is misleading, since in many accidental gun fatalities the kind of firearm was not identified. For that reason, Table 2 gives a percentage figure assuming the same proportion of handgun involvement in these fatalities as in those in which the kind of firearm can be identified. That figure is 41%, which is less than half the percentage of handguns kept loaded at any one time.

[219] Don B. Kates et al., The Public Health Literature on Firearms--A Critique of Overt Mendacity, Paper Delivered at the Annual Meeting of the American Society of Criminology (1991) (unpublished manuscript, on file with the *Tennessee Law Review*).

So much deadlier are loaded long guns kept in the home that even today, when handguns are the primary defensive weapon, long guns are involved in almost seven times more accidental fatalities in the home. The trend data indicate the magnitude of the risks involved if a handgun-only ban induced a return to reliance on loaded long guns for home defense: the "proliferation of handguns" since 1967 has resulted in the handgun largely displacing the long gun as the weapon kept loaded in the home for self-protection. Not coincidentally, since 1967 accidental firearm deaths have *decreased* by almost 60%. From the available data it may be estimated that if the 85.2% of loaded handguns in American homes in the year 1980 had been long guns instead, the number of fatal gun accidents would have more than quadrupled, from 1,244 to c. 5,346. Or, to put it another way, an additional c. 4,100 lives per year would be lost in accidental shootings in the home if a handgun ban resulted in loaded long guns being kept for home defense in the same numbers in which handguns are now kept.

Id. We acknowledge the advice of Professor Kleck, from whom the 1980 home accidental fatality figures were obtained, for his assistance and advice in making this estimate.

[220] *Id.*

[221] National Safety Commission, Accident Facts (1980-1994). Breakdowns between handgun and other firearm accident fatalities are unavailable for the years before 1979 and after 1991. Breakdowns for 1989-1991 appear in Accident Facts 11 (1994); *see also* Kleck, Point Blank, *supra* note 2, at 269-319 (for an extended discussion of fatal gun accidents).

[222] This category includes a small number of what are called "military rifle" fatalities. The rifle category is "hunting rifles"; the shotgun category includes "automatics."

[223] Percentages are rounded off.

[224] *See, e.g.*, Webster & Wilson, *supra* note 5, at 617.

[225] Compare the health advocate figures of 500 and 1,000 children killed per year with the actual figure of 273 (averaged over the ten years period 1980-1989). Kleck, Point Blank, *supra* note 2, at 310 tbl. 7.5; *see also* National Safety Council, Accident Facts 23 (1993). Dr. Tanz, who is an AAP advisor, puts the figure at "five hundred" per year. Joan DeClaire, *Kids & Guns*, View, Sept.-Oct. 1992, at 30, 33. Two of the most prolific health sages put it at "[a]lmost 1,000 children [a] year." Teret & Wintemute, *supra* note 177, at 341, 346.

There is a substantial time lag on publication of accidental death figures. In 1992, when the latest available figure was 236 (for 1990), Dr. Tanz put the figure at 500, an almost 100% exaggeration. In 1983, the latest available figure would have been 298 (for 1981), but Teret and Wintemute put the figure at almost 1,000, a 235% exaggeration.

[226] Compare 10 year average fatal gun accident figures given in the preceding footnote to National Safety Council, Accident Facts 65 (1992) (giving 1988 bicycle death figures).

[227] David B. Kopel, *Children and Guns: Sensible Solutions* 7 (1993). "Compared to the risk of dying in a gun accident, a child aged 0-14 is four times more likely to drown, four times more likely to die in a fire and 13 times more likely to die in an auto accident." *Id.*

[228] *Id.* at 9

[229] We do not pose these questions as rhetorical ones having only one clear "right" answer. Reasonable people may well differ vehemently over how they ought to be answered. That is precisely why scholars discussing the role of firearms and other potentially harmful elements in society ought to disclose the facts and raise the questions. Regrettably, the possibility that honestly informing people might lead to differing conclusions is also the reason such facts and questions are never raised by health advocacy sages who capitalize on the issue of accidental childhood deaths to argue for banning handguns or even all guns.

