

**A Health Impact Assessment of the California
Healthy Families, Healthy Workplaces Act of 2008
A Case Study**



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Abstract

This case study reports on a health impact assessment (HIA) of recently introduced California legislation mandating paid sick days for all employees. Conducted in response to demand from legislative sponsors, the HIA synthesized both original and existing qualitative and quantitative evidence. The HIA predicted significant, positive, and credible health impacts from the legislation, including limiting the transmission of common communicable disease in community settings and enabling workers to care for sick dependents and to participate in preventative care. Legislative sponsors successfully used the HIA in communication and advocacy gaining wide media coverage of the research and framing the legislation as a public health matter. These impacts along with subsequent demand for replication of the effort nationally suggest that HIA can provide a vehicle to give value to public health objectives in policy making.

I. Introduction

Wages, benefits, and workplace safety are critical determinants of population health and health inequities.^{1,2} Historically, tragic and avoidable harms resulting from adverse working conditions helped inspire social movements to achieve workplace and environmental safety laws and standards. While progress has been made, there remain opportunities to translate knowledge regarding the health impacts of employment conditions into health protective workplace policy.

Health impact assessment (HIA) is a process that aims to make the health impacts of social decisions visible to policy-makers.³ To accomplish this, HIA uses a systematic approach, a holistic definition of health, diverse research methods and evidence, and the participation of policy stakeholders.⁴ In the United States, HIA has emerged as a new strategy to influence public policies relevant to health and health inequities.^{5,6,7}

Paid sick day policies afford workers the right to paid, job-protected days off to recover from illness and/or to care for sick family members.⁸ Ensuring access to paid sick days thus could help employees recover from illness, use preventative health care services, provide essential care for family members, and prevent transmission of infectious disease in schools and workplaces.

Internationally, at least 145 countries provide short- or long-term paid sick leave to employees;⁹ however, employees in the United States have no such guarantee. Today, 48% of U.S. employees in the private sector do not have access to paid sick days.¹⁰ Substantial disparities in access to paid sick days also exist by occupation and industry. For example, only 15% of food service workers have paid sick days while greater than 80% of workers in “white-collar” occupations have them.¹⁰

In 2006, San Francisco became the first jurisdiction in the nation to mandate the right of all employees to earn and use paid sick days.¹¹ Public health experts testified at legislative hearings on the benefits of the law. Federal legislation that would require businesses with more than 15 employees to provide a total of seven paid sick days a year to all workers is also under consideration. Several states are also considering similar laws.

In 2008, the San Francisco Department of Public Health (SFDPH) and Human Impact Partners (HIP) working with the Labor Project for Working Families conducted a health impact assessment of the California Healthy Families, Healthy Workplaces Act (AB 2716) – a proposed state law requiring that employees working for seven or more days in a calendar year be entitled to accrue at least one hour of paid sick time for every 30 hours worked.⁸ Here we present a case study of the completed HIA. We describe the stages of the HIA process from screening to monitoring, report key HIA findings, provide a brief evaluation of the process and impacts, and generally illustrate how attentiveness to practice principles and procedures in the HIA process appeared to support its value to the policy process. The case study also underscores the critical value of the screening stage in HIA; the ability of researchers to mobilize and synthesize policy-relevant evidence in the absence of a robust literature base; the ability to make reasoned judgments of the future health impacts from this evidence; and, the use of diverse communication tools to translate the HIA into the policy process.

II. Method: The approach of health impact assessment to policy evaluation

HIA is not a single analytic tool but rather a systematic process for selecting, conducting, and communicating an evaluation of a public policy.⁴ The process involves several distinct stages.¹² Screening, the first step in HIA, involves establishing the policy alternatives under evaluation and the value, feasibility, and timeliness of an HIA. Scoping, the second step, involves prioritizing research questions and methods and establishing participant roles, resources, and a timeline for conducting an HIA. The assessment phase produces judgments about health impacts of a policy and recommendations to improve health using available data, qualitative and quantitative analysis, and expert and experiential knowledge. Reporting is the documentation and translation of the HIA process and findings into the policy-making process. Finally, the monitoring step tracks the impacts of the HIA on the policy and the long-term outcomes of the decision on health.

III. Screening: Deciding to conduct the health impact assessment

In this HIA, the screening process was a collaborative endeavor between SFDPH and HIP (henceforth referred to as the “HIA research team”) and the members of the California Work and Family Coalition (“the Coalition”) that supported the Healthy Families, Healthy Workplaces Act. Members of the Coalition first approached SFDPH and HIP seeking to understand the value of an HIA in their legislative effort. Both the Coalition and the HIA research team understood that the legislation had a significant potential to affect health by providing paid sick days to 5.4 million working Californians currently without the benefit.¹³ The Coalition felt they could use an HIA to educate public and private interest groups on the health benefits of paid sick days, inform deliberations of the bill, and motivate the public health sector’s participation in the policy process. The HIA could also inform other state and national paid sick day policy efforts and create awareness of the practice of HIA and social determinants of health among policy-makers and advocates. Collectively, the Coalition, SFDPH, and HIP agreed that an HIA was feasible within the timeline of the legislative process and provided added value despite lack of external funding for significant new data gathering and research.

