



**Valuing Good Health in California:
The Costs and Benefits of the
Healthy Families, Healthy Workplaces Act of 2008**

Vicky Lovell, Ph.D.

Policy makers across the country are increasingly concerned about the adequacy of existing paid sick leave policies. In addition to concerns about workers' own health, there is growing recognition that, with so many dual-earner and single-parent families, families' health needs can only be addressed by workers taking a break from their scheduled time on the job. Allowing workers with contagious diseases to avoid unnecessary contact with co-workers and customers is a fundamental public health measure. Paid sick days protect workers from being fired when they are too sick to work. And paid sick days policies offer substantial savings to employers by reducing turnover and minimizing absenteeism.

This report uses data collected by the U.S. Bureau of Labor Statistics, the U.S. Department of Health and Human Services, the California Employment Development Department, and the U.S. Census Bureau to evaluate the likely impact of California Assembly Bill No. 2716, the Healthy Families, Healthy Workplaces Act of 2008. The study is one of a series of such analyses conducted by the Institute for Women's Policy Research (IWPR) in the last several years that examine public policy development related to paid sick days. It presents an estimate of how much time off workers would use in California under the proposed legislation and what the costs would be for employers for that sick time. It also employs findings from peer-reviewed research literature to estimate how this leave policy would save money, by reducing turnover, cutting down on the spread of disease at work, helping employers avoid paying for low productivity, holding down nursing-home stays, and reducing norovirus outbreaks in nursing homes.

While this report calculates significant benefits from the sick time proposal, there are likely to be many other meaningful benefits that cannot be measured with existing data. When workers can take needed time off without fear of being fired, they and their families should be able to get health care more promptly when it is needed, leading to improved overall health outcomes, speedier recoveries, and reduced total health-care spending. Fewer workers will be fired, suspended, or otherwise penalized for having to stay home when they are ill or have sick family members to care for; this will improve workers' economic security. The public health impact is also likely to be considerable, as workers with contagious diseases will be better able to avoid infecting others, and parents will not have to send sick children to school or leave them in child-care centers.

Key provisions of the proposed Healthy Families, Healthy Workplaces Act of 2008

- Workers earn one hour of paid sick time for every 30 hours of paid work.
- Workers in firms with more than 10 employees can take up to 72 hours of leave in a calendar year. Those in smaller firms (with 10 or fewer employees) can use up to 40 hours per year.
- Paid sick time may be used for diagnosis or treatment of a worker's or family member's health condition, preventive care, or care and services related to domestic violence or sexual assault.
- Workers begin accruing paid sick time when they are hired and are eligible to use their accrued time on the 90th calendar day of their employment.
- All workers who are employed for at least seven days in a calendar year are covered.

Federal employees working in California, California state employees, and workers in San Francisco already participate in paid sick days programs that meet the requirements of the Healthy Families, Healthy Workplaces Act of 2008 regarding sickness. They may receive new paid time off to respond to domestic violence and sexual assault under the Act. California workers who have paid sick days are already permitted to use a portion of that leave to care for family members and to visit the doctor, although some will receive additional flexibility in using their existing paid leave under the Act.¹

Summary of likely impact of the Healthy Families, Healthy Workplaces Act of 2008²

This estimate assumes that all workers eligible for leave under the new policy would know about their new paid sick days. On the contrary, during the early years of the program, it is very likely that many workers will be unaware of their new leave benefits and thus not take any time off under the new law.³ In particular, workers may not be aware of the multiple uses allowed by the law (see text box, above). Thus, both costs and benefits in the early years of a new program may be considerably lower than these estimates.

¹ California Labor Code Sections 233 and 234.

² This estimate is based on IWPR analysis of several datasets that provide information on workers' current participation in paid sick days programs, their use of those policies for their own illness and injury, their work hours and hourly earnings, and their likely need for paid sick time to care for their families, to receive preventive health care, and to access services related to domestic violence and sexual assault. The basic methodology for this estimate was developed for an evaluation of the Healthy Families Act, as introduced in the 109th Congress in 2005, and has been used to examine paid sick days proposals in Massachusetts, San Francisco, and Washington, DC. The methodology for estimating the benefits of the Healthy Families, Healthy Workplaces Act of 2008 was also initially developed for the evaluation of the national Healthy Families Act; it has been augmented by unpublished analysis from the Institute for Research on Labor and Employment of the University of California Berkeley. Full details of the methodology are presented in Appendix A of this report.

³ It can be very difficult to inform workers of changes in their employment benefits. For instance, three years after California's new paid family leave program went into effect, only a quarter of workers know about their new right to take paid leave (Milkman 2008), despite the requirement that employers notify their employees of their right to paid family leave.

