RESEARCH PAPER

Clearing the airways: advocacy and regulation for smokefree airlines

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Objective: To examine the advocacy and regulatory history surrounding bans on smoking in commercial airliners

Methods: Review of historical documents, popular press articles, and other sources to trace the timeline of events leading up to the US ban on smoking in airliners and subsequent efforts by airlines and other nations.

Results: In early years, efforts by flight attendants and health advocates to make commercial airliners smoke-free were not productive. Advocacy efforts between 1969 and 1984 resulted in maintenance of the status quo, with modest exceptions (creation of smoking and non-smoking sections of aircraft, and a ban on cigar and pipe smoking). Several breakthrough events in the mid 1980s, however, led to an abrupt turnaround in regulatory efforts. The first watershed event was the publication in 1986 of the National Academy of Science's report on the airliner cabin environment, which recommended banning smoking on all commercial flights. Subsequently, following concerted lobbying efforts by health advocates, Congress passed legislation banning smoking on US domestic flights of less than two hours, which became effective in 1988. The law was made permanent and extended to flights of less than six hours in 1990. This landmark legislation propelled the adoption of similar rules internationally, both by airlines and their industry's governing bodies. Though the tobacco industry succeeded in stalling efforts to create smoke-free airways, it was ultimately unable to muster sufficient grassroots support or scientific evidence to convince the general public or policymakers that smoking should continue to be allowed on airlines.

Conclusions: The movement to ban smoking in aircraft represents a case study in effective advocacy for smoke-free workplaces. Health advocates, with crucial assistance from flight attendants, used an incremental advocacy process to push for smoking and non-smoking sections on US commercial flights, then for smoking bans on short domestic flights, and finally for completely smoke-free domestic and international flights. Through the course of the battle, advocates from all quarters of tobacco control presented a unified message, exhibited remarkable focus on an attainable goal, and effectively leveraged their relationships with champions in both government and the private sector.

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The first national non-smokers' rights campaign, the battle to make commercial airline flights smoke-free, began nearly 35 years ago,¹ and has now come very near to completion.² Through a transition from efforts to influence government regulators and private industry to lobbying Congress for a federal regulation, this continued success can be attributed to health advocates' unified focus on a specific goal, as well as the unique character of the in-flight smoking issue and the assistance of key legislative champions.

METHODS

We reviewed historical documents, journal and popular press articles, and information on the world wide web to establish the timeline of events leading up to the banning of smoking on commercial airline flights, particularly in the USA. Some tobacco industry documents were also examined to determine industry strategies and perspectives on the advocacy struggle, though a detailed analysis of industry documents and the strategies they describe was beyond the scope of this paper. We also analysed documents to generate impressions of overriding themes that characterised the advocacy and regulatory process. Four distinct eras in the process were identified, with different key players and strategies rising to prominence in each.

RESULTS

Flight attendants, led by activist Patty Young, an American Airlines flight attendant since 1966, began fighting for the right to work in a tobacco-free environment in the summer of 1966. The flight attendants sought and obtained assistance from health advocates to promote their fight to breathe clean air in airline cabins. Their efforts were crucial in building sufficient momentum for smoke-free flights throughout the advocacy process.

Tug-of-war with the FAA and CAB (1969 to 1984)

The movement to ban smoking on aircraft has its origins in health advocates' petitions to the Federal Aviation Administration (FAA), the agency within the US Department of Transportation charged with regulating airliner safety. Consumer advocate Ralph Nader first petitioned the FAA to ban smoking on aircraft in 1969.¹ That same year, John Banzhaf III, founder of Action on Smoking and Health (ASH), began to pressure regulators to mandate separate smoking and non-smoking sections on domestic flights.³ The FAA never responded to these petitions, citing lack of evidence that tobacco smoke was harmful in the concentrations experienced on aircraft.¹ The agency did ban smoking in

Abbreviations: AMA, American Medical Association; ATA, Air Transport Association; ASH, Action on Smoking and Health; CAB, Civil Aeronautics Board; FAA, Federal Aviation Administration; GASP, Group Against Smoking Pollution; ICAO, International Civil Aviation Organization; NAS, National Academy of Science; NCI, National Cancer Institute; NRC, National Research Council