IV. Scoping: Developing a research agenda and plan

The HIA research team constructed hypothetical scenarios to make explicit the potential pathways between paid sick days and health and to identify research questions and objectives. In the first scenario illustrated in figure 1, an ill worker with paid sick days who takes time off can rest, recover and/or see a doctor, and thereby is able to recover from the illness as quickly as possible. In the second scenario, the ill worker does not take time off and, instead, goes to work sick. At the community level, if the illness is one that is communicable through casual contact and the worker is infectious, this leads to a hazard for co-workers and/or customers (e.g., diners at a restaurant) with whom the worker interacts. Additionally, an ill worker may take longer to recover or a disease can become more severe, which can necessitate even more significant treatment (e.g., increased number of visits to a doctor or increased medication) and/or hospitalization or visits to an emergency room. The worker may also face increased stress levels and/or, as a result of lower productivity, may face a threat of job loss.

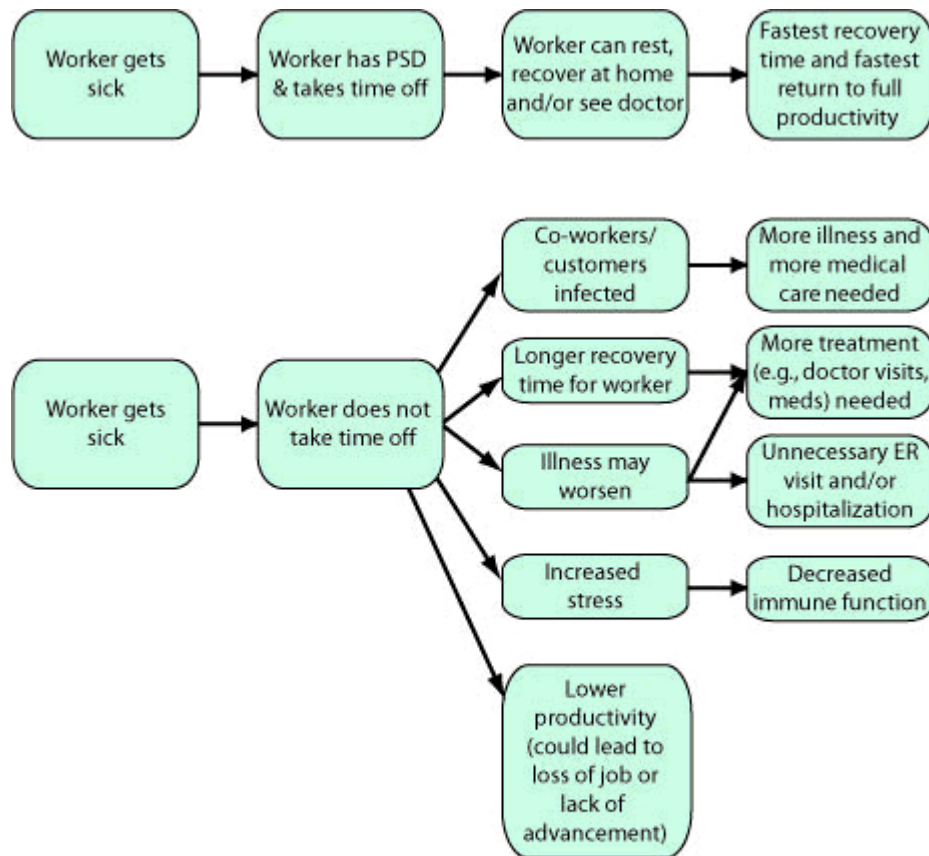


Figure 1: Examples of two hypothetical scenarios that depict the potential pathways linking paid sick days to health outcomes. These and similar hypothetical scenarios were used to develop research questions and objectives.

Collectively, the scenarios developed in the scoping phase suggested that requiring paid sick days could have diverse impacts on health. To focus the evaluation, the HIA research team selected the following primary research questions:

1. What is the availability of paid sick days in relationship to need and health status?
2. Is the availability of paid sick days associated with taking sick days to recover from illness or care for a dependent?
3. What is the effect of paid sick days on recovery from illness, primary care utilization and preventable hospitalizations for workers with and without paid sick days and their dependents?
4. What are the effects of paid sick days on communicable disease transmission in workplaces and other community settings?
5. What are the effects of paid sick days on wage loss, risk of job loss and employer retaliation?

