

RESEARCH PAPER

From strange bedfellows to natural allies: the shifting allegiance of fire service organisations in the push for federal fire-safe cigarette legislation

E M Barbeau, G Kelder, S Ahmed, V Mantuefel, E D Balbach

Tobacco Control 2005;14:338–345. doi: 10.1136/tc.2004.010637

See end of article for authors' affiliations

Correspondence to: Professor Elizabeth M Barbeau, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115, USA; elizabeth_barbeau@dfci.harvard.edu

Received 19 November 2004
Accepted 13 April 2005

Background: Cigarettes are the leading cause of fatal fires in the USA and are associated with one in four fire deaths. Although the technology needed to make fire-safe cigarettes has been available for many years, progress has been slow on legislative and regulatory fronts to require the tobacco industry to manufacture fire-safe cigarettes.

Method and results: We conducted a case study, drawing on data from tobacco industry documents, archives, and key informant interviews to investigate tobacco industry strategies for thwarting fire-safe cigarette legislation in the US Congress. We apply a theoretical framework that posits that policymaking is the product of three sets of forces: interests, institutions, and ideas, to examine tobacco industry behaviour, with a special focus on their and others' attempts to court fire service organisations, including firefighters' unions as allies. We discuss the implications of our findings for future policy efforts related to fire-safe cigarettes and other tobacco control issues.

Conclusions: Tobacco control advocates ought to: continue efforts to align key interest groups, including the firefighters unions; contest tobacco industry "diversionary" science tactics; and pursue a state based legislative strategy for fire-safe cigarettes, building towards national legislation.

Regulations requiring fire-safe cigarettes are an important element of tobacco control policy. Cigarettes are the leading cause of fatal fires in the USA, resulting in one in four fire deaths.¹ Although the technology needed to make fire-safe cigarettes has been available for many years, the first fire-safe cigarette legislation in the USA—in New York state—was not implemented until 2004.² Canada also passed fire-safe cigarette legislation in 2004, making it the first country to do so.³ To meet legal requirements in these venues, the tobacco companies are producing fire-safe cigarettes by applying rings of ultra-thin paper which inhibit burning on top of traditional cigarette paper.⁴ The tobacco companies, however, have no immediate plans to use this technology elsewhere, except for Philip Morris' Merit brand, which has used the banded paper since 2000.²

Tobacco control advocates seeking additional progress on fire-safe cigarette legislation and regulation must acquire a more sophisticated understanding of the tobacco industry's strategies to thwart most fire-safe cigarette policy action to date. Based on this understanding, tobacco control advocates can work to undo the tobacco industry's actions and to bring about additional victories on fire-safe cigarette legislation and regulation. This case study examines how the tobacco industry—operating chiefly through its trade association, the Tobacco Institute—employed an array of politically savvy strategies to halt progress on fire-safe cigarettes in the US Congress.

In conducting our case study, we applied a theoretical framework that posits that policymaking represents the interaction of three sets of forces: interests, institutions, and ideas.⁵ *Interests* refer to the constellation of economic, social, political, or other groupings of people (potentially) attentive to an issue, whose preferences are likely to be taken into account by policymakers. *Ideas* include citizens', stakeholders', and policymakers' understandings of a problem and its possible solutions, including notions about legitimate political processes for addressing the problem. *Institutions* are

the enduring rules, procedures, and organisations under and through which the relevant policymakers and other parties interact and conduct their business.⁵

The industry pursued a "three I's" strategy that included: (1) *interests*—attempting to form alliances with unionised firefighters and other fire service organisations whom they perceived as credible and thus potentially powerful public voices on fire issues, and then using the good will established with these organisations to secure delays in fire-safe cigarette regulation; (2) *ideas*—deflecting attention from fire-safe cigarettes by focusing on fire prevention education and funding issues, and promulgating "diversionary science" to justify this focus; and (3) *institutions*—using their knowledge of congressional and bureaucratic processes to derail legislation and regulations, in part, by infiltrating an interagency committee established in 1984 to make recommendations to Congress, advocating for fire-safe cigarette legislation favourable to the tobacco industry in 1989, and, in 1993, pressuring two of the three commissioners on the Consumer Product Safety Commission (CPSC) into declining to set an ignition standard for fire-safe cigarettes.

As reported by Gunja *et al*⁶ the Tobacco Institute's multi-year and well funded effort to align fire service organisations to pro-industry positions proved a remarkable success up until about 1990. What our paper adds to this previous report is insight into a major policy shift around that time among fire service groups, including organised labour, away from supporting the tobacco industry and toward support for strong fire-safe cigarette bills being sponsored by Representative John Joseph Moakley (D-MA) and eventually other policymakers. Although the US Congress has yet to pass fire-safe cigarette legislation,

Abbreviations: CPSC, Consumer Product Safety Commission; NFIRS, National Fire Incident Reporting System; NFPA, National Fire Protection Association; OSHA, Occupational Safety and Health Administration

Moakley can be credited with having won the support of a critical set of political allies who had previously supported the tobacco industry.

Our goal in this paper is twofold. First, we seek to use the “three I’s” framework to explicate the strategies employed by the tobacco industry and Moakley, especially their respective attempts to court fire service organisations—including the firefighters’ labour union—as allies. Second, we examine the implications of this case for tobacco control policymaking.

METHODS

We used a case study design⁶ to understand relationships between the tobacco industry and fire service organisations, including labour unions. We triangulated our collection of data by using multiple data sources: tobacco industry documents, congressional testimony and archives, newspaper articles and websites.

We searched tobacco industry documents through the University of California, San Francisco Legacy Tobacco Documents on-line library using widely accepted methods.^{7, 8} We conducted initial searches using the terms “fire-safe”, “firefighters”, “IAFF”, and “fire service”. These searches turned up hundreds of documents, which in turn led to a second tier of searches to follow document trails of key memos and individuals. We read through this preliminary dataset, categorised documents as major, minor, or trivial in relation to our research question,⁷ and then created a final dataset of major documents (n = 46). Three of the authors then independently read through the final dataset and jointly developed a narrative describing the relationship of the tobacco industry to fire fighter organisations.

We searched the John Joseph Moakley Archives at Suffolk University Law School in Boston, Massachusetts for relevant materials, turning up hundreds of documents. We read through this preliminary dataset, organised chronologically, categorised documents as major, minor, or trivial in relation to our research question,⁷ and created a final dataset of major documents (n = 25). Three of the authors read through the final dataset and jointly developed a narrative describing Moakley’s efforts to gain allies in support of fire-safe cigarettes.