Main research findings regarding the likely impact of the Healthy Families, Healthy Workplaces Act of 2008

- 5.4 million Californians lack paid sick leave – 42 percent of the private-sector and local government workforce outside of San Francisco.
- Workers covered by the Healthy Families, Healthy Workplaces Act of 2008 will use an average of 1.7 days of paid sick time annually for their own medical needs, excluding maternity leave.
- On average, workers will use one day of sick time for family care and doctor visits.
- Half of all workers who now have paid sick days do not take *any* days off for illness in a given year.
- California employers will pay \$1,343 million annually for wages, payroll taxes and payroll-based employment benefits, and administrative expenses (Table 1).
- Savings to employers will total \$2,295 million annually, mainly from reduced costs of turnover.
- Workers and their families will experience lower expenditures for health-care services, saving \$7 million annually.
- The cost per worker per week for covered workers will be \$6.84, and benefits will be \$11.72. Averaged over the entire California workforce, the average weekly per-worker cost will be \$1.89, and benefits will be \$3.23. The net savings will be \$4.88 per worker per week for covered workers, or \$1.35 per worker for week averaged over the state workforce.
- Three in one thousand Californians experience domestic violence in a given year. Their use of the HFHW Act is estimated to cost employers \$1 million per year.

Other likely benefits: In addition to the benefits discussed above, universal paid sick days will likely create many other significant benefits for employers, workers, families, and the broader community. While the data needed to calculate the dollar value of those benefits are not yet available, it is reasonable to anticipate savings from:

1. Improved health outcomes and speedier recoveries for workers and their families.
2. Greater family economic stability from more consistent employment tenure and fewer days off without pay.
3. Fewer workers being fired or suspended for taking needed but unauthorized time off.
4. Increased scheduling certainty for employers when workers can be open about upcoming medical appointments for themselves and their families.
5. Improved workplace morale when all workers feel their employers offer the support they need.

6. Reduced expenditures on public assistance for workers who are fired due to having inadequate paid sick days.

Table 1. Summary of costs and benefits of the Healthy Families, Healthy Workplaces Act of 2008, in 2007 dollars

	Total (millions)	Per worker per week (averaged over California workforce)	Per worker per week (averaged over workers covered by new law)
Costs			
Wages, wage-based benefits, payroll taxes, and administrative expenses for eligible workers who currently have no paid sick days ^a	\$1,343	\$1.89	\$6.84
<i>Benefits</i>			
Reduced turnover	\$2,104		
Reduced pay to ill workers on the job	\$ 127		
Reduced spread of the flu at work	\$ 64		
Reduced short-term nursing home stays	\$ 5		
Reduced norovirus infections in nursing homes	\$ 1		
Total benefits	\$2,302	\$3.23	\$11.72
NET SAVINGS	\$ 959	\$1.35	\$4.88

^a In addition to these workers, some Californians who currently have paid sick days will receive additional days under the Healthy Families, Healthy Workplaces Act. This is not likely to have a significant cost impact, because (1) workers with one year of job tenure who have paid sick days are granted an average of eight days (IWPR analysis of the March 2006 National Compensation Survey), so the majority with paid sick days already meet the HFHW Act standard; and (2) most workers will not use their full allotment of paid sick days. (Excluding maternity and domestic violence, workers are estimated to take an average of 2.5 days of HFHW leave.) For some number of workers, though, these additional days will be very important in addressing health needs and/or domestic violence. Note: Columns may not sum to totals due to rounding.

Funding for this study was provided by the Ford Foundation and the Annie E. Casey Foundation.

The Institute for Women's Policy Research is a scientific research organization dedicated to informing and stimulating the debate on issues of critical importance to women and their families. IWPR focuses on issues of poverty and welfare, employment and earnings, work and family, health and safety, and women's civic and political participation. IWPR, an independent, nonprofit, research organization, also works in affiliation with the graduate programs in public policy and women's studies at The George Washington University.

APPENDIX A

Methodology for Estimating the Cost and Benefits of the Healthy Families, Healthy Workplaces Act of 2008

The number of California workers who will benefit from the proposed policy and the cost and benefits of the proposal are estimated using the following methodology (Appendix Table 1).

Calculations are conducted separately for larger and small firms because the HFHW Act creates different maximum leave standards for the two sizes of firm (nine days used per year in larger firms, and five in smaller ones).