V. Assessment: Key findings and conclusions on the health impacts of paid sick days

The assessment phase of the paid sick days HIA sought to mobilize evidence for or against hypothetical pathways and make an overall judgment about the magnitude, direction, and certainty of health impacts of the proposed policy. The HIA report provides a complete description of the methods and key findings.¹⁴

For each of the questions, the team first reviewed available empirical research. While paid sick days were logically and intuitively linked to a number of health and health care outcomes, we found limited peer-reviewed and empirical research available on paid sick days and health. Still, substantial published indirect evidence was consistent with the hypothesis that paid sick days protect and enable worker health, worker care for sick dependents, and the reduction of communicable disease transmission in community settings. Importantly, no published research suggested that paid sick days would harm the health of workers.

The HIA research team then conducted additional qualitative and quantitative research to supplement the published literature. Methods included a secondary analysis of available data, two focus groups, interviews with public health practitioners and experts, and a short survey with a limited sample of workers. Table 1 briefly describes each method and provides a sample of key findings based on that method.

| Table 1. Research methods used in the paid sick days health impact assessment | |
|--|--|
| Research method | Activities |
| Literature review | Literature review of empirical research studies on the relationship between paid sick days and physical and mental health outcomes, health care utilization, communicable disease transmission, care of family members, and employment retention |
| Secondary data analysis | Prevalence of availability of paid sick days in relationship to occupation, industry, income, health status and household composition Prevalence of communicable diseases and outbreaks Prevalence of preventable hospitalizations |
| Original analysis of existing dataset | Analysis of the California Work and Health Survey |
| Original data collection and qualitative research | Focus groups with California workers without paid sick days Short survey with a limited sample of California workers Interviews with local, state and national public health officials responsible for communicable disease control Interviews with health care utilization researchers |

Table 2 provides research conclusions regarding the magnitude, direction and certainty of health impacts that are predicted to result from the Healthy Families, Healthy Workplaces Act of 2008. The following is a summary of the findings and supporting evidence.

Inequities in access to paid sick days

Data showed striking inequities in access to paid sick days related to income, health status, and health need. For example, 72% of high-wage workers (highest quartile) received paid sick days while

only 21% of low-wage workers (lowest quartile) received the benefit.¹⁰ According to data analyzed by Heymann and others,¹⁵ 40% of mothers whose children had asthma and 36% of mothers whose children had chronic conditions lacked paid sick leave. Based on our analysis of California Work and Health Survey (CWHS) data, among California workers who viewed their health as excellent/very good/good, 24% had no paid sick days; conversely, among workers who viewed their health as fair/poor, 45% had no paid sick days. Clemans–Cope and others found that among low-income working families with children, 30% of children in fair/poor health had family members with access to paid sick leave for the entire year while 37% of children in good, very good or excellent health had family members with access to the benefit.¹⁶

Use of sick leave

Limited but consistent evidence demonstrated that having paid sick days was associated with taking time off work to care for an illness. One survey of U.S. workers found that 42% of employed adults aged 19-64 without paid sick days did not miss work days because of illness as compared to 28% of workers with the benefit.¹⁷ Adjusting for chronic health problems, disabilities, age, factors influencing frequency of periods of illness, the difference was even stronger. California workers with paid sick days took almost a half-day per year more time off to care for themselves than workers without the benefit.¹³ Similarly, an analysis of factors affecting parents' decisions to care for sick children found that parents who had either paid sick or vacation leave were 5.2 times as likely to care for their children when they were sick.¹⁸

Our qualitative research identified several common reasons workers without paid sick days did not call in sick, including the loss of wages, the risk of loss of job, the loss of desirable job shifts, the need to find coverage for or make up shifts, and the fear of supervisor retaliation.

Preventative care, primary care and avoidable hospitalizations

Limited empirical evidence was available to examine the relationship between paid sick days and primary care utilization, and no empirical studies had examined the relationship between paid sick days and preventable or ambulatory care hospitalizations. Two published studies had small sample sizes and we considered them inconclusive.^{20,21} One of the larger national studies found that mothers who could use sick leave for doctor visits had 27% more sick-child visits than those without the benefit.²²

Our analysis of CWHS data found that respondents who did not receive paid sick days were less likely to have had a routine check-up in the past three years and less likely to have seen a doctor in the past year than workers with sick leave. Having paid sick days was associated with doctor visits for those who rated their health good to excellent, but not for those who rated their health as fair to poor, suggesting that access to paid sick days may affect routine and preventative care.