[230] Kleck, Point Blank, *supra* note 2, at 49-50 tbl. 2.1. As many new guns were sold in the period 1970-90 as were owned in 1969; as many new guns were sold in those two decades as had been sold in the preceding six decades. *Id.* The explosion in handgun sales is particularly marked. As of January 1, 1980, there were twice as many handguns as there had been on January 1, 1968. *Id.* In each year since 1966 Americans have added between 4.0 and 6.6 million new guns to the existing stock, 1.5 to 2.6 million of them being new handguns. *Id.*

[231] Kates, *The Value of Civilian Arms*, *supra* note 43, at 154.

[232] Homicide rates are taken from Bureau of Justice Statistics, U.S. Dep't of Justice, Sourcebook of Criminal Justice Statistics--1993 365 tbl. 3.111 (1993); Bureau of Justice Statistics, U.S. Dep't of Justice, Sourcebook of Criminal Justice Statistics--1989 365 tbl. 3.118 (1990). [*ed. this was footnote 233 in printed copy. MS Word addresses table cells differently and*

thus applied the sequence number to a different cell. The footnote text and cell data correspond, only the numbering is different.]

[233] Kleck, Point Blank, *supra* note 2, at 50 tbl. 2.1. [*ed. this was footnote 232 in printed copy. MS Word addresses table cells differently and thus applied the sequence number to a different cell. The footnote text and cell data correspond, only the numbering is different.*]

[234] The Bureau of Justice Statistics figures end at 1987. But Professor Kleck has provided us with subsequent figures through 1990 derived from Walter Howe, *Firearms Production by U.S. Manufacturers, 1973-1985*, Shooting Industry 101, 103-11 (1988) (the annual "Shot Show" issue covering the shooting industry's major national show held in January of each year). Howe's figures derive from those which the Federal Bureau of Alcohol, Tobacco & Firearms compiles. Unfortunately, these figures lag well behind in years and are only available up through 1991. We have calculated the 1992 figure by extrapolation from averaging the three recent years 1989-1990. This follows Kleck's recommended method for calculating the figures through the end of 1994, which are given below.

[235] These are Professor Kleck's extrapolated figures. *See supra* note 232.

[236] *See supra* notes 230-34 and accompanying text.

[237] *See supra* note 25 and accompanying text.

[238] *See supra* note 232 and accompanying text.

[239] Bureau of Justice Statistics, U.S. Dep't of Justice, Sourcebook of Criminal Justice Statistics--1993 365 tbl. 3.111 (1993).

[240] Kleck, Point Blank, *supra* note 2, at 262 tbl. 6.5.

[241] *Id.*

[242] *See infra* notes 250-56 and accompanying text.

[243] Bureau of Justice Statistics, U.S. Dep't of Justice, Firearms and Crimes of Violence: Selected Findings From National Statistical Series 13 tbl. 2 (1994).

[244] *Id.*

[245] *Id.*

[246] *Id.*

[247] *Id.*

[248] See, e.g., Bordua & Lizotte, *supra* note 43; Bordua, *supra* note 43; Chris W. Eskridge, *Zero-Order Inverse Correlations between Crimes of Violence and Hunting Licenses in the United States*, 71 Soc. & Soc. Res. 55 (1986); Kleck & Patterson, *supra* note 43, at 249-87; *Gun Ownership Levels and Rates of Violence*, *supra* note 43, at 99; Lizotte & Bordua, *supra* note 43; Murray, *supra* note 43; David McDowall, *Gun Availability and Robbery Rates: A Panel Study of Large U.S. Cities, 1974-1978*, 8 Law & Pol'y Q. 135 (1986).

[249] Kleck, Point Blank, *supra* note 2, at 214-15.

[250] Toch & Lizotte, *supra* note 42, at 234 and n.10; see also Kleck, Point Blank, *supra* note 2, at 214-15 (citing ten studies showing that various cities and counties with high gun ownership suffered equal or less violence than demographically comparable areas with lower gun ownership).

[251] Lisa D. Bastian & Bruce M. Taylor, U.S. Dep't of Justice, *Young Black Male Victims* (1994) (showing that black males age 12-24 are murdered at a rate of 114.9 per 100,000 population whereas the homicide rate for white males in the same age group is only 11.7). In other words, the black rate is almost ten times greater than that of whites of similar age and almost 14 times greater than the American population as a whole.