1. How many workers will be affected?

There are nearly 13 million private-sector and local government workers in California, excluding workers in San Francisco (California Employment Development Department 2008). (Federal and state workers in California and all workers in San Francisco already have paid sick days that meet the requirements of the Healthy Families, Healthy Workplaces Act regarding sickness; Office of Personnel Management 2000a and 2000b, California State Personnel Board 2004, San Francisco Office of Labor Standards Enforcement 2008. Under the Act, they may receive new flexibility in using their paid time off to respond to domestic violence and sexual assault.) The share that currently has paid sick days is calculated by industry by the Institute for Women's Policy Research using March 2006 National Compensation Survey microdata for the Pacific region and data on the number of workers in California by industry from the California Employment Development Department. More than five million California workers currently do not have paid sick days (5,417,000).

Some workers who lack paid sick days do have paid vacation leave or general paid time off. This estimate assumes that employers with this kind of leave program will convert their current policy to one that conforms to the Healthy Families, Healthy Workplaces Act, without offering more total days off than they do now.¹ The share of workers covered by vacation and/or paid sick days is calculated by industry by the Institute for Women's Policy Research from March 2006 National Compensation Survey microdata for the Pacific region and data on the number of workers in California by industry from the California Employment Development Department. Nearly four million California workers currently have no paid leave benefits (3,776,000).²

Workers would accrue paid sick days from their date of hire under the Healthy Families, Healthy Workplaces Act of 2008, but employers would not be required to allow workers to use their leave until the 90th day of their employment. Some newly hired workers will either leave their jobs before the 90th day or be terminated before becoming eligible to use their accrued leave. Approximately 10 percent of workers have job tenure of less than three months (Institute for Women's Policy Research calculation of the annual average of monthly new hires, by industry, from the 2007 Job Openings and Labor Turnover Survey), and job turnover among that group is likely to be in the range of two to five

percent (ERC 2006). Thus, this estimate calculates that two percent of workers with less than 90 days of job tenure will not qualify to use their accrued leave.³

2. How many days of paid sick days will workers take?

a. For their own medical needs:

The average number of days of work that are missed for health reasons is calculated for the U.S. workforce by industry and firm size from the 2006 National Health Interview Survey (NHIS).⁴ When workers in small businesses are limited to a maximum of five days of work loss and those in larger businesses to a maximum of nine days of work loss, workers with paid sick days miss an average of 1.8 days annually for illness and injury, excluding maternity leave (IWPR analysis of the 2006 NHIS).⁵ (Those without paid sick days miss an average of 1.4 days annually.)⁶ **Half (49 percent) of all workers who are covered by paid sick days plans do not take any days off for illness or injury in a given year.**⁷

b. For family care:

According to the U.S. Department of Labor's 2000 Family and Medical Leave Act Survey of Employees, **workers take 0.33 days of FMLA-type leave to care for ill children, spouses, and parents for every 1.0 days of own-health leave** (Rutgers University Center for Women and Work 2005).

c. For doctor visits:

Workers with paid sick days visit the doctor an average of 3.3 times per year (IWPR analysis of the 2006 NHIS). These visits may be during or outside of work hours or may already be included in time off due to illness or injury in 2(a) above. For this analysis, the average numbers of doctor visits are calculated by industry from the 2006 NHIS. Each visit is assumed to take 1.0 hours of work-time.⁸

d. For maternity leave:

i. There are 235,000 births each year to women employed in the private sector or local government in California (excluding San Francisco) who currently lack paid vacation and sick leave (IWPR analysis of national data from the 2005-2007 Annual Social and Economic Supplement to the Current Population Survey (ASEC)).

ii. Each of these workers is expected to take the maximum number of paid sick days, using the additional days (beyond those accounted for in paragraphs 2(a) – 2(c), above) for prenatal care or maternity recovery. This report estimates that women employed in larger firms who give birth would use an additional 7.2 days (to their maximum of 9), while those in small firms would use an 3.8 days.

iii. Half the these pregnant workers are assumed to have an employed spouse or partner who would use all their paid sick days to accompany the woman to doctor visits or provide care during her pregnancy.

e. **To respond to domestic violence or sexual assault:**

Victims of domestic violence and sexual assault need time to seek medical care, access law enforcement and judicial proceedings, gain shelter, and address mental health issues as they try to establish safety and care for their families. This can involve seeking a Temporary Protection Order and a Civil Protection Order, accessing counseling, working with case managers, and preparing for criminal or civil trials. While some victims of domestic violence or sexual assault will not need any paid time off work to access services or respond to the violence, others will use their full allotment of paid time off. Lacking any data that indicates how much time on average is required, this estimate assumes that every victim of domestic violence or sexual assault will use all the paid time off provided for by the Act.

Three of every 1,000 Americans are victims of intimate partner violence annually (Rennison 2003).⁹ California has a higher reported crime rate than the national average (U.S. Bureau of Justice Statistics 2008b), so this estimate adjusts the national intimate partner violence rate to 3.3 per 1,000, or 0.33 percent. The rate is applied to the total workforce, as data by victims' industry of employment is not available.