We found no studies that evaluated paid sick days as a risk factor for preventable hospitalizations. Our CWHS analysis demonstrated that people with chronic health conditions had less access to paid sick days, suggesting that lack of the benefit may be a barrier to early and timely outpatient care. Our focus groups did not generally identify the specific value of access to paid sick days when asked about primary care utilization but rather emphasized that sick days and health insurance “go hand-in-hand.”

Communicable disease in community settings

Evidence linking paid sick days to common infectious diseases transmitted through casual contact, such as influenza and viral gastroenteritis, was indirect but persuasive. Only one study had directly evaluated this relationship. That study, conducted in New York State nursing homes in 1993 found that risk of respiratory and gastrointestinal infectious disease outbreaks was significantly less for nursing homes with paid sick leave policies.²³

Evidence in the literature on pandemic flu control suggested that workplace leave to minimize social contacts between people would be highly effective in controlling the spread of influenza. Pandemic influenza modeling studies consistently predicted a reduction in the cumulative incidence of clinical infections with modest measures to reduce contacts among individuals.²⁴ A uniform workplace paid sick leave policy would thus likely support compliance with social distancing strategies.

Evidence also confirmed that a substantial share of foodborne diseases, which are collectively responsible for approximately 76 million illnesses in the United States each year, resulted from contamination of food by food workers at food service establishments such as restaurants and cafeterias.²⁵ In one review, researchers found that 93% of foodborne disease outbreaks involved food workers who were ill either prior to or at the time of the outbreak.²⁶ According to Article 3, Section 113950 of the California Retail Food Code, health departments are required to exclude food handlers from a food facility if he/she was diagnosed with a communicable disease transmissible through food.²⁷ Yet 78% of accommodation and food service workers in the state did not have paid sick days.¹⁰ Case studies illustrated compelling examples of the involvement of restaurant workers in high profile disease outbreaks. For example, in 2006, a restaurant-worker infected over 350 customers with norovirus at a restaurant in Michigan.²⁸

A focus group participant described workplace norms that expected sick workers to either show up for work or to find a replacement, “The staff of the restaurant is pretty big. People have kids. People get sick all the time . . . It gets passed from one person to the next. People cover each other’s shifts and try to help each other out when necessary but there isn’t such a thing as sick leave.”

Wage loss and job loss for workers without paid sick days

Income is one of the strongest and most consistent predictors of poor health and disease in the public health research literature.²⁹ The impact of income on health is mediated in part through material conditions.³⁰ Current gaps between self-sufficiency suggest that even a small loss of income on a monthly basis may lead to health adverse trade-offs between housing, heating and cooling, transport to jobs or schools, food, and health care services.³¹

The minimum wage required for meeting basic needs in California ranges from \$13.62 to \$28.72 per hour depending on family composition.³² In contrast, the average hourly wage of workers without paid sick days is \$15.70, substantially lower than the median wage for California workers (\$17.42).¹³ Analysis of CWSHS data confirmed that workers with no paid sick days found it more difficult to live on their total household income (52%) than workers with some paid sick days (45%). Focus group participants echoed this position; one stated that if “I only work three shifts this week and if I’m like too sick and I can’t make my \$150 that I need. . . I’m totally not paying rent and I definitely can’t buy groceries. . . a lot of times there’s no choice but to keep working. I never call in sick.”

In settings where workers do not have paid sick days, potential employer retaliation, including the threat of job loss, may deter workers from taking time off. One focus group participant discussed how she was made to feel guilty by her employer for taking time off while her children were sick.

Another participant stated she had been laid off after taking time off to take her daughter to the doctor. Another described seeing a co-worker, “someone who worked there for two years,” getting fired because she didn’t show up for a shift.

Table 2. Assessment of HIA health outcomes, judgment of the magnitude of impact, and the quality of the evidence

| Health Outcome | Judgment of Magnitude of Impact ¹ | Quality of Evidence |
|--|--|--|
| <i>Impacts on Worker or Dependent Health</i> | | |
| Taking leave for medical need | ▲▲▲ | Consistent but limited quantitative evidence; supportive qualitative research |
| Taking leave to care for ill dependents | ▲▲▲ | Consistent but limited quantitative evidence; supportive qualitative research |
| Appropriate and timely utilization of primary care | ▲ | Limited supportive evidence |
| Avoidable hospitalization | - | Insufficient evidence |
| <i>Impacts on Community Transmission of Communicable Diseases</i> | | |
| Seasonal or pandemic influenza | ▲▲▲ | Consistent and adequate indirect quantitative research; established authoritative public health guidance |
| Foodborne disease in restaurants | ▲▲ | Consistent sufficient quantitative research; established authoritative public health guidance |
| Gastrointestinal infections in health care facility disease transmission | ▲▲ | Consistent limited research; established authoritative public health guidance |
| Communicable diseases in child care facilities | ▲ | Inadequate empirical evidence; established authoritative public health guidance |
| <i>Worker Economic Impacts</i> | | |
| Loss of income | ▲▲▲ | Sufficient Evidence |
| Job loss | ▲ | Consistent but limited qualitative evidence |

¹This column provides a scale of significance ranging from 0 – 3, where 0 = no impact and 3 = a significant impact. An effect is considered significant if it would affect a large number of people in California and have the potential to create a

serious adverse or potentially life threatening health outcome.