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aircraft lavatories in 1973, as a result of a tragic fire in an airliner bathroom waste bin that caused a crash killing 124 people. That same year, however, they rejected a petition by 76 commercial airline pilots (calling themselves the Airline Pilots Committee of 76), backed by the Health Research Group of Nader's Public Citizen organisation and the Aviation Consumer Action Project, to ban smoking in cockpits and forbid flight crews from smoking before flights. The petition cited the apparent effects of carbon monoxide on pilots' nervous system functions. The FAA again cited a lack of evidence (in this case, that secondhand smoke or smoking impairs pilots' ability to fly planes) as the reason for rejecting the petition.

Faced with the FAA's unwillingness to regulate in-flight smoking, advocates turned to another regulatory body, the Civil Aeronautics Board (CAB), to petition for relief. The CAB was charged with the economic regulation of airlines, and was located within the US Department of Commerce. In 1972, in response to another Nader petition, and citing polls indicating that 60% of passengers were bothered by smoke in airplanes,¹ the CAB issued a rule requiring airlines to provide separate sections for smokers and non-smokers.¹ In 1976, ASH petitioned the CAB to ban cigar and pipe smoking on aircraft, which it did.8

The smoking/non-smoking section rule was a major symbolic step forward in acknowledging that smoking on aircraft (or in any enclosed space) caused discomfort for nonsmokers, and was consistent with efforts to create nonsmoking sections in other public places. However, it did little to protect the health of passengers and airline employees.9 The rule created huge enforcement problems for airline staff and was generally ineffective in satisfying passengers and flight crews.4 Passengers complained about lack of adequate non-smoking seating and private carriers did a poor job of enforcing the requirements, particularly in cases of smoke sensitive passengers. In addition, the CAB proved to be easily swayed to reverse its smoking rules. In 1978, the CAB amended its rules to allow limited cigar and pipe smoking, in response to a Cigar Association petition.¹⁰ The American Medical Association (AMA) urged the CAB to re-ban cigar and pipe smoking in 1979, and to place a variety of restrictions on cigarette smoking, including a ban on smoking aboard flights of one hour or less and aircraft of 60 seats or less.11 When the CAB failed to respond to such recommendations, ASH sued in federal court to compel the agency to retain the cigar and pipe ban and enforce its smoking/non-smoking section rules.1

This sort of back-and-forth exchange between the CAB and advocates, particularly ASH, continued through the early 1980s. In 1981, the CAB republished its rules on smoking in aircraft, deleting a requirement that "airlines ensure that if a no-smoking section is placed between two smoking sections, the nonsmokers are not unreasonably burdened". The language had originally been adopted in 1979, but the 1981 version omitted it; once again, court action by ASH forced its reinstatement. In 1983, the CAB again tried to eliminate the "unreasonably burdened" provision, and again ASH sued, with the court judgment requiring the CAB to republish the original language. 12

In response to this repeated pressure, in 1983 the CAB proposed (but did not adopt) rules to prohibit smoking on flights of one hour or less, require airlines to seat passengers with documented smoke related medical problems as far from smoking sections as possible, and ban smoking on flights if necessary to alleviate a passenger's illness.¹³ Despite supportive public comments from health advocates, ¹⁴ the Air Transport Association (ATA), the trade association for the principal US airlines, successfully argued that the proposed rules were too vague for cabin personnel to implement, and

that they would result in an arbitrary distortion of the airline market. Flights shorter or longer than one hour, the ATA claimed, would be more or less attractive to certain passengers. The ATA asserted during oral testimony before the board that "smoking is a fact of life; it is something we must accommodate". An airline pilots' union also opposed the rule out of concern that passengers would try to smoke in lavatories, where it was prohibited.