Starting with a narrative description of findings based on the tobacco industry documents, we wove in findings from the other data sources. These other sources provided additional context in which to understand the industry’s documents and the actions of the major organisations and individuals mentioned in the case. Collecting and synthesising data from multiple sources also enhances the validity of qualitative research findings.⁹

RESULTS

“A runaway freight train”

In 1947, US President Harry S Truman pulled together more than 2000 experts to identify ways to prevent unwanted fire. At that time, the National Fire Protection Association (NFPA) called on cigarette manufacturers to take some responsibility for the problem.¹⁰ The first bill mandating fire-safe cigarettes, however, was not introduced until 1974, when Senator Phil Hart of Michigan did so. This legislation passed in the Senate but failed in the House of Representatives.¹¹

By the early 1980s, politicians and journalists had become interested in the development of fire-safe cigarettes, tobacco control advocates had made it a high priority, and the CPSC had become active on the issue.¹² Tobacco industry attempts to deflect attention from the issue proved increasingly ineffective, and in 1982, Sam Chilcote, president of the Tobacco Institute, described the issue as a “runaway freight train”.¹² Chilcote concluded that the issue would probably not go away by itself, commenting that, “A strong, visible, positive tobacco industry effort...[was] needed to reverse the

trend”.¹² In 1983, he suggested that the institute’s efforts be used to position it as “part of the solution” to cigarette-caused fires, a solution that need not include the design and manufacture of fire-safe cigarettes.¹³

Interests: the Tobacco Institute rationale for engaging fire fighting organisations

Those who fight fires—including chiefs, unionised firefighters, or volunteer firefighters—were likely to be key players in the legislative debate over fire-safe cigarettes. Fires not only kill building occupants but also kill those who fight fires and attempt to rescue occupants. Thus, the tobacco industry viewed the firefighters as natural opponents to the tobacco industry’s position on fire-safe cigarettes.

Beginning in the early 1980s, the industry sought to overcome this natural opposition and to make alliances with these “unnatural” allies by reframing or enlarging the issue to be about how to reduce the number of fire related deaths. In so doing, the industry could support several activities that firefighters also supported, such as fire prevention education, smoke detectors, fire retardant furniture, and improved firefighter training and recruitment.^{12, 14} These goals helped the industry form the alliance it needed, particularly because the industry was willing to put substantial money into these other efforts. Industry money would not be evenly distributed, however, as Chilcote proposed focusing the institute’s efforts “in [geographical] areas considering self-extinguishing legislation”.¹²

The tobacco industry thought this alliance would be possible for several reasons. With the phasing out of the US Fire Safety Administration, the firefighters had lost their “national voice”, a voice the industry believed it could restore.¹⁵ The tobacco industry could provide firefighters with funding for fire safety education at a time when public funds were growing scarce.¹⁵ And, in the industry’s view, firefighters were not “anti-smokers per se” and thus potentially would be amenable to adopting pro-industry positions.¹⁵

In 1982 the Tobacco Institute devised a master plan designed “to offset the notion that [the tobacco industry] places profitability above public welfare” and “to be viewed as constructively addressing tobacco-related issues of public concern”.¹⁵ This detailed plan included: (1) immediate projects on fire prevention education, encouragement of volunteerism in the fire services, promotion of smoke detector use and maintenance, and merchandising; (2) long range programming that included building “good will and recognition” among firefighters and decreasing firefighter support of “impractical or ineffective remedies for the fire problem”, such as the promotion of fire-safe cigarettes; and (3) hiring of industry friendly consultants.¹⁴

The Tobacco Institute then systematically implemented their plan. In 1983, for example, they instituted a Smoke Detector Fire Safety Program.¹⁶ The purposes of this programme were “to develop strong, positive working relationships with key firefighters” and “to provide evidence that the industry is working towards a reduction in the incidence and severity of accidental fires”.¹⁶ The industry also created educational programmes for school students on preventing accidental fires,¹⁷ resource catalogues, smoke detector programmes for senior citizens, artwork for placing ads on fire safety tips in local newspapers, and public service radio announcement scripts.¹⁸ To build alliances with the volunteer fire fighting organisations, the industry worked with the National Council of Volunteer Firefighters Executive Council to develop a recruiting/fundraising assistance kit¹³ aimed at increasing the number of volunteers.

By 1985, the Tobacco Institute could report that they “were working with more than 3,100 fire service groups in the U.S. in all 50 states”.¹⁹ The first formal budgets for this issue

appear in a 1985 document from the Tobacco Institute's public relations division (table 1).²⁰ Funding for earlier initiatives may have been subsumed under other programme budgets, though we found no such evidence in the documents. By 1988, according to the Tobacco Institute, its Fire Safety Education Program had become the chief source of private sector funding for US fire prevention education.²¹

Ideas: funding and promulgating diversionary science

As an illustration of the industry's attempts to use *ideas* to shape debate, we describe their hiring of a consultant, Philip Schaenman, who would produce "scientific" findings to support industry positions on fire-safe cigarettes. Schaenman was president of TriData Corporation in Rosslyn, Virginia,¹⁸ former associate administrator of the US Fire Administration, author of numerous studies on fire prevention, and designer of the National Fire Incident Reporting System (NFIRS).²² Jim Goold of Covington and Burling described Schaenman's relationship to both the tobacco industry and the firefighting community in this way:

While the Tobacco Institute was in existence, Phil did a series of programs on fire safety issues that were well received and widely commended... Phil continues to be one of the leaders in the fire safety field through projects for federal, state, and local agencies. The fact that Phil has a relationship with the [tobacco] industry is well known and he is widely regarded as an authoritative source of fire data...²³

Schaenman's work for the industry "under a variety of arrangements for many years" involved "monitoring fire statistics" and "attend[ing] fire safety conferences and other

gatherings" that offered him the opportunity to interact with "federal, state, and local fire officials."²³

One of Schaenman's most important early activities was a 1982 report, "International concepts in fire protection: ideas from Europe that could improve U.S. fire safety".²⁴⁻²⁵ Schaenman claimed that the reason the USA had a higher fire death rate than most of the rest of the industrialised world was not because of cigarette design, but rather that the USA tended to absolve individuals from taking responsibility for their actions while "other countries approached individual responsibility much more seriously, took better advantage of existing fire prevention technologies, and generally invested more in fire prevention".²⁶ The Tobacco Institute developed a promotional plan for this report that included publication of a version of the report in the May 1983 issue of *Fire Chief* ("America's burning, why isn't Europe?").²⁷ A potentially serious flaw in Schaenman's work is that it did not focus on the comparative ignition propensity of foreign and domestic cigarettes. Some tobacco control advocates have contended that, in contrast to US cigarettes, many foreign brands of cigarettes are made to self-extinguish.²⁸

In 1994, Schaenman testified before Congress that his research showed that there had been "a dramatic and sustained decline in the number of fires and fire deaths attributed to smoking materials" and that this decline was "not due solely or even primarily to the decline in smoking rates".²⁶ He contended that "the remarkable decline in smoking-materials fires" was due to a number of factors, including a dramatic increase in the number of smoke detectors in homes, the installation of sprinklers in commercial and multi-family dwellings, mattress flammability standards developed by the CPSC, and improvements in the fire resistance of upholstered furniture.²⁶