To reiterate, when we say a fact is never discussed, we are not denying that it can sometimes be ferreted out of some article in that literature by a reader independently aware of it. But, if mentioned at all, it will be buried in a table or worded so obscurely that its adverse implications for the health advocacy position is not revealed and dealt with.

[252] See, e.g., Centers for Disease Control and Prevention, *Homicide Surveillance: High-Risk Racial and Ethnic Groups--Blacks and Hispanics, 1970-1983*, 36 Morbidity & Mortality Wkly. Rep. 634-36 (1987); Centers for Disease Control and Prevention, *Impact of Homicide On Years of Potential Life Lost in Michigan's Black Population*, 38 Morbidity & Mortality Wkly. Rep. 4-11 (1989); James A. Gulaid et al., *Differences in Death Rates Due to Injury Among Blacks and Whites, 1984*, 37 Morbidity & Mortality Wkly. Rep. 25-31 (1988) (Surveillance Summary 3); Lois A. Fingerhut et al., *Firearm and Nonfirearm Homicide Among Persons 15 Through 19 Years of Age: Differences By Level of Urbanization, United States, 1979 Through 1989*, 267 JAMA 3048 (1992); Lois A. Fingerhut et al., *Firearm Homicide Among Black Teenage Males in Metropolitan Counties: Comparison of Death Rates in Two Periods, 1983 Through 1985 and 1987 Through 1989*, 267 JAMA 3054 (1992); Patrick W. O'Carroll, *Homicides Among Black Males 15-24 Years of Age, 1970-1984*, 37 Morbidity & Mortality Wkly. Rep. 53-60.

[253] Kleck, Point Blank, *supra* note 2, at 22-23. "Whites are much more likely to own guns or handguns than blacks . . ." *Id.* Kleck suggests that this difference is largely "due to the fact that most blacks live in big cities and that gun ownership is low in big cities." *Id.*

[254] Kates, *Current Evidence*, *supra* note 44, at 201. In that connection remember the fact that young black inner city males have a homicide rate almost 900% greater than their counterparts in rural areas, even though rural blacks have far greater gun ownership than do urban blacks.

[255] See, e.g., Brandon S. Centerwall, *Race, Socioeconomic Status and Domestic Homicide, Atlanta, 1971-72*, 74 Am. J. Pub. Health 813, 815 (1984) (reporting results of research and discussing prior studies); Darnell F. Hawkins, *Inequality, Culture, and Interpersonal Violence*, 12 Health Aff. 88 (1993); Mercy et al., *supra* note 12, at 16.

[256] Gary Kleck, *Guns and Violence: A summary of the Field*, Soc. Pathology (forthcoming 1995). "[M]easures that attempt to restrict access to firearms without reference to drugs, poverty with its attendant lack of educational and employment opportunities, clogged courts and overcrowded prisons are bound to have only marginal effects on firearm crime." Wisconsin Legislative Bureau, *supra* note 45, at 30.

[The problem of violence] will not yield to simplistic, uncausal solutions. In this connection, it is useful to point out that nearly everything that leads to gun-related violence among youth is already against the law. What is needed are not new and more stringent gun laws but rather a concerted effort to rebuild the social structure of inner cities.

Joseph F. Sheley et al., *Gun-Related Violence in and Around Inner-City Schools*, 146 Am. J. Diseases Children 677, 682 (1992).

[257] Raymond Kessler, *Gun Control and Political Power*, 5 Law & Pol'y Q. 381, 386 (1983). A further effect, he argues, is that once disarmed and rendered dependent on police for protection, the citizenry becomes less able or willing to criticize abuses and more inclined to favor burgeoning police power. *Id.* at 383.

[258] Goldsmith, *supra* note 4, at 676.

[259] Patrick W. O'Carroll, *Correspondence: CDC's Approach to Firearms Injuries*, 262 JAMA 348, 349 (1989).

[260] Dr. Mark Rosenberg, who directs the CDC's National Center for Injury Prevention and Control, has been quoted avowing his and the CDC's desire to create a public perception of firearms as "dirty, deadly--and banned." Raspberry, *supra* note 4, at A23; see also Somerville, *supra* note 4, at 9 (quoting approving comments by Rosenberg).

[261] See, e.g., Dorothy P. Rice et al., *Cost of Injury in the United States: A Report to Congress* (1989).