The CAB continued to flip-flop ineffectually through the remainder of its existence as a regulatory entity. In 1984, the CAB considered but eventually rejected rules to ban smoking on flights of less than two hours, ban smoking on planes of 30 seats or less, and require installation of smoke detectors in lavatories. ¹⁶ In a defining gesture of the board's inability to take a stance, board chairman Dan McKinnon at one point moved in favour of a ban, changed his mind after "discussions with agency staff" (some advocates suggested this was code for "calls from influential legislators"), and reversed again after another board meeting, all to no effect. ¹⁷

By mid-1984, the CAB had been debating the smoking issue for more than 10 years and had rejected several proposed bans, effecting negligible change in airliner cabin air quality. Cigars and pipes were out, but smoking and nonsmoking sections remained the norm, despite increasing pressure by flight attendants, passengers, and health advocates. In any case, the CAB was about to fade away from the scene due to airline industry deregulation. The AMA successfully lobbied Congress to retain the airline smoking regulations adopted under the CAB's tenure and transfer that regulatory authority from the Department of Commerce to the Department of Transportation.¹⁸ The CAB ceased operations on 31 December 1984, after 46 years of regulating US commercial air transport.19 The legal and regulatory tug-ofwar between the CAB and health advocates was never quite resolved, after a decade of inching toward increased restrictions on smoking aboard commercial aircraft.

Evidence tips the balance in favour of regulation (1984 to 1988)

By 1983, the debate over smoking on airlines had begun to garner national attention (fig 1). In 1983 and 1984, Congressional hearings were held on the subject. The hearings highlighted the fact that data on airplane cabin air quality were contradictory, and no standards existed for acceptable levels of contaminants such as tobacco smoke. Congress therefore directed the National Research Council (NRC) of the National Academy of Sciences (NAS) to conduct a study of air quality standards on commercial aircraft and determine whether deficient air quality could be responsible for health problems.²⁰

The release in 1986 of the NRC's report, *The airliner cabin environment: air quality and safety*, was the first watershed event in the fight for smoke-free skies. The report acknowledged that the NRC's Committee on Airliner Cabin Air Quality, which prepared the report, made "one recommendation that clearly will be controversial. It is unanimously and forcefully proposing that smoking be banned on all commercial flights within the United States." Other key findings of the report included that full time flight attendants received secondhand smoke exposure approximately equal to living with a pack-a-day smoker, and that the potential health effects of secondhand smoke outweighed the concerns about smokers' nicotine withdrawal on flights.²⁰

The NRC's findings were bolstered by the release, in late 1986, of two authoritative reports on the health effects of passive smoking, both of which concluded that passive smoking is a cause of lung cancer in non-smokers. One report was issued by the NRC²¹ and the other by the US Surgeon General.²² The Surgeon General's report, in particular, caused

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Figure 1 This cartoon, drawn by Dick Locher and published in 1984 in the Chicago Tribune, was one of the many editorial cartoons featured in newspapers during the campaign for smoke-free flights. Copyright, Tribune Media Services, Inc. All rights reserved. Reprinted with permission.

the tide to turn in favour of a complete ban on smoking on domestic flights, and energised health advocates to press for a solution more comprehensive than smoking and non-smoking sections. Perceptions among the general public²³ and airline management also began to favour smoking restrictions. Health advocates took advantage of this momentum and stepped up their campaigns for the ban.

The campaign received a huge boost in April of 1987. The same month that the *New York Times* announced its newsroom would go smoke-free,²⁴ the Association of Flight Attendants endorsed a complete ban on smoking on commercial flights, joining the AMA and the American Lung Association.²⁵

In response, government agencies and the travel industry began to modify their stances on in-flight smoking. In February of 1987, the FAA reported to Congress regarding the NRC report on the airliner cabin environment, agreeing with many of the NRC's findings though asserting that more study was required before a smoking ban could be recommended.²⁶ Fuelling efforts to take action against smoking on airplanes, the US Department of Health and Human Services established a smoke-free workplace environment in its buildings.²⁷ In June, Air Canada instituted highly successful nonsmoking flights on three busy corridors (Toronto–New York, Toronto–Newark, and Montreal–New York); 96% of passengers on the flights said they would continue to choose the airline for future flights.²⁸ The stage was set for broader efforts to ensure a smoke-free airline cabin environment.