Table 1 Timeline of Tobacco Institute funding and major events related to fire-safe cigarettes

Year	Budget* (\$000)	Major events
1979		Congressmen Moakley and Cranston introduce bill requiring tobacco companies to comply with Consumer Product Safety Commission (CPSC) standard that cigarettes stop burning within 5 minutes if not smoked. Major fire fighting organisations, including the firefighters' union (IAFF), endorse bill
1982		Tobacco Institute (TI) president describes the issue of fire-safe cigarettes as a "runaway freight train", recommending industry action to reverse trend. TI devises master plan to court firefighter organisations and to produce "diversionary" science
1984		An amended Moakley-Cranston bill, supported by the IAFF and most other fire service groups, passes. Law calls for formation of an Interagency Committee
1985	477	Interagency Committee comprised of 15 members pulled from government agencies, the cigarette industry, the furniture industry, public health organisations, the firefighters' union, and fire safety organisations
1986	495	
1987	628	The Interagency Committee finds that it is technically, economically, and commercially feasible to develop a cigarette that is less likely to cause fires and develops methods for testing such cigarettes. Nonetheless, the committee recommends more research
1988	835	Competing fire-safe cigarette bills introduced, one by Moakley and the other by Bliley ("the Congressman from Philip Morris"). Over the next year, the IAFF and other fire service groups support various versions of one or both bills
1989	945	Several fire service organisations switched their endorsement to the Moakley bill or gave their exclusive endorsement to the Moakley bill
1990	865	Institute progress report expresses concern that the IAFF had switched from supporting Bliley bill to endorsing Moakley's bill, and vows to shore up existing fire service support. IAFF testifies in Congress in support of the Moakley Bill. Moakley compromises, allowing forestalling of regulations mandating fire-safe cigarettes, but ordering the CPSC to develop a standard test to determine cigarette ignition propensity. With support from the IAFF and most other fire service organisations, this bill was enacted as the Fire-Safe Cigarette Act of 1990 (Public Law No: 101-352)
1991	835	Moakley reintroduces fire-safe cigarette bills each year
1992	652	
1993	700	The CPSC reports to Congress that a fire safety test method had been developed, but informs Senate that it is beyond their "jurisdiction and capability" to develop a performance standard. CPSC chair admits to Moakley that two of the three CPSC commissioners were swayed by special interest groups
1994-1998	†	Republicans gain control of Congress; no progress made on fire-safe cigarettes. TI disbands in 1998 under terms of Master Settlement Agreement
1999		Moakley files bill to establish a cigarette safety standard and direct the CPSC to implement this standard within 18 months of the date of enactment
2001		Moakley dies
2003		Congressmen Markey and King file Moakley Memorial Bill to establish federal cigarette fire safety standards; bill is pending
2004		Major fire service organisations in the USA, including the IAFF, national volunteer fire council, fire chiefs, state fire marshals, among others, endorse fire-safe cigarette bill. Senator Durbin introduces senate version of bill

*Amounts represent dollars budgeted by the Tobacco Institute's Public Affairs Division for addressing the fire safety issue.^{20 83-94}

†No further documents indicating public affairs division support for fire safety; small amounts of funding (in tens of thousands of dollars) are dedicated to fire safety related issues under budgets for general coalitions or general administration each year.

The important nature of Schaeffer's involvement with the tobacco industry has continued to the present. In 1999, Gould stated that "the recent activity in New York" on fire-safe cigarettes "highlighted the importance of this issue and the need to maintain a relationship with Phil".²³ Schaeffer was retained by the industry through the Washington offices of Philip Morris, Brown & Williamson, and RJ Reynolds and through Covington & Burling for Lorillard.²³

Institutions: derailing legislative and regulatory efforts for fire-safe cigarettes

The tobacco industry generally prefers to fight policy battles at the national level, because this venue has typically proved favourable to the industry.²⁹ But at the federal level on the fire-safe cigarette issue, the industry was confronted by Congressman Moakley (D-MA), a veteran representative with a strong interest in passing the kind of tough fire-safe cigarette legislation that the tobacco industry wanted to defeat. To provide the reader with context for Moakley's actions, we briefly note here the origins of his advocacy on the fire-safe cigarette issue, which pre-date the industry's involvement in this issue. Moakley's interest in this issue began in 1979 when a family from his district—including both parents and five children—died in a fire caused by a cigarette.³⁰ In that same year, he and US Senator Alan Cranston (D-CA) introduced a bill requiring manufacturers of cigarettes and little cigars to comply with CPSC standards to ensure that such products would stop burning within five minutes if not being actively smoked.³¹

The Moakley-Cranston bill was endorsed by "every major fire service group" in the country, including the firefighters union (IAFF), the fire chiefs' association, and the NFPA.³² In the years that followed, between 1979 and 1984, the Moakley bill underwent several revisions.³³ Moakley appears to have adopted a strategy of compromising and taking incremental steps toward mandating fire-safe cigarettes.^{31 33-36} The first step involved shifting from *requiring* fire-safe cigarettes to *studying the feasibility* of fire-safe cigarettes. In 1984, an amended Moakley-Cranston bill (The Federal Cigarette Safety Act of 1984), supported by the IAFF and most other fire service groups, passed.^{37 38} This law called for formation of a Technical Study Group to determine the technical and economic feasibility of making a fire-safe cigarette and for the formation of an Interagency Committee on Cigarette and Little Cigar Fire Safety.³⁹

The Interagency Committee would be chaired by the head of the CPSC and was comprised of 15 members pulled from government agencies, the furniture industry, public health organisations, firefighters' union, fire safety organisations, and the cigarette industry.³⁶ The tobacco industry was fully engaged in this issue at this time, had begun to dedicate significant financial resources to building alliances with fire service organisations (table 1), and had four seats on the Interagency Committee. The Tobacco Institute's Chilcote summarised the industry's perspective on these events:

The value of coalitions was crystal clear in 1984 on the self-extinguishing cigarette legislation.... We are not out of the woods on the self-extinguishing issue...the federal bill which passed last summer [has] removed much of the pressure in Washington, yet the federal study... authorized by the legislation is quite slowly getting underway....We are monitoring the Federal Fire Safe Cigarette Study as closely as possible. The industry has already selected its four representatives on the panel, and we are attempting to place other friendly members on the panel. The Chairman of the Consumer Product Safety Commission is to direct the entire study...He appears to be

someone we can work with....our fire prevention program is in place from coast to coast. We continue to ensure that key legislators are aware of our positive working relationships with fire fighters.⁴⁰