3. How much are workers paid?

Average hourly wages and average daily work-hours are calculated by industry for the California private-sector and local government workforce using the 2005-2007 ASEC.

4. What other costs will employers incur?

a. Employers pay certain benefits and taxes as a percent of their payroll: retirement contributions and legally mandated payroll taxes (the employer's share of Social Security and Medicare taxes, plus federal and state unemployment insurance taxes and workers' compensation).¹⁰ These costs are calculated by industry from the 2007 Employer Costs for Employee Compensation survey (U.S. Bureau of Labor Statistics 2008a).

b. Administrative expenses are estimated at 1.8 percent of wages. This is one-third the average ratio of administrative costs to benefit payments for state Temporary Disability Insurance programs (TDI) in California, New Jersey, and Rhode Island (U.S. Social Security Administration 2007). TDI is somewhat similar to paid sick days in that both relate to workers' illness-related work absence, but TDI is more complex, involving collection of payroll taxes, evaluation of medical disability, tracking of health status, and long-term benefit periods. It is likely that administration of a state-wide TDI program is more expensive than an employer's costs for running a paid sick days policy.

Appendix Table 1. Estimated cost of the Healthy Families, Healthy Workplaces Act of 2008

Cost factor	Value	Notes / Source
Number of California private-sector and local government workers who currently lack paid leave	In larger firms: 3,046,000 In small firms: 731,000	IWPR analysis of California Employment Development Department 2008, the March 2006 National Compensation Survey, and the 2007 Job Openings and Labor Turnover Survey.
Average number of days of paid sick days workers will take per year for their own health needs, family care, and doctor visits	Varies by industry and firm size, from 1.5 to 3.8	IWPR analysis of the 2006 National Health Interview Survey and Rutgers University Center for Women and Work 2005.
Additional days taken by pregnant employed women and their partners, to bring their use to the maxima provided for in the proposal	235,000 employed women give birth in California annually	IWPR analysis of the 2005-2007 ASEC.
Additional days taken by domestic violence victims	0.33 percent of adults experience domestic violence each year	Rennison 2003; U.S. Bureau of Justice Statistics 2008b.
Average hourly wage	Varies by industry and firm size	IWPR analysis of the 2005-2007 ASEC.
Cost of benefits and payroll taxes as share of hourly wage	Varies by industry	U.S. Bureau of Labor Statistics (2008).
Administrative expenses	1.8 percent of wages	U.S. Social Security Administration (2007).
Total	\$1,343 million	

This estimate does not include any costs to employers for replacing workers who are taking paid sick days. For one thing, these costs will be the same whether a worker is on unpaid or paid leave, so providing wage replacement when a worker is too sick to be on the job does not generate any new replacement costs. Second, hiring of temporary workers is likely to be relatively uncommon for the short leaves possible under the proposed paid sick days plan. As a comparison, for longer absences under the federal Family and Medical Leave Act, where leaves may total 12 weeks in a year, only 13 percent of leave-takers report that a replacement worker was hired to fill in for them during their leave (Cantor et al. 2001, Table A2-6.7). It is much more common for work to be covered by other employees or held for the absent worker to address when back on the job.

BENEFITS OF THE PROPOSED PAID SICK DAYS POLICY

Ensuring that workers have paid time off work when needed to take care of their own health needs or those of members of their families is likely to lead to improved health outcomes for workers and their families (Lovell 2004). Better health outcomes will reduce health-care expenditures and increase quality of life.

While there is solid theoretical work suggesting the nature of these benefits, in some cases there is no specific empirical data for valuing a benefit. This report presents an estimate of several benefits of paid sick days and discusses other likely benefits. Future research may provide measures of these benefits that can be added to those analyzed here.

Cost savings #1: Reduced voluntary job turnover

What we can estimate: Having paid sick days reduces voluntary job mobility by three to six percentage points (the effect varies by sex and marital status; Cooper and Monheit 1993).¹¹ Because workers value paid sick days, when they have that benefit, they are less likely to look for a different job. Workers who experience a health-care crisis are also more likely to return to their employer if they have a paid leave policy – more than twice as likely, in the case of women with heart disease (Earle, Ayanian, and Heymann 2006).

If all California employers provide paid sick days, this effect on voluntary turnover may be reduced, since workers considering a job change will have paid sick days both at their current job and at their potential new job. Having paid sick days in a current job may increase worker loyalty to the current employer, however, or reduce work/life conflict, even if the same benefit would be offered by any other employer. Since changing jobs is somewhat costly and risky for workers, even a universal paid sick days policy is likely to strengthen the attachment between workers and their current employers.