Landmark legislation: the Durbin Amendment and subsequent bans (1987 to 1990)

In the spring of 1987, health advocates found the champion they needed to move forward in the battle to ban smoking on US airline flights. US Representative Richard J Durbin (Democrat from Illinois), now a US Senator, took up the cause, attaching an amendment to a Department of Transportation appropriations bill being considered by the US House of Representatives transportation subcommittee. The amendment, which called for federal funds to be cut from any airport that services flights during which smoking is allowed on flights of two hours or less, failed in

subcommittee as well as before the full Appropriations Committee.¹

Undeterred, Durbin obtained a procedural waiver so that the amendment could be brought before the full House for a vote despite its disapproval by the subcommittee. The bill was co-sponsored by Rep CW "Bill" Young (Republican from Florida). Americans for Nonsmokers' Rights and several affiliates of the Group Against Smoking Pollution (GASP) across the country mobilised their constituents to lobby their Congressional representatives in support of the amendment. These vocal advocates' efforts were bolstered by support from the AMA, the American Heart Association, the American Cancer Society, the American Lung Association, the American Public Health Association, the Consumer Federation of America, the Joint Council of Flight Attendants Unions, the Association of Flight Attendants, and then Surgeon General C Everett Koop. American Council of Flight Attendants

Members of the flight attendants' union were present in the House while the measure was being debated, as a visible reminder that their health was the most important reason for enacting the ban.¹ Public awareness of the suffering endured by flight attendants due to secondhand smoke and of the safety hazards caused by smoking on aircraft was a major reason for passage of the legislation.°

Because of this powerful and unified support, the ban passed in the House by a vote of 198–193, despite opposition from the tobacco and airline lobbies.²⁹ Americans for Nonsmokers' Rights characterised the victory as follows:

Congressional insiders attribute the success of the Durbin amendment to three factors. The first is the grass-roots constituent campaign conducted by nonsmokers' rights groups. The second is Representative Durbin's effectiveness with his congressional colleagues. The third and final factor is strong personal feelings on the part of many Members of Congress about smoking on aircraft. (No wonder—congressmen must often fly several times a week!)³¹

The bill was shepherded through the Senate by Senator Frank Lautenberg (Democrat from New Jersey)³² and passed by a margin of 84–10.¹

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Get Involved! The two-hour airline smoking ban is scheduled to "sunset" in 1990. Anti-smokers continue to press for a total ban on smoking aboard airliners, and legislation is pending in Congress to do just that. However, like the two-hour ban, such legislation is unnecessary, unfair and unwarranted. If you agree that federal and private airline smoking bans have gone too far, take this opportunity to get involved. Let the airlines know how you feel, and urge your elected officials to support "sunset" of the two-hour ban. Smoker's Rights Alliance, Inc. 20 East Main Street **Passport to** Suite 710 Mesa, AZ 85201 **Smokers' Rights** 800/562-RIGHTS

Figure 2 Material from the Tobacco Institute's "Passport to Smokers' Rights" advocacy campaign. This kit contained an "Issue Brief" on airline smoking restrictions, detailed instructions for a letter writing campaign, pre-printed postcards to be sent to airlines and the US Department of Transportation, and membership information for the Smokers' Rights Alliance, Inc.

The ban on smoking aboard US domestic flights of less than two hours went into effect on 23 April 1988; it was meant to last for two years, expire in April 1990, and then face reconsideration.¹ It levied civil penalties of \$1000 for passengers who smoked on short flights, and \$2000 for anyone who tampered with, disabled, or destroyed lavatory smoke detectors.³³ It immediately served as a jumping-off point for advocates to press for a total smoking ban on all flights, both by expanded, permanent legislation and through persuasion of airlines to voluntarily go smoke-free.

One airline, Northwest, decided to use the ban as a marketing opportunity. On the same day as the federal ban became effective, Northwest implemented a total no-smoking policy on its domestic flights.³⁴ Northwest promoted its action with a \$5 million advertising campaign designed by the agency Saatchi & Saatchi. In retaliation, RJR-Nabisco took \$70–80 million worth of food advertising accounts (including campaigns for Life Savers, Oreo and Chips Ahoy cookies, Care Free sugarless gum, Bubble Yum bubble gum, and Breath Savers) away from the agency.³⁵ Despite tobacco companies' frequent, aggressive attempts to punish those who defied their wishes,³⁶ more airlines began to adopt smoke-free policies in flight.^{37–39}