VI. Reporting: Getting the message out

The HIA research team documented the HIA in a report that included a full accounting of the HIA process, participants, research methods, and research findings.¹⁴ The team also produced a 4-page summary that articulated the key findings of the HIA. Cognizant of the limitations of available evidence on paid sick days, we asked public health officials in California to review the findings and judgments of the draft report and incorporated feedback from those officials into the final version. Developing and implementing a communication strategy for the findings of the HIA was a joint effort between the HIA research team and the the Coalition. Collectively, we identified the most compelling and substantiated findings and, with the help of outside experts in communication, developed a set of messages regarding the policy. These key messages included: 1) the policy would benefit the health of all Californians given protections for workers interacting with the public (e.g., retail food, child care, and healthcare workers); 2) there was inconsistency between public health guidance to exclude sick workers from work and the lack of paid sick days benefits that would support workers to comply with such guidance; 3) it was unfair for workers to be forced to choose between their health and their wages; and 4) disparities in paid sick day access existed for those most vulnerable to medical needs.

To communicate the findings, the Coalition engaged the services of a professional firm that organized a conference call with media outlets and produced a radio news feed. The HIA research team also presented results at a press conference held with elected officials one week following the release of the HIA report.

In total, seven local newspapers across California, at least 10 on-line publications and blogs, Spanish-language TV, and both local and national radio reported on the HIA. For the first time, California legislators, including the bill's author, emphasized the legislation's public health rationale in comments to the media.

VII. Monitoring: What happened?

The monitoring stage tracks how the HIA impacted the policy, the policy outcomes and the impact of the policy on health outcomes. After being approved by the State Assembly, the legislation stalled in the Senate Appropriations Committee presumably because budget analysts had identified a large cost to the State to adopt the legislation. Although most State employees already had paid sick days, a large number of state-contracted home healthcare workers did not receive paid sick days benefits, and would have been required to receive them under the legislation. It is likely that lawmakers judged the cost to the State as too high during a time of fiscal crisis. Because the legislation was not passed, it is not possible to assess the impact of the policy on long-term health outcomes. In the discussion section below, we delineate specific impacts of the HIA on the policy process.

VIII. Discussion: Evaluating the paid sick days health impact assessment

Evaluation of HIA is generally concerned with two primary issues: the quality of the HIA process and the impact of the HIA on the policy discourse and decision.^{33,34} Table 3 lists several criteria relevant for evaluation of HIA, and below we delineate how the paid sick days HIA advanced these criteria.

| Table 3. Criteria for evaluating the HIA process and policy impacts | |
|--|---|
| Quality of the HIA process | HIA impacts on the policy process |
| <ul style="list-style-type: none"> ▪ Comprehensive consideration of health determinants ▪ Acknowledgement of stakeholder values ▪ Meaningful role for stakeholders in process oversight ▪ Inclusion of all available evidence ▪ Inclusion of experiential, community and lay knowledge ▪ Explicit judgments of the magnitude and direction of impacts of alternative courses of action of distributional impacts ▪ Acknowledgement of limitations and uncertainties due to evidence and context ▪ Transparency and documentation of process, methods, participants, findings, and assumptions ▪ Process for peer review or public comment | <ul style="list-style-type: none"> ▪ Engagement with decision-makers, opinion leaders or surrogates ▪ Timeliness of dissemination ▪ Uptake of HIA findings in media ▪ Influence on decision-makers opinions ▪ Influences on outcomes—including policy choice, policy design, and mitigations |

We note that the quality of the HIA as a process is not primarily a function of predictive validity and precision of forecasted impacts. Formal validation of future health impact predictions is theoretically possible but practically infeasible as it requires long term monitoring of predicted outcomes, disentangling the decision from other causes of change, and accounting for temporal effects.³⁵

Quality of the health impact assessment process

Overall, the HIA demonstrated several attributes of established HIA practice principles.⁴ The scope of impacts was comprehensive and driven by logic pathways. There was an explicit recognition of impacts of the distribution of paid sick days on inequities. The HIA used diverse sources of evidence, sought peer review of conclusions, explicitly acknowledged the uncertainties in judgments, and provided complete documentation of the process, methods, and findings.