[262] See *supra* notes 18-96 and accompanying text.

[263] Rice et al., *supra* note 259, at 23. A similar misrepresentation was offered by a premier health advocacy sage, Garen J. Wintemute, *supra* note 180, at 534 ("Since the early 1970s year-to-year changes in new firearm availability and firearm homicide have often occurred in parallel.").

[264] Kleck, *Point Blank*, *supra* note 2, at 49-50 tbl. 2.1. Compared to the 1988 figures discussed in Table 3, the figures in *Point Blank* show that the accumulated handgun stock increased from 39 million to 65.8 million in that period while the total gun stock increased from 134.5 million to 198.3 million, an increase from 187.9 to 270.6 in handguns per 1000 Americans and from 627.0 to 815.5 in all guns per 1000 Americans. In contrast, the homicide rate declined from 9.8 in 1974 to 8.4 in 1988. Bureau of Justice Statistics, U.S. Dep't of Justice, *Sourcebook of Criminal Justice Statistics--1989* 365 tbl. 3.118 (1990).

[265] Gordon Smith & Henry Falk, *Unintentional Injuries*, in *Closing the Gap: The Burden of Unnecessary Illness* 143, 157 (Robert W. Amler & H. Bruce Dull eds., 1987). *See also* Schetky, *supra* note 13.

[266] *See supra* notes 81-84 and accompanying text.

[267] Schetky, *supra* note 13; Smith & Falk, *supra* note 265, at 157, 163.

[268] Using multi-year *Uniform Crime Report* figures, anti-gun health advocate Garen J. Wintemute has calculated that handguns "are used in 70-75% of firearm homicides." Garen J. Wintemute, *Closing the Gap Between Research and Policy: Firearms*, 7 *Inj. Prevention Network Newsl.*, Winter 1989-1990, at 20, 21.

[269] Sloan et al., *supra* note 130, at 1257, 1260.

[270] Paul H. Blackman, *Correspondence*, 320 *New Eng. J. Med.* 1214, 1214-15 (1989) (letter by the NRA's Paul H. Blackman and response by Sloan).

[271] *Id.* at 1216-17.

[272] Sloan et al., *supra* note 130, at 1261.

[273] Wintemute, *supra* note 266, at 21; *see* Mercy et al., *supra* note 12, at 19; Webster et al., *supra* note 4, at 76.

[274] Webster et al., *supra* note 4, at 73; *see also* Calhoun, *supra* note 4, at 15 (most murderers "are neither felons nor crazy," but rather "people involved in family fights and fights over jobs and money, and people who are sad or depressed").

[275] Christoffel, *supra* note 10, at 300.

[276] Goldsmith, *supra* note 4, at 675 (quoting the president of the American College of Epidemiology); *cf. Brady Bill Has Medicine's Support*, *Am. Med. News*, May 20, 1991 at 25 ("[U]ncontrolled ownership and use of firearms" is "one of the main causes of intentional and unintentional injury and death."); Calhoun, *supra* note 4, at 17 ("[G]uns are not just an inanimate object, but in fact are a social ill."); Somerville, *supra* note 4, at 9 ("Guns are a virus that must be eradicated.").

[277] See *infra* notes 278-84.

[278] See, e.g., Bureau of Justice Statistics, U.S. Dep't of Justice, *Murder in Families* 5 tbl. 7 (1994) [hereinafter *Murder in Families*]; Bureau of Justice Statistics, U.S. Dep't of Justice, *Murder in Large Urban Counties*, 1988 (1993).