By Autumn of 1987, even before the law's implementation, six different bills seeking to permanently regulate smoking on airline flights had been introduced in Congress. Some banned smoking on all flights, others only on flights of certain durations. The House Committee on Public Works and Transportation's Aviation Subcommittee held a hearing on 7 October 1987 regarding a complete ban on smoking in aircraft.40 The Department of Transportation again offered testimony claiming that evidence was lacking concerning the level of contamination introduced by cigarette smoke into the airliner cabin; the department recommended that the government continue to allow smoking on airplanes until more research had been conducted.41 The AMA, the Flight Attendants' Association, a grassroots advocacy group called Citizens Against Tobacco Smoke, and others argued strongly in favour of the complete ban.42

The "lack of evidence" argument, however, was difficult to counter, despite mounting evidence from studies of other indoor environments. To fill this gap in the scientific knowledge base, in November 1987 National Cancer

Institute (NCI) staff began to discuss collaborating with the Canadian Minister of Health and Welfare and Air Canada to formally study exposure to tobacco smoke on commercial flights.⁴³ The study was eventually published in *JAMA* in February of 1989, and found that passengers in non-smoking sections were exposed to cigarette smoke, in some cases at levels comparable to those experienced by passengers seated in smoking sections.⁴⁴ In the NCI's press release about the study, Surgeon General Koop urged that "cigarette smoking be banned on all commercial flights".⁴⁵

In the meantime, advocates and policymakers in California had been busy as well. They passed a law that banned smoking on flights departing from and arriving in the state, which went into effect in January of 1988 with little fanfare and impressive levels of compliance by passengers. ⁴⁶ That success presaged the smooth implementation of the national ban.

So it was that the smoking ban on short domestic flights went into effect on 23 April 1988 with very few difficulties.⁴⁷ About a dozen smokers staged a demonstration at Washington National Airport, but press coverage noted that the Tobacco Institute (TI) had flown some of them in for the event.⁴⁸ A guest column in the *Washington Post* by Congressman Durbin made note of the TI-sponsored "Passport to Smoker's Rights" letter-writing campaign (fig 2), which aimed (but failed) to generate a "flood of mass mail" to the FAA and Congress.⁴⁹ Very few obstacles remained to block the adoption of a more complete smoking ban on domestic flights.

Legislation to ban smoking on all domestic flights permanently was introduced in the US Senate in March 1989. The House Transportation Committee's Aviation Subcommittee held hearings in June regarding legislation limiting or banning smoking on airlines. Testimony cited a survey conducted by the American Association of Respiratory Care, which indicated that more than 80% of 30 000 passengers surveyed wanted to see a permanent extension of the ban, and that the FAA had received fewer than 120 complaints relating to the ban's enforcement during a period when 445 million people travelled. So Subsequently, as part of its public relations drive in support of extending the ban, ASH gave 250 television stations a videotape of flight attendants' testimony, which described the health effects

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Figure 3 A 1994 ad from Philip Morris' "empathy advertising campaign" for Benson & Hedges. The small print at the top of the ad reads, "Have you noticed your smoking flights have been cancelled? For a great smoke, just wing it," and the tagline of the campaign is "The length you go to for pleasure."

and safety hazards experienced by flight attendants and passengers on flights where smoking was permitted.⁵¹ In December 1989, a report by the National Cancer Advisory Board recommended banning smoking on all airline flights, as one of many strategies to achieve the cancer prevention goals of Healthy People 2000.⁵²

The tobacco lobby and the airlines were unable to overcome the growing consensus supporting a ban on inflight smoking, and in 1990 Congress made permanent the ban on smoking on domestic flights of two hours or less and expanded it to include all domestic flights of six hours or less. Health advocates, including ASH (for which the smoking ban was a longstanding goal), were able to claim victory in this battle. The ASH Review noted:

The battle included several successful law suits, more than a dozen major administrative proceedings and many more minor ones, hundreds of complaints, over one hundred thousand dollars in fines against airlines, and a publicity and public relations campaign to convince legislators, the major national health organizations, and the public of the need for such action.⁵³

In 1994 Philip Morris launched its "empathy advertising campaign", acknowledging the demise of in-flight smoking (fig 3).