In 1987, the Interagency Committee completed its study.⁴¹ They found that it was technically, economically, and commercially feasible to develop a cigarette that is less likely to cause fires, and developed methods for testing such cigarettes.^{41 42} Despite these findings, the committee recommended that more research was needed into the feasibility of manufacturing fire-safe cigarettes.⁴¹ On the heels of this report, two bills were introduced in Congress, one (HR 293) by Representative Moakley and another (HR 673) by Representative Thomas Bliley (R-VA), known in the tobacco control community as "the Congressman from Philip Morris",⁴³ and his colleague Frederick Boucher (D-VA).⁴⁴ While both bills claimed to seek to implement the findings of the Interagency Study, the Boucher-Bliley Bill called for additional study without setting any standards.^{44 45} The heart of the Moakley Bill, by contrast, was directing the CPSC to establish standards, to complete any necessary research, and to mandate that the tobacco companies produce fire-safe cigarettes.⁴⁶ Over the next few years, the IAFF and other fire service groups at different points in time supported various versions of one or both bills.⁴⁷⁻⁵⁴

In early 1989, alliances between the tobacco industry and fire service organisations began to break down, as Congressman Moakley waged a concentrated campaign to secure fire service organisations' exclusive endorsement of his bill. Moakley asserted that it was technically feasible to produce a fire-safe cigarette,⁵⁵ and his staff sent several requests to all the major fire service organisations seeking to obtain new and/or exclusive endorsements of his bill.⁵⁶ On 8 February 1989, Congressmen Boucher and Bliley attempted to counter Moakley's efforts by sending out a "Dear Colleague" letter that stated: "...other pending legislation [that is, the Moakley Bill] would ignore the recommendations of this blue-ribbon panel [the 1984-87 Technical Study Group]..."⁵⁷ Moakley countered, on 13 February 1989, with a "Dear Colleague" letter of his own that focused on the technical feasibility of producing a fire-safe cigarette and disparaged the Boucher-Bliley Bill as not really implementing the 1987 findings of the Technical Study Group.⁵⁸ Moakley's office also produced a fact sheet that argued that his bill would carry out the recommendations of the Technical Study Group, while the Boucher-Bliley would not really do so.

A key turning point in this debate was an April 1989 meeting of the Joint Council of Fire Service Organizations, during which the merits of the Moakley bill versus the Boucher-Bliley bill were debated and to which Moakley sent a member of his staff.⁵⁹ After this meeting, several fire service organisations switched their endorsement to the Moakley bill or gave their exclusive endorsement to the Moakley bill, including the International Association of Fire Chiefs⁶⁰ and the IAFF.⁶¹ Over the following month, Congressmen Boucher and Bliley⁶² and Moakley sent out competing and conflicting "Dear Colleague" letters in which they each claimed that they had gained support from the IAFF for their bills.⁶³ Moakley touted the IAFF's endorsement of his bill in remarks made in the Congressional Record on 25 May 1989,⁶⁴ and in a 5 June 1989 "Dear Colleague" letter.⁵⁸

The tobacco industry was growing concerned that the IAFF was favouring the Moakley bill over the industry friendly Boucher-Bliley bill, but a Tobacco Institute progress report noted that the union had not asked to be removed from the list of supporters for the Boucher Bill.⁶⁵ This institute report further notes that the industry would respond to Moakley's

stepped up efforts to secure fire service support by shifting its focus away from gaining new endorsements to strengthening already existing fire service support.⁶⁵ In 1989 and 1990, the Tobacco Institute budgeted its largest amounts ever to the issue—\$865 000 and \$945 000 (table 1). In 1990, however, the IAFF testified in support of the Moakley Bill, arguing that “no further scientific...deliberation is needed”.⁶⁶

In June of 1990, Moakley made a compromise on HR 293 that would forestall regulations mandating fire-safe cigarettes, but that would order the CPSC to develop a standard test to determine cigarette ignition propensity and to perform the research necessary to develop a performance standard for fire-safe cigarettes.⁶⁷ With support from the IAFF and most other fire service organisations, this bill was enacted as the Fire-Safe Cigarette Act of 1990 (Public Law No: 101-352).⁶⁸

In 1993, the CPSC reported to Congress that a fire safety test method had been developed, but the CPSC chair informed Senate President Al Gore that it was beyond the “jurisdiction and capability” of her agency to develop a performance standard for fire-safe cigarettes, and asked that the US Congress appoint a more appropriate agency to work with the tobacco industry to achieve this objective, provided Congress wanted the performance standard.⁶⁹ In a subsequent letter to Congressman Moakley, the CPSC chair admitted that two of the three CPSC commissioners (holdovers from the Reagan administration) were swayed by special interest groups who asked the CPSC to intercede on their behalf.⁷⁰ Moakley’s efforts to establish a standard through the CPSC were again thwarted by the tobacco industry.

Although Moakley reintroduced fire-safe cigarette bills every year, by 1994, the issue lost momentum as Republicans regained control of Congress. The Tobacco Institute’s funding on this issue also dropped off precipitously in 1994. In 1999, Moakley filed HR 1130, the Fire Safe Cigarette Act of 1999, requiring the establishment of a cigarette safety standard and directing the CPSC to implement this standard within 18 months of the date of enactment.⁷¹ Moakley died in May 2001, but in 2003, his Massachusetts colleague US Representative Edward Markey (D-MA), along with Representative Peter King (R-NY), filed the Moakley Memorial Bill to establish federal cigarette fire safety standards (HR 4155); the bill is pending.⁷² As of June 2004, major fire service organisations in the USA, including the IAFF, national volunteer fire council, fire chiefs, state fire marshals, among others, had endorsed the bill.⁷³ Senator Durbin (D-IL) introduced a Senate version in 2004.

DISCUSSION

The Tobacco Institute’s strategy relied on interests, ideas, and institutions in a sophisticated and politically savvy way. The institute focused its strategy on firefighters, their unions, and related fire service organisations and realigned the interests of those organisations to conform to those of the tobacco industry. The institute believed these groups would be the most credible voices on fire-safe cigarettes and, if properly funded, could be the paramount actors in the constellation of people attentive to the issue. The Tobacco Institute also had a related “ideas” strategy—that is, to influence the understanding of cigarette caused fires and the politically and technologically feasible solutions to the problem posed by them. By crafting “solutions” with some scientific credibility, though not reflecting the best scientific solution to the problem, the industry created “diversionary science”. Finally, the Tobacco Institute used its knowledge of the institutional processes involved—both congressional and bureaucratic—to derail legislative and regulatory efforts, in part, by using the good will established with fire service groups to secure delays in fire-safe cigarette regulation, infiltrating an interagency committee established in 1984 to make recommendations to

Congress, advocating for fire-safe cigarette legislation favourable to the tobacco industry in 1989, and then, in 1993, pressuring two of the three commissioners on the CPSC into declining to set an ignition standard for fire-safe cigarettes.