[279] See *Injury Prevention*, *supra* note 4, at 265 (asserting that prior criminal and assaultive behavior of murderers supports the utility of background checks for firearms purchasers); Eugene D. Wheeler & S. Anthony Baron, *Violence in Our Schools, Hospitals and Public Places: A Prevention and Management Guide* 166 (1993) ("A history of violence is the best predictor of [whether persons are likely to murder or commit other] violence."); Centers for Disease Control and Prevention, *Homicides Among 15-19 Year Old Males-United States 1963-1991*, 43 *Morbidity & Mortality Wkly. Rep.* 725, 726-27 (1994) (noting drastically rising homicide among inner city youth and suggesting that "the immediate and specific causes" may include "the recruitment of juveniles into drug markets"); Andrew L. Dannenberg et al., *Intentional and Unintentional Injuries in Women: An Overview*, 4 *Annals Epidemiology* 133, 137 (1994) ("Risk factors for [wife-battering] may include prior episodes of physical abuse"); Dowd et al., *supra* note 10, at 871 (showing one study's finding that "75% of the 26 perpetrators for whom criminal status was known had a history of one or more arrests by the Kansas City police department."); Sheilagh Hodgins, *Mental Disorder, Intellectual Deficiency, and Crime: Evidence From a Birth Cohort*, 49 *Archives Gen. Psychiatry* 476 (1992) (citing numerous studies from the United States, Canada, and Europe which indicate that persons suffering from major mental disorders, persons with sub-par intelligence and substance abusers were each several times more likely to engage in violent crime than ordinary citizens).

[280] An FBI data run of murder arrestees nationally over a four year period in the 1960s found 74.7% to have had prior arrests for violent felony or burglary. In one study, the Bureau of Criminal Statistics found that 76.7% of murder arrestees had criminal histories as did 78% of defendants in murder prosecutions nationally. In another FBI data run of murder arrestees over a one year period, 77.9% had prior criminal records. Federal Bureau of Investigation, *Uniform Crime Rep.* 38 (1971).

The annual Chicago Police Department bulletin *Murder Analysis* shows the following figures for the percentage of murderers who had prior crime records:

1991: 77.15%
1990: 74.63%
1989: 74.22%
1988: 73.59%
1987: 73.81%

Five year average for 1987-1991: 74.68%

[281] Federal Bureau of Investigation, *Uniform Crime Rep.* 43 (1975).

[282] John Dilulio, *The Question of Black Crime*, 117 *Pub. Interest* 3, 16 (1994).

[283] See Kathleen M. Heide, *Weapons Used by Juveniles and Adults to Kill Parents*, 11 *Behav. Sci. & Law* 397, 398 (1993).

[284] Ronald M. Holmes & Stephen T. Holmes, *Murder in America* 8-9 (1994).

[285] *Boy, 5, Is Killed for Refusing to Steal Candy*, *N.Y. Times*, Oct. 15, 1994, at 9. [hereinafter *Refusing to Steal*]; Dowd seems to have had special access to city-level police data including juvenile records because the age of shooting perpetrators averaged 19.5 and 75% had previously been arrested at least once by the local police. Dowd et al., *supra* note 10, at 871.

[286] *Refusing to Steal*, *supra* note 285, at 9.

[287] *Id.*

[288] Raspberry, *supra* note 5, at A23.

[289] *Id.*

[290] Mark L. Rosenberg et al., *Violence as a Public Health Problem: A New Role for CDC and a New Alliance with Educators*, 62 *Educational Horizons* 124, 1226-27 (1984) (emphasis added).

[291] *Id.* at 124.

[292] Mark L. Rosenberg et al., *Interpersonal Violence: Homicide and Spouse Abuse*, in *Public Health and Preventive Medicine* 1399-1426 (John M. Last ed., 12th ed. 1986); *see also* Mark L. Rosenberg et al., *Violence: Homicide, Assault, and Suicide*, in *Closing the Gap* 164-78 (Robert w. Amler & H. Bruce Dull eds., 1987)

[293] Jeremiah A Barondess, *Correspondence*, 272 *JAMA* 1409 (1994) (emphasis added).

[294] Daniel W. Webster, *The Unconvincing Case for School-Based Conflict Resolution Programs for Adolescents*, 12 *Health Aff.* 126,132 (1994).

[295] *Id.*

[296] *Id.* at 133.

[297] *Id.* at 138.

[298] *Id.* at 137.

[299] Kahn, *supra* note 10, at 567.

[300] Barondess, *supra* note 291, at 1409.

[301] *Id.*; *see supra* notes 278-84 and accompanying text.

[302] Barondess, *supra* note 291, at 1409.

[303] See Paul J. Goldstein, *Homicide Related to Drug Traffic*, 62 Bull. N.Y. Acad. Med. 509 (1986); Tardiff et al., *supra* note 10, at 46; Franklin E. Zimring & James Zuehl, *Victim Injury and Death in Urban Robbery: A Chicago Study*, 15 J. Legal. Stud. 1, 9-12 (1986).