Other impacts that cannot be measured: Having paid sick days also affects involuntary turnover, by protecting workers from being fired for unauthorized work absences when they are sick or must care for sick family members (Heymann 2000, Earle and Heymann 2002). Seven percent of women's job separations are responses to health issues, and another 15 percent concern other family or personal reasons (Emsellem, Allen, and Shaw 1999). We lack data for accurately estimating the savings related to lowered involuntary turnover that would flow from the paid sick days proposal. Any overestimation in savings from voluntary turnover in this analysis will most likely be more than offset by savings in employer expenses from reduced involuntary turnover.

Why turnover is expensive for employers: Turnover entails a variety of costs for employers, of which actual outlays to recruit a new worker are only a small portion. Low productivity of new hires, drains on the productivity of the new worker's colleagues and supervisors, human resources processing time for exit and entry, training, and lost productivity during vacancies are also real costs to employers (Phillips 1990). A newly hired low-paid retail worker may lose sales—and customers—during the period the employee is learning about the employer's products, and may mistakenly undercharge for products (Johnson and Tratensek 2001).

Careful analyses of the range of impacts associated with turnover provide guidance on the true costs to employers. Phillips (1990) reports that replacing a mid-level manager costs 1.5 times the worker’s annual salary. An estimate by Johnson and Tratensek (2001) pegs the cost of turnover of retail workers earning \$7 an hour at \$6,241, or 43 percent of their annual pay. A study of the costs of replacing front-desk associates at two hotels in New York found total turnover costs of 28 percent and 31 percent of annual compensation (Hinkin and Tracey 2000).

A widely cited rubric for calculating turnover costs places them at 25 percent of total annual compensation (Employment Policy Foundation 2002). This figure is used in this analysis to estimate employers’ savings under the Healthy Families, Healthy Workplaces Act from reduced turnover: \$2,104 million per year (Appendix Table 2).

Appendix Table 2. Cost savings from reduced turnover

Cost factor	Value	Notes / Source
Number of California private-sector and local government workers who currently lack paid leave	In larger firms: 3,046,000 In small firms: 731,000	IWPR analysis of California Employment Development Department 2008, the March 2006 National Compensation Survey, and the 2007 Job Openings and Labor Turnover Survey.
Percentage point reduction in voluntary turnover when paid sick days are provided	5.0	IWPR calculation of weighted average from Cooper and Monheit (1993), based on Lovell (2005)
Cost of turnover	25 percent of total compensation	Employment Policy Foundation (2002)
Average hourly wage, workers who lack paid sick days	\$15.70	IWPR analysis of the 2005-2007 ASEC.
Wages as percent of total compensation	69.8 percent	U.S. Bureau of Labor Statistics (2008a).
Total	\$2,104 million	

Cost savings #2: Wages currently paid to workers with low productivity

Employers pay substantial wages to employees who are unproductive because of health issues. Goetzel et al. (2004) estimate the average total annual productivity loss, per employee, for the top 10 most costly health conditions at between \$1,566.63, using average productivity loss estimates, and \$217.07, using low productivity loss estimates (in 2001 dollars; from Table 4A).

Empirical studies document that workers with influenza have worse performance on a variety of tasks than healthy workers. A study that used random assignment of experimentally induced colds and influenza found that “minor illnesses . . . have significant effects on performance efficiency” during both incubation and symptomatic periods (Smith 1989, 68). A follow-up study discovered that performance impairment continues even after clinical symptoms have ended (Smith 1990).

Workers without paid sick days miss an average of 0.4 fewer days due to illness and injury than workers with paid sick days, when constrained to the maximum provided for in the Healthy Families, Healthy Workplaces Act (IWPR analysis of the 2006 NHIS). Other research suggests that productivity during this extra time at work is only 50 percent of normal (Nichol 2001). The total cost to employers of this unproductive time, in terms of wages and associated payroll taxes, is \$127 million per year (Appendix Table 3).

Appendix Table 3. Cost savings from not paying ill workers for unproductive time on the job

Cost factor	Value	Notes / Source
Number of California private-sector and local government workers who currently lack paid leave	In larger firms: 3,046,000 In small firms: 731,000	IWPR analysis of California Employment Development Department 2008, the March 2006 National Compensation Survey, and the 2007 Job Openings and Labor Turnover Survey.
Lost productivity currently paid	0.4 days at 50 percent effectiveness	IWPR analysis of the 2006 NHIS; Nichol (2001).
Average hourly wage, workers who lack paid sick days	\$15.70	IWPR analysis of the 2005-2007 ASEC.
Average daily work-hours, workers who lack paid sick days	7.3	IWPR analysis of the 2005-2007 ASEC.
Cost of benefits and payroll taxes as share of hourly wage	Varies by industry	U.S. Bureau of Labor Statistics (2008a).
Total	\$127 million	

Cost savings #3: Reduced spread of the flu within workplaces; reduced overall absence and lowered productivity

Employers are increasingly aware of the cost of the spread of disease within workplaces that occurs when sick employees go to work, a practice known as presenteeism. Two of every five employers identify presenteeism as a problem for their organization (CCH Incorporated 2004a). As Dr. Richard Chaifetz notes, presenteeism can lead to “the spread of illness for an even greater reduction in productivity” than would be caused by an individual worker’s absence (ComPsych 2004). Firms with low employee morale are more likely to experience presenteeism than those with better morale (CCH Incorporated 2004b).