The tobacco industry was forced to continue to engage the fire-safe cigarette issue because Congressman Moakley was also skilled in managing the interplay of ideas, interests, and institutions. Especially noteworthy in Moakley’s legislative struggles was his successful effort to attract the support of the firefighters’ union and other fire service groups, despite the fact that the tobacco industry had also heavily courted these groups and provided generous financial support for fire prevention and safety education. With Moakley’s support, the fire-safe cigarette remained on the public agenda, when it otherwise might have disappeared as an issue.

Limitations

As with all tobacco documents research, our study may have failed to uncover key tobacco industry documents, which, if found, may have altered our reporting on the fire-safe cigarette issue. We believe, however, that our search was comprehensive, relying on several skilled searchers. In addition, our study design, which relied on additional data sources to corroborate and expand upon the documents, allowed us to use multiple sources to check the accuracy of the story found in the documents. Additionally, our findings corroborate and extend those of Gunja *et al.*⁴

Reviewing the findings in broader context

The tobacco industry’s behavior in this case is similar to its efforts to thwart regulation of secondhand smoke exposure.⁷⁴ With respect to policymaking in both of these areas, the industry has used similar tactics, one aimed at obscuring scientific debate, and the second aimed at building alliances with other interested parties who would lend a sympathetic face to industry positions. In the fire-safe cigarette case, the industry’s efforts focused not on contesting the science, as it had done in the case of secondhand smoke,^{75–77} but rather on using different science to divert attention away from the design of a fire-safe cigarette. For example, the industry enlarged the discussion to focus on ways to prevent fires and on the design of fire retardant clothes and furniture. While the industry’s use of “junk science” has been well documented,⁷⁸ its research efforts on accidental fires might more appropriately be termed “diversionary science”. Science as a diversion differs from the industry’s effort to categorise peer reviewed science as “junk science” and its own work as “sound science”⁷⁷ or to try to discredit the peer reviewed science.⁷⁵ Industry sponsored science on fire-safe cigarettes was not necessarily false or fatally flawed, but rather it served to shift attention away from fire-safe cigarettes as a solution to cigarette caused fires. To help “sell” their diversionary science, the tobacco industry hired industry friendly consultants who were also well known in the firefighting community.²³ Without this intellectual underpinning, it would have been much more difficult for the industry to keep firefighters on their side.

With respect to the use of third party allies, the tobacco industry’s attempts to court firefighters as a group with a particular interest in fire-safe cigarettes is similar to that played by flight attendants in smoke-free airlines cases. In the USA the industry was unable to mute flight attendant support for smoke-free airlines.⁷⁹ The flight attendants’ support lent a highly sympathetic face to the effort for smoke-free airlines. As a result, smoke-free airlines were mandated by federal law, the only smoke-free worksite Congress has ever required. By contrast, in Europe, the International Flight Attendant Association accepted money for its conferences from Philip Morris and gave industry

scientists a forum for presenting their findings that smoking was a minor cause of poor cabin air quality. Scandinavian Airlines did not go completely smoke-free until 1997.⁸⁰ As with US flight attendants, if the firefighters had been strong advocates for fire-safe cigarettes, it likely would have been much more difficult for legislators to oppose them. Through their early support of the tobacco industry, the firefighters may have played a role similar to that played by European flight attendants in the 1980s. In later years and presently, however, the firefighters' union and other fire service organisations have backed away from industry friendly positions and have endorsed strong fire-safe cigarette legislation in Congress.⁷³

This case study holds additional lessons for other areas of tobacco control policymaking. The tobacco industry was adept at understanding the needs of fire service organisations (for example, funding for fire prevention programmes as government resources grew scarce, assisting volunteer firefighter groups with recruitment), and moreover they provided significant funding to meet those needs. Despite the industry's funding, however, Congressman Moakley's staff was able to win over fire service groups, and this support has endured to the present time. Tobacco control advocates often lament having to fight an industry that has such vast financial and political capital, and though their funding presents significant obstacles, this case illustrates that critical alliances can be formed nonetheless. One could question whether the alliance between firefighters and Moakley was meaningful and effective, given that Congress has yet to pass legislation mandating fire-safe cigarettes. And though it is impossible to know for certain, we suspect that without the firefighters' support, Moakley may have made less progress on the issue.

A related lesson concerns how to frame issues or ideas in order to build alliances with groups that may have previously supported pro-tobacco industry positions. The tobacco industry enlarged the fire-safe cigarette issue to be about fire prevention, a frame that appealed to fire service organisations. Likewise, the industry has in the past attempted to enlarge debate on worksite based exposure to secondhand smoke to include broader concerns about clean indoor air. In so doing, the industry tapped into deep and legitimate concerns within organised labour about other toxic indoor air hazards that were not being adequately regulated by Occupational Safety and Health Administration (OSHA).⁸¹ In recent years, however, tobacco control groups have been successful in re-framing worksite secondhand smoke exposure. Rather than narrowly focusing on secondhand smoke's health effects on restaurant customers, for example, we have begun to broaden our understanding and advocacy to raise concerns about the health of restaurant workers, who endure prolonged exposure to secondhand smoke. This re-framing has made it possible to garner labour union support for smoke-free worksites legislation as a worker health and safety issue.⁸² The tobacco industry is adept at framing issues to appeal to various groups, and tobacco control advocates can use similar strategies to form alliances.

Looking to the future on fire-safe cigarette policymaking

Our findings have implications for future efforts at both the state and federal levels to pass legislation requiring fire-safe cigarettes.

First, on aligning *interests*, tobacco control advocates can win over organisations, like the IAFF, even though these organisations may start out with pro-tobacco industry positions and receive financial backing from the industry. Tobacco control advocates should continue to reach out to the IAFF and other fire service groups for support. Key to creating a strong relationship is supporting other fire safety/prevention efforts that are important to firefighters.

What this paper adds

As has been previously reported, the Tobacco Institute courted fire service organisations, including the firefighters' union, in efforts to oppose fire-safe cigarette legislation. The efforts to build alliances was successful up until about 1990.

This paper adds insight into a major policy shift around that time among fire service groups, including the firefighters' union, away from supporting the tobacco industry and toward support for strong fire-safe cigarette bills being sponsored by US Representative Moakley and eventually other policymakers. Our goal in this paper is twofold. First, we explicate the strategies employed by the tobacco industry and Moakley, especially their respective attempts to court fire service organisations—including the firefighters' union—as allies. Second, we examine the implications of the lessons drawn from this case for the prospects of the mobilisation of non-traditional allies by tobacco control advocates in the making of good tobacco control policy.