[304] See, e.g., Michael D. McGonigal et al., *Urban Firearm Deaths: A Five-Year Perspective*, 35 J. Trauma 532, 536-37 (1993). "Eighty-four percent of victims in 1990 had antemortem drug use or criminal history." *Id.* at 532. H. Range Hutson et al., *Adolescents and Children Injured or Killed in Drive-By Shootings in Los Angeles*, 330 New Eng. J. Med. 324, 325 (1994) (stating that 71% of children and adolescents injured in drive-by shootings "were documented members of violent street gangs").

Medical studies suggest that a minimum of 2,000 murders annually are drug-related, including one-third to one-half or more of the murders in some major cities. Injury Prevention, *supra* note 4, at 206; Daniel W. Webster et al., *Epidemiologic Changes in Gunshot Wounds in Washington D.C., 1983-1990*, 127 Archives Surgery 694, 698 (1992). Studies in three major trauma care centers reported finding urban knife and bullet wounds to be "a chronic recurrent disease peculiar to unemployed, uninsured law breakers." R. Stephen Smith et al., *Recidivism in an Urban Trauma Center*, 127 Archives Surgery 668, 670 (1992) (describing the conclusions in Deborah W. Sims et al., *Urban Trauma: A Chronic, Recurrent Disease*, 29 J. Trauma 940 (1989)); Thomas B. Morrissey et al., *The Incidence of Recurrent Penetrating Wound Trauma in an Urban Trauma Center*, 31 J. Trauma 1536 (1991).

[305] Murder in Families, *supra* note 278.

[306] Rosenberg et al., *supra* note 292, at 126-27.

[307] Holmes & Holmes, *supra* note 284, at 28.

[308] Murray A. Straus, *Domestic Violence and Homicide Antecedents*, 62 Bull. N.Y. Acad. Med. 446, 457 (1986).

[309] *Id.* at 454.

[310] See Kleck & Bordua, *supra* note 118.

[311] Arthur L. Kellermann et al., *Gun Ownership as a Risk Factor for Homicide in the Home*, 329 New Eng. J. Med. 1084 (1993) [hereinafter *NEJM-1993*].

[312] Daniel D. Polsby, *The False Promise of Gun Control*, Atlantic Monthly, Mar. 1994, at 59, 60 (stating that "within two months [of its publication, *NEJM-1993*] received almost 100 mentions in publications and broadcast transcripts indexed in the Nexis data base," including "prominent coverage" in the *New York Times*, *Los Angeles Times*, *Washington Post*, *Boston Globe*, and *Chicago Tribune*).

[313] Since its appearance it has been cited in at least the following articles: Adler et al., *supra* note 4, at 1283; Dannenberg et al., *supra* note 277, at 137; Mercy et al., *supra* note 12, at 28; Jeffrey J. Sacks et al., *Correspondence*, 272 JAMA 847, 848 (1994); Yvonne D. Senturia et al., *Reply*, 94 Pediatrics 777, 778 (1994); Susan B. Sorenson & Audrey F. Saftlas, *Violence and Women's Health: The Role of Epidemiology*, 4 Annals Epidemiology 140, 145 (1994); Webster & Wilson, *supra* note 5, at 622.

[314] *See generally* William G. Cochran & Gertrude M. Cox, *Experimental Designs* (2d ed. 1992) (providing background information on the field).

[315] 1 Klaus Hinkelmann & Oscar Kempthorne, *Design and Analysis of Experiments: Introduction to Experimental Design* 361 (1994) (discussing intentional confounding).

[316] *NEJM-1993*, *supra* note 311, at 1084.

[317] *Id.* at 1084-85.

[318] *Id.* at 1087-90.

[319] *Id.* at 1090.

[320] *Id.* at 1084. The three counties included Shelby County, Tennessee, containing Memphis; King County, Washington, containing Seattle; and Cuyahoga County, Ohio, containing Cleveland.

[321] *Id.* at 1085.