Stakeholders had critical and well-defined roles in the process. The Coalition was the primary decision-maker in the screening process and reviewed the scope. Sponsors and allies supported data collection through recruiting for focus groups and disseminating survey instruments. The HIA research team and supporters of the legislation carefully considered how to frame results in a way that would appeal to a broad audience and influence the legislative process, and importantly, the Coalition took leadership after the completion of the analysis in developing and implementing a communication strategy.

One of the key challenges of the paid sick days HIA resulted from a limited public health literature base. Only a handful of peer-reviewed studies had explored access to paid sick days as a risk factor for disease or health care utilization. Studies were uniformly cross-sectional in design which limited causal inference. The HIA research team utilized indirect support for pathways where possible and conducted original analysis using an existing data set.

Often, the timing of an HIA to meet the needs of a policy process requires a reliance on available evidence and secondary data sources. While it is typically feasible to conduct qualitative focus groups and interviews, it is generally infeasible to initiate and conclude a longitudinal epidemiological study. In some cases, for example, HIAs of air pollution regulations or income policies, substantial evidence exists to support robust and even quantitative predictions in the assessment. Limited research on the social determinants of health may inhibit efforts to conduct HIA on other social and economic policies. To support HIA, public health researchers could utilize intervention studies on policy innovations and could pursue additional empirical research on actionable social determinants of health.

In sum, the HIA process considered a broad range of health determinants in developing research questions, utilized all available and accessible evidence, incorporated qualitative research and experiential knowledge, integrated stakeholders in the assessment process, included a clear judgment of the impacts of the policy on health, provided extensive documentation of the process, methods, participants, and findings, and incorporated both peer review and public comment into the final report. Given the limited evidence and the close association between the legislative advocates and the HIA research team, the team was also careful to identify assumptions and limits and avoid unsupported conclusions.

Health impact assessment impacts on the policy process

There are several barriers to the successful uptake and utilization of knowledge produced through HIA in the policy process. In contrast to environmental impact assessments, HIAs are not institutionalized as components of the policy analysis and decision-making process.⁷ Furthermore, on a day-to-day basis, there is little interaction between public health institutions and policy actors in other sectors. Policy-makers are unfamiliar with HIA, and the centrality of a holistic vision of health in the practice of HIA may challenge social norms and expectations. Finally, the public health community does not typically work in coalitions with social movements advocating for changes in social and economic determinants of health.

For effective communication and translation of results in the decision-making process, HIA proponents need to simultaneously translate not only the findings of an HIA but explain an unfamiliar brand of applied research and generate a constituency to leverage the findings. The timeliness of an HIA, the importance of the policy choice it targets, and engagement and ownership of policy-makers and stakeholders in the HIA process are all critical. Effective HIA practice cannot

occur as an isolated activity within the public health institutions, but needs to engage with other actors to communicate findings and advance goals.

In this case, there was a clear policy target along with a clear legislative timeline. Moreover, the initial demand for the HIA came from supporters of the legislation. Sponsors had the explicit intent to use the HIA to help frame the public dialogue as one that promoted public health. In their view, the public health frame and findings might not only mobilize public health and allied constituencies to take supportive positions on the proposed law but might also appeal to conservative lawmakers less friendly to traditional labor interests. That the sponsors invested substantial resources to develop communication messages and implement a media strategy is one indication of the value of the findings.

While the HIA was instrumental in helping the Coalition communicate a public health rationale for the bill, it had less success in mobilizing the active advocacy support of public health interests and organizations. Some public health professional groups and advocacy organizations wrote letters of support for the legislation but none had a central advocacy presence in legislative activity.

The impacts of the HIA on the actual policy outcome are challenging to judge. While it is infeasible to discern policy-makers positions and the reasons why the legislation failed to pass out of the Senate Appropriations Committee, it is clear that the HIA provided supportive and persuasive evidence that brought significant attention to the legislation's impacts on health. Sponsors intend to revive the bill in the next legislative session. A central focus of the future legislative strategy will be to strengthen the public health arguments and to mobilize stronger support in the public health community.

The paid sick days HIA was distributed widely and has had notable impacts beyond California. Coalitions in other state and local jurisdictions and their member organizations (e.g., Multi-State Working Families Consortium and the National Partnership for Women and Families) have requested HIP to replicate the HIA for these efforts, and HIP has offered to work with local partners to conduct research relevant to the jurisdiction.

For example, working with HIP, the 9 to 5 Coalition in Milwaukee was recently successful in using the California HIA along with Milwaukee-specific data to inform public opinion on a local paid sick day law on the November 4, 2008 ballot. Legislative advocates publicized health facts through the local media and the initiative passed with the support of two-thirds of the votes of Milwaukee residents. Sponsors of a Philadelphia law also utilized testimony provided by HIP in local efforts to pass a paid sick days law.