Second, on *ideas*, the tobacco industry continues to argue that cigarette caused fires can be solved through means other than fire-safe cigarettes, and they warn consumers that "fire-safe" cigarettes may lull smokers into a false sense of security and carelessness, which could result in an increase in cigarette fires. Given this rhetoric, tobacco control advocates must contest the ideas put forth by the industry. To do so, advocates must guard against the industry use of diversionary science—science that might have some factual basis but does not present a full picture. For example, we do not need to choose between fire-safe cigarettes and other fire prevention techniques; we can pursue both. If no evidence is presented that careless smoking increases as cigarettes are made safer, then advocates can demand proof while also collecting data from places like New York to demonstrate that the industry's theory is false.

Third, on *institutions*, we might expect, based on this case study and a long history of tobacco control failures in the US Congress, that federal action on fire-safe cigarettes could be long in coming. The legislative and regulatory victory in New York suggests that it may be more feasible for tobacco control advocates to work at the state level, building momentum toward an eventual federal law. Building support to pass local smoke-free worksites ordinances has led to the passage of state level legislation in a few states; likewise, winning fire-safe cigarette legislation at the state level may assist in efforts to pass federal legislation.

ACKNOWLEDGEMENTS

This study was funded by NCI Grant No. 5R01CA95964-03. The authors thank Gary McKissick, Charles Levenstein, and Jocelyn Pan for their comments on an earlier draft of this manuscript, Caroline Kennedy for her assistance with preliminary documents searches, and Julia Collins, Beth Bower, and Steve Kalrites at the Moakley archives. The authors are indebted to Geoffrey Ferris Wayne for his helpful comments on an earlier version of this manuscript.

Authors' affiliations

E M Barbeau, G Kelder, Dana-Farber Cancer Institute, Boston, Massachusetts, USA
S Ahmed, V Mantuefel, E D Balbach, Tufts University, Medford, Massachusetts, USA

Competing interests: none declared

REFERENCES

1 PennWell Corporation. NFPA study finds a stunning increase in cigarette-caused fires. http://fe.pennnet.com/Articles/Article_Display.cfm?Section