[322] *Id.*

[323] *Id.*

[324] *Id.* at 1086 tbl. 1. Other data in Table 1, taken in conjunction with the data in Table 3, and other data discussed in the text, shows that in a substantial number of the homicides by gun, the gun was brought in from outside, presumably by the perpetrator. *NEJM-1993*'s authors refuse to disclose their study data to scholars who want to evaluate their findings. Without access to the data, it is not possible to determine the actual fraction of guns which were brought into the household and used in homicide.

[325] *See, e.g.*, Cook, *supra* note 87, at n.4 ("The Metropolitan [District of Columbia] Police Department classified most homicides by motive: the fraction classified as drug-related increased from 21 percent to 80 percent between 1985 and 1988."); Ann D. Helms, *In Charlotte, Risk of Being Shot Seems Tied to Lifestyle, Study Says*, *Charlotte Observer*, Nov. 25, 1994, at 1A (discussing all gunshot wounds reported to the Charlotte, N.C. Police Department from 1992 to 1993). Of the 632 known gunshot victims, 71% of the 545 adult victims had known criminal records. *Id.* at 14A. The juvenile victims could not be analyzed for criminal records because of the unavailability of juvenile criminal records.

[326] *NEJM-1993, supra* note 311, at 1084-85.

[327] *Id.* at 1086.

[328] *Id.* at 1086-88.

[329] *Id.* at 1088.

[330] *Id.* at 1086-88.

[331] *See generally* Jan M. Chaiken & Marcia R. Chaiken, *Varieties of Criminal Behavior* (1982). Based on a survey of 2,190 felons in California, Michigan, and Texas prisons of the crimes they had committed in the two years prior to their incarceration, Chaiken and Chaiken determined that a small minority were responsible for most crimes, and particularly the serious ones. The average "violent predator" (their term for these career criminals) reported committing eight assaults, 63 robberies, 172 burglaries, 1,252 drug deals and 214 miscellaneous other thefts in a one year period. *Id.*; Jan M. Chaiken & Marcia R. Chaiken, *Offender Types and Public Policy*, 30 *Delinquency* 195 (1984); *cf.* Paul E. Tracy et al., *Delinquency Careers in Two Birth Cohorts* (1990) (showing that between their tenth and eighteenth years, of 13,160 Philadelphia boys born in 1958, 67.2% were never arrested, 25.3% were arrested four or fewer times, 7.5% were arrested five or more times accounting for 60.6% of the arrests in the total birth cohort); Marvin E. Wolfgang, *Delinquency in a Birth Cohort* (1972) (showing that between their tenth and eighteenth years, of 9,945 Philadelphia boys born in 1945, 65.1% had no offenses, 16.2% had one offense, 12.4% had a few offenses, and 6.3% committed 51.9% of the offenses in the cohort).

[332] By way of analogy, suppose a study of people who had had one heart attack, and then later died of another, showed that more of them had taken up strenuous exercise after their first heart attack than had a control group of heart attack victims who had not taken up strenuous exercise after the first attack. That result would suggest that strenuous exercise was a risk factor for people who are at high risk of having a heart attack. But it would not prove anything about the level of risk that strenuous exercise imposes on low, or ordinary, risk people who have never had a heart attack.

[333] *NEJM-1993, supra* note 311, at 1084-87.

[334] *Id.* at 1088 (emphasis added). The effect of excluding cases of homicide of children under 13 years of age is not clear, but the authors note that this was done "at the request of the medical examiners." *Id.* at 1084.

[335] *Id.* at 1085.

[336] *Id.*

[337] *Id.*

[338] *Id.*

[339] *Id.* at 1086.

[340] *Id.* at 1089.

[341] *Id.* at 1085, 1087.

[342] Letter from Arthur L. Kellermann to Henry Schaffer (Oct. 12, 1994). This research was supported by grants from the Centers for Disease Control and Prevention of the National Institutes of Health. The CDC does not require that data resulting from their grants be made available to the public. This is in contrast to the policy of the National Institute of Justice, which requires that comparable datasets be made publicly available.

[343] A. Bradford Hill, *Statistical Methods in Clinical and Preventive Medicine* (1962) *quoted in* J. B. Chassan, *Research Design in Clinical Psychology and Psychiatry* 100 (2d ed. 1979).

[344] Hinkelman & Kempthorne, *supra* note 313, at 22.

[345] *NEJM-1993*, *supra* note 311, at 1085.