After completing the CA-specific HIA, HIP and SFDPH went on to conduct an analysis of a national paid sick days bill, the Healthy Families Act of 2009 and HIP continued this work with an HIA of a similar bill in Massachusetts. While these HIAs built upon the research conducted for the California HIA, one significant addition was a new quantitative analysis conducted on the National Health Interview Survey (NHIS). NHIS is an annual cross-sectional household interview survey conducted by the CDC to monitor the health of the U.S. population on a broad range of health topics.

Because NHIS included variables on both paid sick days and health insurance access, and because these variables are so closely linked, we were able to look at the independent effect of paid sick days

on different outcomes, controlling for access to health insurance. Two particularly compelling findings emerging from this analysis were that:

- Among workers with health insurance, those without paid sick days were 15% more likely to use the emergency room for themselves than those without paid sick days.
- And among workers with health insurance, those without paid sick days were almost 40% more likely to delay necessary medical care for themselves or family members than those without paid sick days.

In sum, these findings highlighted that for those who did not have paid sick days (even if they had insurance) they were less likely to visit a doctor, and, more likely to visit a ER.

Building off of this work, HIP then partnered with groups in Maine and New Hampshire, to customize findings of these reports to local jurisdictions, and to collect locally relevant data to analyze the health impacts of paid sick days.

IX. Conclusion

The HIA of the California Healthy Families, Healthy Workplaces Act of 2008 demonstrated the successful inclusion of public health arguments in a policy process not originally defined by health interests. Public health practitioners successfully collaborated with interest groups outside a traditional institutional domain. We were able to make evidence-based conclusions on a legislative proposal in a time-limited period using available literature, secondary analysis of available data, and rapid qualitative methods. Resonance of findings with policy-makers, the enthusiastic use of the HIA by supporters of the legislation, extensive coverage by the media, endorsement of public health officials and organizations, and continuing collaboration with paid sick days efforts nationally all suggest that the paid sick days HIA successfully furthered the inclusion of health considerations in a broader policy dialogue. This HIA provides an important example for the future practice of HIA in the United States.

References

- ¹ Yen IH and Syme SL. The social environment and health: A discussion of the epidemiologic literature. *Annu Rev Public Health*. 1999;20:287-308.
- ² Marmot M, Wilkinson RG. (eds) Social Determinants of Health. 2nd Edition. Oxford: Oxford University Press; 2006.
- ³ World Health Organization. Health impact assessment: Main concepts and suggested approach. Brussels: European Centre for Health Policy, World Health Organization Regional Office for Europe; 1999.
- ⁴ Quigley R, den Broeder L, Furu P, Bond A, Cave B, Bos R. Health Impact Assessment: International Best Practice Principles. Special Publication Series No. 5. Fargo, North Dakota: International Association of Impact Assessment; 2006. Available at: <http://www.iaia.org/modx/index.php?id=74>. Accessed November 17, 2008.
- ⁵ Cole B, Fielding J. Health impact assessment: A tool to help policy makers understand health beyond health care. *Annu Rev Public Health*. 2007;28:393-412.
- ⁶ Dannenberg A, Bhatia R, Cole B, Heaton S, Feldman J, Rutt C. Use of health impact assessment in the United States: 27 case studies, 1999-2007. *Am J Prev Med*. 2008;34:241-256.
- ⁷ Bhatia R, Wernham A. Integrating human health into environmental impact assessment: An unrealized opportunity for environmental health and justice. *Environ Health Perspect*. 2008;116:991-1000.
- ⁸ Healthy Families, Healthy Workplaces Act of 2008. Assembly Bill 2716. State of California. 2008.
- ⁹ Heymann J, Earle A, Hayes J. The work, family, and equity index: How does the United States measure up? Boston, MA/Montreal, QC: Project on Global Working Families. Available at: <http://www.globalworkingfamilies.org/>. Accessed November 17, 2008.
- ¹⁰ Hartmann HI. The Healthy Families Act: Impacts on workers, businesses, the economy and public health. Testimony presented at: Senate Committee on Health, Education, Labor & Pensions; February 13, 2007; Washington, D.C. Available at: http://help.senate.gov/Hearings/2007_02_13/2007_02_13.html. Accessed November 17, 2008.
- ¹¹ San Francisco Office of Labor Standards Enforcement. Paid sick leave ordinance. Available at: http://www.sfgov.org/site/olse_index.asp?id=49389. Accessed November 17, 2008.
- ¹² Joffe M, Mindell J. Health Impact Assessment. *Occupational and Environmental Medicine*. 2005; 62: 907-912.
- ¹³ Lovell V. Valuing good health in California: The costs and benefits of the Healthy Families, Healthy Workplaces Act of 2008. Washington D.C.: Institute for Women's Policy Research; April 2008. Available at: <http://www.paidicksdaysca.org>. Accessed November 17, 2008.