Smoke-free airways take flight internationally (1991 to present)

Building on the momentum generated by successes in the USA, the Canadian Cancer Society hosted "Rendez-vous 91", an international summit on smoke-free airlines, in February 1991.⁵⁴ Attendees included North American and European health advocates and flight attendant unions. The group agreed to develop an international campaign to lobby member states of the International Civil Aviation Organization (ICAO) on the issue of in-flight secondhand smoke. Based in Montreal, the ICAO is a United Nations affiliated body that sets international standards for air transportation.⁵⁵ Its standards must be agreed to by member nations, called "Contracting States".⁵⁶

In an effort to influence the ICAO, the Coalition on Smoking OR Health (a now-defunct coalition of the American Heart Association, the American Lung Association, and the American Cancer Society), in concert with the European Bureau for Action on Smoking Pollution, the Canadian Cancer Society, and the International Organization of Consumers Unions, kicked off the "Campaign for Smoke-Free Skies Worldwide", which encouraged "groups from different countries to work together to launch a long-term effort to achieve smoke-free airline flights everywhere".57 Advocates around the world distributed press releases, held press conferences, and wrote to their nations' ICAO representatives, urging the adoption of an ICAO "Standard" requiring commercial flights to be smoke-free. By this time, 28 nations had banned smoking on some or all domestic flights. The coalition was therefore able to argue that "smokers have proven that they can abstain from smoking on flights of all durations". 58 As a result of this pressure, the ICAO approved a resolution in 1992⁵⁹ to eliminate smoking on international commercial flights by 1 July 1996.60 Though not legally binding, the resolution did present an accepted standard for airlines, and the campaign also encouraged Canada and Australia to ban smoking on all commercial flights.⁵⁹ As a further step, the USA, Australia, New Zealand, and Canada mutually agreed to ban smoking on all flights between the countries in 1994.61

From this point on, airline carriers began to take the initiative to carry out their own smoking bans. In December 1994, eight airlines (American, British Airways, Continental, KLM, Northwest, TWA, United, and USAir) jointly petitioned the Department of Transportation for antitrust immunity so they could work together to plan smoking bans on international flights; Delta, American, United, Cathay Pacific, Singapore Airlines, and Virgin Atlantic Airways had by this time already implemented their own bans.61 The airline "dominos" continued to fall throughout the 1990s: Sabena, Swissair, and Austrian airlines banned smoking on trans-Atlantic flights in 1997, and United and American banned smoking on all their flights.^{62 63} In 1998, Brazil banned smoking on all domestic and international flights, and among private carriers Royal Air Maroc, British Airways, Virgin Atlantic, Lufthansa, Aer Lingus, Finnair, Icelandair, Advocacy and regulation i35

and Scandinavian Airlines banned smoking on all their flights. ⁶² In 1999, Saudi Airlines, Japan Airlines, Aeromexico, Spanair, Air Zimbabwe, and Qatar Airways followed suit. ⁶²

Advocacy for smoke-free airlines reached its terminal destination—at least for those travelling to and from the United States—in 2000, when the USA banned smoking on all domestic and international flights. The ban was enacted as part of an aviation overhaul bill. By this time, 97.7% of all US international flights were already smoke-free, due to both governmental regulation and voluntary action by airlines. The same year, Air France and Sudan Airways banned smoking on their flights. A few stragglers joined the smoke-free club in 2001 and 2002, with Emirates airline, Middle East Airlines, Biman Bangladesh Airlines, and Saudi Arabian Airlines implementing their own smoking bans.

DISCUSSION

Tobacco industry advocates and allies miss their connections

Throughout this advocacy and regulatory process, the tobacco industry and its cohorts had relatively little success in halting the slow but sure progress toward smoke-free airways, though they did manage to delay the adoption and implementation of airline smoking restrictions, sometimes by years. This example stands in stark contrast to the strong influence they have exerted on policymakers, particularly at the federal level in the USA, over a number of different and similar issues. Why was this the case?