Empirical research has documented the widely suspected link between presenteeism and contagion within workplaces. Li, Birkhead, Strogatz, and Coles (1996) find lower rates of respiratory and gastrointestinal infection among nursing home residents when nurses have paid sick days, demonstrating that the spread of disease is diminished (at least in workplaces involving intimate physical contact) when ill workers can stay home. Potter et al. (1997) report reduced disease and mortality among patients in long-term care hospitals when health-care workers are vaccinated against influenza.

Because influenza (the flu) is highly contagious and accounts for 10 to 12 percent of all illness-related employment absences—about the same portion as musculoskeletal disorders (Keech, Scott, and Ryan 1998)—the impact of paid sick days on transmission of the flu virus is likely to be the largest consequence of increased paid leave on the spread of disease in the workplace. Longini, Koopman, Haber, and Cotsonis (1988) estimate the probability of an individual contracting influenza from community contacts at 16.4 percent and from an infected household member at 26.0 percent. Islam, O’Shaughnessy, and Smith (1996) calculate the probability of an individual catching an infection from community contacts during a flu epidemic at 0.168;¹² intra-household disease transmission probabilities per cohabitant are a bit higher (mean of 0.177). These transmission rates suggest that a sick worker who is in the workplace while contagious is likely to infect 1.8 of every 10 co-workers.

By a low estimate, 5 percent of healthy working adults will get the flu in a given flu season (Nichol 2001). Studies find that workers with the flu miss one to five days of work (Nichol 2001). Half of employees out sick with the flu are attended by a caregiver, with an average work-loss of 0.4 days per caregiver (Keech, Scott, and Ryan 1998).

Workers with the flu also incur costs for doctor visits (45 percent seek medical care; Nichol 2001), hospitalizations (four hospitalizations per 10,000 flu cases; Nichol 2001), and purchase of prescription and non-prescription medications and other treatments (Kavet 1977). In addition, the flu kills one in every 100,000 infected individuals (Nichol 2001).

These factors are combined with workforce data to estimate savings under the Healthy Families, Healthy Workplaces Act from reduced spread of the flu in workplaces (Appendix Table 4). Detailed data are not available to estimate savings from other contagious diseases (see text box), although they would without doubt be significant.

Appendix Table 4. Cost savings from reduced spread of the flu within workplaces

Cost factor	Value	Source
Employers’ wage costs		
Number of California private-sector and local government workers who currently lack paid leave	In larger firms: 3,046,000 In small firms: 731,000	IWPR analysis of California Employment Development Department 2008, March 2006 National Compensation Survey, 2007 Job Openings and Labor Turnover Survey.
Influenza illness rate	5 percent	Nichol (2001), Table 6
Contagion rate (each co-worker’s chance of contracting the flu)	18 percent	Islam, O’Shaughnessy, and Smith (1996).
Assumed number of close daily work contacts	5 co-workers	
Number of missed workdays per infected co-worker	2	Nichol (2001).

Number of missed workdays for employed caregivers of ill workers	50 percent of flu-stricken workers receive care; average of 0.4 lost workdays per caregiver	Keech, Scott, and Ryan (1998).
Lost productivity for infected co-workers on return to work	0.5 days at 50 percent productivity	Nichol (2001).
Average hourly wage, workers who lack paid sick days	\$15.70	IWPR analysis of the 2005-2007 ASEC.
Average daily work-hours, workers who lack paid sick days	7.3	IWPR analysis of the 2005-2007 ASEC.
Cost of benefits and payroll taxes as share of hourly wage	Varies by industry	U.S. Bureau of Labor Statistics (2008a).
Subtotal	\$56 million	
Workers' medical costs		
Doctor visits for infected co-workers	45 percent of ill workers, at average cost of \$60	Nichol (2001), BlueCross BlueShield of Texas n.d.
Prescription drugs	42 per 100 ill workers, at average cost of \$53	Kavet (1977), Kaiser Family Foundation webtool (2005).
Subtotal	\$8 million	
Total	\$64 million	

The Cost of Other Contagious Diseases

The flu is the only contagious disease for which accurate data could be located on transmission rates, work absence, and treatment costs. A comprehensive accounting for the spread of all relatively common contagious diseases—including, e.g., colds, mononucleosis, strep, and pink-eye—would certainly be much higher. In addition, costs related to work absence and health-care use that result from the spread of disease in child-care settings when parents cannot keep their sick children home are not calculated here.