- OnlineArticles&SubSection=HOME&PUBLICATION_ID=25&ARTICLE_ID=208381 (Accessed July 28, 2004).
- 2 **Associated Press.** 'Fire-Safe' cigarettes to be sold in New York. <http://msnbc.msn.com/id/5316131/> (Accessed July 28, 2004).
 - 3 **Anon.** Bill C-260. An act to amend the hazardous products act (fire-safe cigarettes) passed into law on March 31, 2004. 2004. http://www.parl.gc.ca/PDF/37/3/parlbus/chambus/house/bills/private/c-260_4.pdf. (Accessed February 23, 2005).
 - 4 **Gunja M, Wayne GF, Landman A, et al.** The case for fire safe cigarettes made through industry documents. *Tobacco Control* 2002;11:346-53.
 - 5 **Heclio H.** Ideas, interests, and institutions. In: Dodd LC, Jillson C, eds. *The dynamics of American politics: approaches and interpretations*. Westview Press, Boulder CO, 1994:366-93.
 - 6 **Yin R.** *Case study research*. Thousand Oaks, California: Sage Publications, 1994.
 - 7 **Balbach E, Barbeau E, Gasior R.** Tobacco industry documents: comparing the Minnesota depository and internet access. *Tobacco Control* 2002;11:68-72.
 - 8 **Malone RE, Balbach, eds.** Tobacco industry documents: treasure trove or quagmire? *Tobacco Control* 2000;9:334-8.
 - 9 **Rice PL, Ezzy D.** *Qualitative research methods: a health focus*. New York: Oxford University Press, 1999.
 - 10 **Nicholson J.** Looking back. At the 1947 President's Conference on Fire Prevention. 2002. <http://www.nfpa.org/NFPAJournal/Columns/LookingBack/BackNovDec2002/BackNovDec2002.asp>. (Accessed August 20, 2004).
 - 11 **Anon.** Fire-Safe Cigarette Act of 1989. 1989. Historical Highlights of the Campaign for a Fire-Safe Cigarette, 1987-1989, Legislative Assistant Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 12 **Chilcote SD.** Comments of Samuel D. Chilcote, Jr. Dinner group meeting June 23, 1982. 1982. Tobacco Institute. Bates No. TIMN0278684/0278697. <http://legacy.library.ucsf.edu/tid/ybx62f00>.
 - 13 **Chilcote S.** 1983. Brown and Williamson. Bates No. 533000531/533000533. <http://legacy.library.ucsf.edu/tid/sri24f00>.
 - 14 **Anon.** In support of fire safety and fire fighters: A public service proposal for the tobacco industry. 1982. Brown and Williamson. Bates No. 690131794/690131828. <http://legacy.library.ucsf.edu/tid/nbs93f00>.
 - 15 **Philip Morris.** The development of tobacco industry strategy. 1982. Philip Morris, American Tobacco. Bates No. 2022963134/2022963177. <http://legacy.library.ucsf.edu/tid/ilk53e00>.
 - 16 **Sparber PG.** 'Smoke Detector Fire Safety Program' from National Fire Protection Association. 1983. Philip Morris. Bates No. 2024730880/2024730881. <http://legacy.library.ucsf.edu/tid/svm85e00>.
 - 17 **Osborne L.** Tobacco college accidental fire issue. Tobacco Institute. Bates No. TIFL0071764/0071765. <http://legacy.library.ucsf.edu/tid/gds02f00>.
 - 18 **Public Relations Division.** Public relations resource catalogue. 1986. R.J. Reynolds. Bates No. 505092054/505092185. <http://legacy.library.ucsf.edu/tid/ulb35d00>.
 - 19 **Sparber PG.** Tobacco Institute. Letter to Martin Mulholland, November 4, 1985. Tobacco Institute. Bates No. TIOK0014294. <http://legacy.library.ucsf.edu/tid/nra02f00>.
 - 20 **Tobacco Institute.** The Tobacco Institute 1985 (850000) budget. Summary of major contingencies public relations. 1985. RJ Reynolds. Bates No. 506639315/506639335. <http://legacy.library.ucsf.edu/tid/njw44d>.
 - 21 **Tobacco Institute.** The Tobacco Institute's Fire Safety Education Program. 1988. RJ Reynolds. Bates No. 508509905/508509906. <http://legacy.library.ucsf.edu/tid/tji93d00>.
 - 22 **Sparber P.** Accidental fires where the tobacco industry stands. 1984. Brown and Williamson. Bates No. 690138098/690138106. <http://legacy.library.ucsf.edu/tid/xlr93f00>.
 - 23 **Goold J.** Covington Burling. "Fire-Safe" cigarettes: Tridata Corporation. 1999. Philip Morris. Bates No. 2075140012/2075140013. <http://legacy.library.ucsf.edu/tid/otq52c00>.
 - 24 **Schaenman PS.** TriData. International concepts in fire protection ideas from Europe that could improve U.S. fire safety. 1982. Lorillard. Bates No. 95301331/95301424. <http://legacy.library.ucsf.edu/tid/tzl53c00>.
 - 25 **Schaenman PS.** TriData. International concepts in fire protection ideas from Europe that could improve U.S. fire safety. 1982. Philip Morris. Bates No. 2022228445/2022228447. <http://legacy.library.ucsf.edu/tid/cpk72a00>.
 - 26 **Schaenman PS,** Corporation T. Statement of P. Schaenman before the Subcommittee on Commerce, Consumer Protection and Competitiveness of the Energy and Commerce Committee. U.S. House of Representatives on H.R. 3885, "The Fire Safe Cigarette Act of 1994." 1994. Brown and Williamson. Bates No. 505300468/505300475. <http://legacy.library.ucsf.edu/tid/kfp51f00>.
 - 27 **Schaenman P, Frazier P.** Trend in smoking material fires: 1991. Update. American Tobacco. Bates No. 950747847/950747885. <http://legacy.library.ucsf.edu/tid/opa01a00>.
 - 28 **Lewis LS, Robinson AL, Townsend DE, R.J. Reynolds.** A comparative ignition propensity study of foreign and domestic cigarettes. 1989. Lorillard. Bates No. 87877730/87877742. <http://legacy.library.ucsf.edu/tid/hxz74c00>.
 - 29 **Kelder G, Daynard RA.** The role of litigation in the effective control of the sale and use of tobacco. *Stanford Law & Policy Review* 1997;8:1.
 - 30 **Moakley JJ.** Testimony of congressman John Joseph Moakley. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA, 1983.
 - 31 **Moakley J.** Congress H. H.R. 5504 A bill to require persons who manufacture cigarettes or little cigars for sale or distribution in commerce to comply with processing standards prescribed by the consumer product safety commission which ensure that such cigarettes or little cigars will stop burning within a period of five minutes after being ignited if such cigarettes or little cigars are not smoked during such period, and for other purposes. 1979. Philip Morris. Bates No. 2021335935/2021335939. <http://legacy.library.ucsf.edu/tid/zqn72a00>.
 - 32 **McGuire A.** Sixth Annual Conference. U.S. Fire Administration, San Francisco, CA. 810119 810121 Session on technology for prevention of residential fires. 1981. Brown and Williamson. Bates No. 684025462/684025472. <http://legacy.library.ucsf.edu/tid/ljv10f00>.
 - 33 **Moakley J.** Fire-safe cigarettes, Moakley tobacco proposals. 1983-84. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 34 **Moakley J.** Record C. Congressional record Cigarette Safety Act. 1983. Philip Morris. Bates No. 1005060095/1005060096. <http://legacy.library.ucsf.edu/tid/eif54e00>.
 - 35 **Unknown.** Self extinguishing cigarette legislation. 1982. RJ Reynolds. Bates No. 516652185/516652186. <http://legacy.library.ucsf.edu/tid/ajj33a00>.
 - 36 **Anon.** "Cigarette Safety Act of 1984" Public Law 98 567, an act to establish an interagency committee and a technical study group on cigarette safety. 1984. American Tobacco. Bates No. 980371784/980371786. <http://legacy.library.ucsf.edu/tid/ifo15f00>.
 - 37 **Tobacco Institute, Stuntz SM.** Tobacco Institute newsletter. 1984. RJ Reynolds. Bates No. 505482638/505482644. <http://legacy.library.ucsf.edu/tid/yor15d00>.
 - 38 **Abrams A, Eberly P, Fleming AT, et al.** King Features Syndicate, Tobacco Institute, Tobacco Museum of NC, Tobacco Observer. 1984. Lorillard. Bates No. 93852824/93852831. <http://legacy.library.ucsf.edu/tid/isg60e00>.
 - 39 **Moakley JJ.** H.R. 1880; a bill to require persons who manufacture cigarettes or little cigars for sale or distribution in commerce to meet performance standards prescribed by the consumer product safety commission, and for other purposes. 1983. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 40 **Chilcote SD.** Comments made at the Annual Meeting, December 13, 1984. 1984. Tobacco Institute. Bates No. TIOK0010273/0010290. <http://legacy.library.ucsf.edu/tid/iq91f00>.
 - 41 **Anon.** Final report of the technical study group. 1987-1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 42 **Anon.** Toward a less fire prone cigarette: Final report of the technical study group on cigarette and little cigar fire safety. Cigarette Safety Act of 1984 (840000). 1987. RJ Reynolds. Bates No. 508686643/508686700. <http://legacy.library.ucsf.edu/tid/keo33a00>.
 - 43 **Shenk JW.** Smoke in your eyes. *Tobacco Control* 1998;7:324-6.
 - 44 **Moakley JJ.** H.R. 673, Fire Safe Cigarette Act of 1990. 1990. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 45 **IAFC AGiis.** Comparison of H.R. 293 and H.R. 673, International Association of Fire Chiefs. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 46 **Moakley JJ.** H.R. 293; Fire Safe Cigarette Act of 1989. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 47 **Tobacco Institute.** Statement for Jack Gannon, President, IAFF Fire Safe Cigarette Press Conference. Tobacco Institute. Bates No. TITX0035187/0035188. <http://legacy.library.ucsf.edu/tid/ywv32f00>.
 - 48 **Schaenman PS.** TriData. Joint report on status of fire service endorsements of H.R. 4497. 1989. Tobacco Institute. Bates No. TITX0035161/0035164. <http://legacy.library.ucsf.edu/tid/izw32f00>.
 - 49 **McGary RA.** Int'l Society of Fire Service Instructors. 1989. Philip Morris. Bates No. 2023171441. <http://legacy.library.ucsf.edu/tid/wxi72a00>.
 - 50 **Anon.** Communications efforts 890300. 1989. Philip Morris. Bates No. 2015024347/2015024350. <http://legacy.library.ucsf.edu/tid/hug34e00>.
 - 51 **Schaenman PS.** TriData. Joint report on status of fire service endorsements of H.R. 673. 1989. Tobacco Institute. Bates No. TITX0035155/0035158. <http://legacy.library.ucsf.edu/tid/lzw32f00>.
 - 52 **Scott.** Philip Morris. Issues. 1989. Philip Morris. Bates No. 2040857501/2040857503. <http://legacy.library.ucsf.edu/tid/kqf72a00>.
 - 53 **International Association of Firefighters.** IAFF endorsement of H.R. 4497. 1988. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 54 **International Association of Firefighters.** IAFF endorsement of H.R. 293. 1999. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 55 **Moakley JJ.** Congressional record. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 56 **Moakley JJ.** Letter to the IAFC. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 57 **Biley T, Boucher F.** "Dear colleague" letter. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 58 **Moakley JJ.** "Dear colleague" letter. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 59 **Moakley JJ.** Letter to National Volunteer Fire Council. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 60 **International Association of Fire Chiefs.** IAFC letter endorsing Moakley bill. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
 - 61 **Whitehead AK.** IAFF letter endorsing Moakley bill by Alfred K. Whitehead, President. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.