[346] *Id.* at 1088. Table 3 includes excessive alcohol use, illicit drug use, and presence or absence of an arrest record.

[347] *See generally* Christopher S. Dunn, *Crime Area Research*, in *Crime: A Spatial Perspective* 5 (Daniel E. Georges-Abeyie & Keith D. Harries eds., 1980).

[348] *See supra* note 330 and accompanying text.

[349] *NEJM-1993*, *supra* note 311, at 1087-88.

[350] While the problem of unwillingness to admit gun ownership is not entirely absent as to the homicide case households, it is much less acute. *NEJM-1993*'s authors had police reports as to these households. *Id.* at 1084. In cases where the murder weapon was left near the body the police report would presumably so indicate. In cases where it was not, the report would presumably indicate whether the home was searched for guns, whether other occupants, if any, were asked about gun ownership, and whether registration records were consulted to see if a gun was registered to a person living in the household. The family of the deceased in the case-subject home also had time between the homicide and the interview to go through the effects of the deceased and to discover a gun, if one was owned. None of this, however, eliminates the possibility that a gun was kept in the homicide household. That possibility is far better minimized as to the homicide case households than as to the control households. There, the accuracy of *NEJM-1993*'s gun ownership finding is entirely dependent on the truthfulness of the interviewees.

[351] *Id.* at 1089.

[352] *Id.*

[353] Kleck, Point Blank, *supra* note 2, at 455. We must remark that the quantitative difference between the paragraph they devote to this issue, and the appendix that Kleck devotes to it, is emblematic of the qualitative difference in scholarship between Kleck and the entire health advocacy literature.

[354] *NEJM-1993*, *supra* note 311, at 1089 (emphasis added) (citing Kellermann et al., *Validating Survey Responses To Questions About Gun Ownership Among Owners of Registered Handguns*, 131 *Am. J. Epidemiology* 1080-84 (1990) [hereinafter Kellerman et al., *Validating Survey*]).

[355] Kellerman et al., *Validating Survey*, *supra* note 354, at 1080.

[356] *Id.*

[357] *Id.* The correct degree of openness should be based not just on these final 35, but on the larger original sample. Only 31 of the 55 homes contacted (61.84%) admitted to gun ownership and only 31 of the total of 75 homes (45.3%) selected were contacted and then willing to admit gun ownership. The failure to find or contact 22 of the 75 registered owners (29.3%) may relate to their unwillingness to be connected with ownership. The owners who could not be reached (24%) might also have the same root cause. With only 45.3% of the registered handgun owners finally admitting to gun ownership, little substantiation is provided for the assumption that all guns owned by the control group would be admitted. *Id.*

[358] *Id.* at 1083. For example, the state of Tennessee and the city of Cleveland have various handgun registration or transfer regulations. Owners who violate these regulations have committed an offense which varies in seriousness depending on place of residence. The state of Washington also has a permit system for dealer transfer. Additionally, some handgun owners may have heard of the extremely severe limitations on handgun possession in many large cities, such as Washington, D.C., New York, and Chicago. All of these regulations would tend to make the owner reluctant to admit to the presence of an unregistered handgun. *NEJM-1993* does not mention how many of the guns in either the homicide or the control groups were owned legally.

[359] *Id.*

[360] *NEJM-1993*, *supra* note 311, at 1089.

[361] *Id.* at 1084.

[362] Thomas B. Newman et al., *Designing a New Study: II. Cross-sectional and Case-control Studies*, in *Designing Clinical Research* 78-86 (Stephen B. Hulley & Steven R. Cummings eds., 1988).

[363] *Id.* at 80. "Case control studies are a cheap and practical way to investigate risk factors for rare diseases, or to generate hypotheses about new diseases or unusual outbreaks. These are great

strengths, but they are achieved at a considerable cost. . . . [T]he biggest weakness of case-control studies is their *increased susceptibility to bias*." *Id.*

[364] *NEJM-1993, supra* note 311, at 1084.

[365] *Id.*

[366] *Id.* at 1090.

[367] *Id.* at 1089 "People who keep guns in their homes *appear* to be at greater risk of homicide in the home than people who do not." *Id.* (emphasis added).

[368] James D. Wright, *Bad Guys, Bad Guns*, Nat'l Rev., March 6, 1995, at 51.