In the early years of the regulatory history of airline smoking, the tobacco industry had little direct leverage over the CAB or FAA. They were limited to submitting comments on proposed rules, and resorted to soliciting individual industry employees and their family members to write letters during agency public comment periods.⁶⁴ Neither of these regulatory agencies was particularly beholden to tobacco interests, though they may have responded to indirect industry influence via pressure from legislators. Some influence may have been felt through the industry's strongarm tactics wielded upon third parties, such as airlines (of whom industry employees were significant customers).⁶⁵

In addition, the industry was ultimately unable to mobilise significant grassroots support for its position. Though data on the health effects of passive smoking aboard aircraft were sparse, many air travellers were annoyed by secondhand smoke. Industry documents noted that despite (or perhaps even because of) the industry's publicity efforts on the issue, the debate over smoking in public places heightened nonsmokers' awareness of their exposure to secondhand smoke.66 Opinion polls conducted in 1978 found that only 43% of respondents favoured a smoking ban on flights, whereas by 1987, surveys by the AMA and the American Association for Respiratory Care found that about two thirds of Americans favoured the ban.67 Even highly orchestrated write-in campaigns (such as the "Passport to Smokers' Rights" effort) failed to generate the hoped for "flood" of mail to legislators. Likewise, protests at airports failed to gain momentum, even when the industry shipped in its own employees for "Astroturf" activism. It appears that the tobacco industry was asking too much of its constituents. It was much easier for smokers to simply put up with the ban during flights than to, for example, time flights on which smoking was banned and then complain to airlines or the government when flights went overtime.

A third limitation for the industry was that it did not have a persuasive science base to support its position. The industry was relatively slow in commissioning studies to support its dubious conclusions. For example, a study with the airline SAS did not begin until 1987,68 when health advocates' efforts were well underway. Internal documents suggest that

What this paper adds

Through a process that began more than 30 years ago, the vast majority of commercial airline flights are now smoke-free. This paper examines the regulatory and advocacy process that allowed this sea change in the airliner cabin environment to occur. Those seeking smoke-free workplace regulations affecting other venues should view the campaign to eliminate smoking in aircraft as an exemplar of effective advocacy. The tobacco industry also has undoubtedly learned a number of lessons from its failure to defeat these measures, and likely has changed its strategies accordingly.

the timeline for developing studies to contradict mainstream scientific evidence was slow and difficult to speed up.⁶⁹

The above problems, combined with effective advocacy by health interests, resulted in insufficient support for the industry's position among legislators. After the initial federal ban on smoking during flights of less than two hours took effect, the industry could not demonstrate that smokers and other airline passengers wanted the previous system restored. The industry was unable to change the focus of debate to the broader issue of "cabin air quality and ventilation" during the two years between the ban on two hour flights and the near total ban on domestic flights.

Lessons for health advocates

Health advocates' unique success in achieving a near total ban on smoking during airline flights holds several lessons for smoke-free workplace advocacy. One of the most striking aspects of the advocacy was a singularity of focus in the message put forth by health groups. This was an issue that everyone could agree on and push for in the same direction, with very little in-fighting or dissent about the proper legislative remedy.

The effort was aided by the nature of the issue, as much of the general public could identify with the perspective of passengers being annoyed by smoking as well as that of workers being forced to perform their jobs in an unhealthy, unsafe environment. This also holds true for smoke-free workplace regulations generally; when the debate is rightly focused on the core issue of worker health, such policies are more likely to succeed.

Another important property of this policymaking process was its incremental nature. Health advocates began by pushing for smoking and non-smoking sections on US commercial flights, then for bans on smoking during short domestic flights, and finally for completely smoke-free domestic and international flights. Through the years, policies advanced toward providing completely smoke-free air on all flights, and more scientific data became available on secondhand smoke within aircraft specifically. Passengers and policymakers were able to see how easily previous regulations (such as the California law) had been implemented, and draw the obvious conclusion—that it would be reasonable to take the next step in further restricting in-flight smoking.

Finally, health advocates were aided by legislative champions such as then-Representative (now Senator) Dick Durbin and Senator Frank Lautenberg. These adept politicians were able to shepherd bills through Congress as they deflected opponents' attempts to derail the legislation.

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