- 62 **Bliley T**, Boucher F. "Dear colleague" letter. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
- 63 **Moakley JJ**. "Dear colleague" letter. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
- 64 **Moakley JJ**. Congressional record. 1989. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
- 65 **Schoonmaker D**, et al. Public Affairs management plan progress report. May, 1989. Tobacco Institute. Bates No. TIDN0016945/0016976. <http://legacy.library.ucsf.edu/tid/zfi91f00>.
- 66 **International Association of Firefighters**. IAFF testimony on H.R. 293. 1990. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
- 67 **Moakley JJ**. Statement of Joseph Moakley re: Willingness to compromise on H.R. 293. 1990. Fire-Safe Cigarettes, 1975-2001, Legislative Files, MS 100, John Joseph Moakley Archive, Suffolk University; Boston, MA.
- 68 **Anon**. Public law 101 352, Fire Safe Cigarette Act of 900000. 1990. Brown and Williamson. Bates No. 521400387/521400389. <http://legacy.library.ucsf.edu/tid/hbm21c00>.
- 69 **Jones-Smith J**. Letter from Jacqueline Jones-Smith, Chair of Consumer Product Safety Commission to US Senator Al Gore. Boston, MA. August 9, 1993.
- 70 **Jones-Smith J**. Letter from Jacqueline Jones-Smith, Chair of Consumer Product Safety Commission to US Representative Joseph Moakley. Boston, MA.
- 71 **Anon**. Fire Safe Cigarette Act of 1999, 106th Congress 1st session H.R. 1130 in the House of Representatives, March 16, 1999. A bill. Brown and Williamson. Bates No. 505691850/505691852. <http://legacy.library.ucsf.edu/tid/eyc11c00>.
- 72 **Markey EJ**. Markey, King introduce National Cigarette Fire Safety legislation. 2004. Accessed: September http://www.house.gov/markey/Issues/iss_cigfs_pr040505pdf.
- 73 **Markey EJ**. Rep. Markey's work on cigarette fire safety. <http://www.house.gov/markey/firesafe.htm> (Accessed July 28, 2004).
- 74 **Bryan-Jones K**, Bero LA. Tobacco industry efforts to defeat the Occupational Safety and Health Administration indoor air quality rule. *Am J Public Health* 2003;**93**:585-92.
- 75 **Drope J**, Chapman S. Tobacco industry efforts at discrediting scientific knowledge of environmental tobacco smoke: a review of internal industry documents. *J Epidemiol Community Health* 2001;**55**:588-94.
- 76 **Muggli ME**, Pollay RW, Lew R, et al. Targeting of Asian Americans and Pacific Islanders by the tobacco industry: results from the Minnesota Tobacco Document Depository. *Tobacco Control* 2002;**11**:201-9.
- 77 **Ong EK**, Glantz SA. Constructing "sound science" and "good epidemiology": tobacco, lawyers, and public relations firms. *Am J Public Health* 2001;**91**:1749-57.
- 78 **Hong MK**, Bero LA. How the tobacco industry responded to an influential study of the health effects of secondhand smoke. *BMJ* 2002;**325**:1413-16.
- 79 **Pan J**, Barbeau EM, Levenstein C, et al. Smoke-free airlines and the role of organized labor: a case study. *Am J Public Health* 2005;**95**:398-404.
- 80 **Neilsen K**, Glantz SA. A tobacco industry study of airline cabin air quality: dropping inconvenient findings. *Tobacco Control* 2004;**13**(suppl 1):i20-9.
- 81 **Balbach E**, Barbeau E, Mantefeuil V, et al. Political coalitions for mutual advantage: the case of the Tobacco Institute's labor management committee. *Am J Public Health* 2005;**95**:985-93.
- 82 **Haynes R**, Casavant K. Letter from the Massachusetts AFL-CIO to the Massachusetts House of Representatives. 2003. <http://www.laborandtobacco.org/docs/endorsemnt-letter-to-House.doc>. (Accessed February 25, 2005).
- 83 **Tobacco Institute**. Public relations division 860000 proposed budget. 1986. Lorillard. Bates No. 85544536/85544643. <http://legacy.library.ucsf.edu/tid/rvu31e00>.
- 84 **Heger C**. The Tobacco Institute 870000. 1986. Brown and Williamson. Bates No. 640518376/640518463. <http://legacy.library.ucsf.edu/tid/lbf33f00>.
- 85 **Tobacco Institute**. The Tobacco Institute Public Affairs Division proposed budget and operating. 1989. Tobacco Institute. Bates No. TIMN0366674/0366895. <http://legacy.library.ucsf.edu/tid/rj52f00>.
- 86 **Tobacco Institute**. Public Affairs Division proposed 1988 (880000) operation plans and budget. 1987. RJ Reynolds. <http://legacy.library.ucsf.edu/tid/rmv44d00>.
- 87 **Tobacco Institute**. Tobacco Institute Public Affairs Division: Proposed budget plan 1990. 1989. Tobacco Institute. Bates No. TIMN0352911/0353085. <http://legacy.library.ucsf.edu/tid/dfa52f00>.
- 88 **Tobacco Institute**. The Tobacco Institute Public Affairs Division: Proposed budget 1991. 1990. Tobacco Institute. Bates No. TIMN0377297/0377378. <http://legacy.library.ucsf.edu/tid/mfy42f00>.
- 89 **Tobacco Institute**. The Tobacco Institute 1992 budget. Public Affairs Division. 1991. Tobacco Institute. Bates No. T116681420/16681499. <http://legacy.library.ucsf.edu/tid/kns76d00>.
- 90 **Tobacco Institute**. The Tobacco Institute 1993 budget. Public Affairs Division. 1992. Tobacco Institute. Bates No. T116681190/16681262. <http://legacy.library.ucsf.edu/tid/ams76d00>.
- 91 **Tobacco Institute**. The Tobacco Institute 1994 (940000) proposed budget. 1993. RJ Reynolds. Bates No. 508774831/508774958. <http://legacy.library.ucsf.edu/tid/mjy83d00>.
- 92 **Tobacco Institute**. The Tobacco Institute 950000 proposed budget. 1994. Lorillard. Bates No. 91082768/91082879. <http://legacy.library.ucsf.edu/tid/brp00e00>.
- 93 **Tobacco Institute**. Tobacco Institute. 960000 proposed budget. 1995. Philip Morris. Bates No. 2041212088/2041212216. <http://legacy.library.ucsf.edu/tid/rju28d00>.
- 94 **Tobacco Institute**. The Tobacco Institute 1997 budget. Public Affairs Division. 1996. Brown and Williamson. Bates No. 297030456/297030477. <http://legacy.library.ucsf.edu/tid/spk11c00>.

The Lighter Side



© Speed Bump by Dave Coverly, Creators Syndicate, 2005.