- ¹⁴ Bhatia R, Farhang L, Heller J, Capozza K, Melendez J, Gilhuly K, Firestein N. A Health Impact Assessment of the California Healthy Families, Healthy Workplaces Act of 2008. Oakland, California: Human Impact Partners and San Francisco Department of Public Health; July 2008. Available at: www.humanimpact.org. Accessed November 25, 2008.
- ¹⁵ Heymann SJ, Earle A, Egleston B. Parental availability for the care of sick children. *Pediatrics*. 1996;98:226-30.
- ¹⁶ Clemans-Cope L, Perry CD, Kenney GM, Pelletier JE, Pantell M. Access to and use of paid sick leave among low-income families with children. *Pediatrics*. 2008;122:e480-486.
- ¹⁷ Davis K, Colins SR, Doty MM, Ho A, Holmgren AL. Health and productivity among U.S. workers. Washington, D.C.: The Commonwealth Fund; August 2005. Available at: http://www.commonwealthfund.org/publications/publications_show.htm?doc_id=294176. Accessed November 17, 2008.
- ¹⁸ Heymann SJ, Toomey S, Furstenberg F. Working parents: what factors are involved in their ability to take time off from work when their children are sick? *Arch Pediatr Adolesc Med*. 1999;153:870-4.
- ²⁰ Kneipp SM. The relationships among employment, paid sick leave, and difficulty obtaining health care of single mothers with young children. *Policy Polit Nurs Pract*. 2002;3:20-30.
- ²¹ Gleason RP, Kneipp SM. Employment related constraints: Determinants of primary health care access? *Policy Polit Nurs Pract*. 2004;5:73-83.
- ²² Vistnes JP, Hamilton V. The time and monetary costs of outpatient care for children. *Am Econ Rev*. 1995;85:117-121.
- ²³ Li J, Birkhead GS, Strogatz DS, Coles FB. Impact of institution size, staffing patterns, and infection control practices on communicable disease outbreaks in New York State nursing homes. *Am J Epidemiol*. 1996;143:1042-9.
- ²⁴ Halloran ME, Ferguson NM, Eubank S, et al. Modeling targeted layered containment of an influenza pandemic in the United States. *Proc Natl Acad Sci USA*. 2008;105:4639-44.
- ²⁵ Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. *Emerg Infect Dis*. 1999;5:605-625.
- ²⁶ Guzewich J, Ross MP. Evaluation of risks related to microbiological contamination of ready-to-eat food by food preparation workers and the effectiveness of interventions to minimize those risks. Washington, D.C: Food and Drug Administration; September, 1999. Available at: <http://www.cfsan.fda.gov/~ear/rterisk.html>. Accessed November 17, 2008.
- ²⁷ California Retail Food Code. Available at: http://www.ceha.org/documents/Cal_Code_rev_1_16_07.pdf. Accessed November 25, 2008.
- ²⁸ Centers for Disease Control and Prevention. Norovirus outbreak associated with ill food-service workers—Michigan, January–February 2006. *MMWR Morb Mortal Wkly Rep*. 2007;56:1212-1216.

- ²⁹ Sorlie PD, Backlund E, Keller JB. US mortality by economic, demographic, and social characteristics: the National Longitudinal Mortality Study. *Am J Public Health*. 1995;85:949-56.
- ³⁰ Morris JN, Donkin AJ, Wonderling D, Wilkinson P, Dowler EA. A minimum income for healthy living. *J Epidemiol Community Health*. 2000;54:885-9.
- ³¹ Insight Center for Community Economic Development. How much is enough in your county? The 2008 California family economic self-sufficiency standard. Oakland, CA: Insight Center for Community Economic Development; 2008.
- ³² California Budget Project. Making ends meet: How much does it cost to raise a family in California. Sacramento, CA: California Budget Project; November 2005. Available at: <http://www.cbp.org/pdfs/2005/0509mem.pdf>. Accessed November 25, 2008.
- ³³ Parry JM, Kemm J. Criteria for use in the evaluation of health impact assessments. *Public Health*. 2005;119:1122-1129.
- ³⁴ Quigley RJ, Taylor LC. Evaluating health impact assessment. *Public Health*. 2004;118:544-52.
- ³⁵ Veerman JL Mackenbach JP, Barendregt JJ. Validity of predictions in health impact assessment. *J Epidemiol Community Health*. 2007;61:363-366.