Cost savings #4: Reduced expenditures for short-term nursing home stays

Workers with the flexibility to provide informal care for elderly, disabled, and medically fragile relatives may be able to reduce expenditures for health care, including paid care at home or in nursing homes that might otherwise be financed by Medicaid or Medicare. Certainly, individuals consider the level of informal care available to them in decisions about purchasing formal care. When adult children increase their hours of informal care for their single parents, the likelihood of purchasing home health care and nursing home services decreases, and lengths of stays in nursing homes and hospitals are reduced (Van Houtven and Norton 2004). (Because informal care may increase elders' ability to navigate the health care system, informal care increases hospital stays, outpatient surgery, and physician visits.) A 10 percent increase in the number of

hours of informal care provided to individuals aged 70 and older reduces the probability of entering a nursing home by 0.77 percentage points, from 8.6 to 7.83 (Van Houtven and Norton 2004). Elderly patients discharged from acute care wards return home at higher rates if they have children, rather than moving to a lower-level care facility of the hospital (McClaran, Berglas, and Franco 1996). Unmarried and childless individuals are more likely to enter nursing homes than others (Freedman 1993), as they less often have an informal caregiver to help them return home.

With nearly 9 million full-time workers providing care to adults aged 50 and older (IWPR calculation from National Alliance for Caregiving and AARP 2004), nearly 1.5 million nursing facility patients at any one time (American Health Care Association n.d.), or roughly 2.7 nursing home admissions per year (IWPR calculation from Mehdizadeh and Applebaum 2003, Table 1)—78 percent paid for by Medicare or Medicaid (AHCA n.d.)—and average annual per-patient costs of \$58,000 (MetLife 2004), savings to families and taxpayers from reduced nursing home utilization could be substantial. An even larger number of elderly individuals receive paid care at home (Lo Sasso and Johnson 2002). This group may be particularly affected by their adult children’s work hours flexibility—having a child who can respond to medical crises may mean the difference between staying at home and transitioning to assisted living or nursing home facilities.

Preventing short-term nursing home care of medically frail individuals saves money for families and taxpayers and leads to better health outcomes for the individuals themselves. Recognizing this, the government has stated that “preventing premature institutionalization is a major public health goal” (Sahyoun et al. 2001).

Savings from reduced short-term nursing home stays are estimated in Appendix Table 5.

Appendix Table 5. Cost savings from reduced short-term nursing home stays

Cost factor	Rate	Source
Number of caregivers of adults aged 50 and older employed full-time in California	1,783,000	IWPR calculation based on National Alliance for Caregiving and AARP (2004), Tables 2 and 5, and state-level population data.
Average number of care recipients per caregiver	0.5	IWPR calculation based on Kramarow et al. (1999)
Percent of California workers with no paid leave	29.1	IWPR analysis of California Employment Development Department 2008, March 2006 National Compensation Survey, and 2007 Job Openings and Labor Turnover Survey.
Estimated length of nursing home stay averted with paid sick days	1 day per care recipient	
Average cost of one day of nursing home stay, semi-private room	\$177	MetLife (2004).
Total	\$5 million	

Cost savings #5: Reduced expenditures for treating victims of norovirus outbreaks in nursing homes

Paid sick days that allows ill workers to stay home can have very important public health impacts, by limiting the spread of contagious diseases. Data are not yet available to measure most of this kind of benefit of paid sick days. One that can be calculated is the cost of health care for nursing home residents and staff who contract norovirus. The estimate of those costs for California are described in Appendix Table 6.

Appendix Table 6. Cost savings from reduced norovirus outbreaks in nursing homes

Cost factor	Value	Source
Annual number of nursing homes in California that experience a norovirus outbreak	150	2004 California Department of Public Health Surveillance (mid-range number).
Relative risk of experiencing an outbreak between homes with paid sick days and homes without paid sick days	0.38	Li et al. (1996)
Share of nursing home workers with access to paid sick days (nationally)	73 percent	IWPR analysis of the March 2006 National Compensation Survey.
Number of outbreaks that would be avoided if all nursing home workers had paid sick days	45.7	
Average size of nursing homes (beds)	108	CDC National Nursing Home Survey (2004) (weighted average).
Average occupancy of nursing homes	0.95	2004 California Department of Public Health Surveillance data.
Average ratio of staff to residents	0.71	CDC National Nursing Home Survey (2004).
Attack rate for norovirus	0.30	California Department of Public Health; CDC 2003.
Total number of staff and residents who will become ill with norovirus annually and who would have avoided illness if their homes had paid sick days	2,405	
Percent of norovirus victims who will require hospitalization	0.10	Calderon-Margalit (2005).

Cost of treatment (varies between staff and residents; between those requiring hospitalization vs. out-patient treatment; and by payer)	Varies	KFF State Health Facts; Case et al. (2002); Harris-Kojetin et al. (2004); California Medical Assistance Commission Annual Report to the Legislature in 2007; Xiao et al. (2004); Prospective Payment Assessment Commission, Optional Hospital Payment Rates, Congressional Report No. C-92-03; Medi-Cal rates 2008; Kaiser Northern California rates.
Total medical costs	\$1 million	

Source: Unpublished analysis by Korey Capozza, MPH, Institute for Research on Labor and Employment, University of California Berkeley, March 2008.

Other benefits to measure when needed data become available

While data are currently lacking to calculate the economic impact of all the consequences of workers not having adequate paid sick days, it is certain that there are many others, in addition to those discussed above, that do impose costs on workers, their families, employers, taxpayers, and society as a whole. Eliminating these costs thus confers benefit on society. They include the following:

1. Additional impacts of presenteeism on employers and workers

a. Health care expenditures for workers who are sick longer because they are unable to recuperate at home: extra expenditures for workers and firms. Without adequate time to regain health, minor medical problems may be exacerbated (Grinyer and Singleton 2000), eventually requiring longer work absence and/or increased treatment costs.

b. Cost to employers of scheduling uncertainties (e.g., from workers who call at the start of their shifts to say they're ill, when they knew the previous day they would have to stay home with a sick child).

c. Improved morale and resultant productivity; impacts on co-workers and customers. Enhanced worker loyalty and job satisfaction related to having adequate paid time off may translate into gains for employers through improved customer relations. In addition, "if ill health results in more accidents or increased errors, all who explicitly or even implicitly interact with unhealthy employees can become less productive" (Greenberg, Finkelstein, and Berndt 1995, 36).

2. Health and health care utilization impacts on family members when workers cannot provide care

Keeping children at home when they have contagious diseases like the flu can prevent illness and work absence among their schoolmates' parents. Because "children are more susceptible to influenza, carry and spread the influenza virus over a longer period of time than adults, and are often the first to get the infection in the community" (King 2004), preventing children from being disease vectors in school and child-care settings can significantly reduce workplace absence and productivity effects among adults.

Children have better short- and long-term health outcomes when they are cared for by their parents (Palmer 1993); hospital stays are shorter when parents are involved in care (Kristensson-Hallstrom, Elander, and Malmfors 1997). With increased flexibility in attending to sick children, paid sick days are likely to reduce treatment costs and overall length of illness.

Heart attack survivors who perceive that they receive adequate tangible social support have decreased mortality rates and better overall health outcomes than those perceiving inadequate levels of tangible social support (Woloshin et al. 1997). Being married or having children (even if not living nearby) reduces the length of hospital stays for elderly patients in acute care wards (McClaran, Berglas, and Franco 1996). Stroke victims have better functional and social outcomes when they receive high levels of family social support, and are more likely to receive nursing home care if they have low levels of support (Tsouna-Hadjis et al. 2000). Workers with the flexibility provided by paid sick days may be able to positively affect the health status of their relatives with coronary disease and other chronic medical conditions by being more able to provide timely care.

3. Other impacts on families when workers cannot take time needed to provide care

When parents cannot stay home to care for sick children, older siblings may be kept out of school to care for their younger siblings (Dodson and Dickert 2004). These school absences may affect school performance and have long-range impacts on the older children's education and work productivity.

Informal caregivers whose work schedules are incompatible with the care needs of their relatives may decrease their work hours or even leave the labor force completely (Stone and Short 1990). Paid sick days may provide sufficient leave to many caregivers to allow them to maintain their desired level of employment while continuing to perform their caregiving work as well.

4. Lost wages of workers suspended for missing work without authorization when they are sick or a family member needs care (Dodson, Manuel, and Bravo 2002), workers fired for missing work without authorization when they are sick or a family member needs care (Browne and Kennelly 1999; Dodson, Manuel, and Bravo 2002)

5. Reduced expenditures on public assistance of workers who lose their jobs due to having inadequate paid sick days. (For instance, 8.7 percent of workers who take an FMLA-type leave and do not receive their full wages during the leave turn to public assistance for support (Cantor et al. 2001, Table A1-4.8).)

6. Increased financial stability and economic well-being of families when their incomes are not interrupted by unpaid leave.

7. The value of workers and their family members feeling better because they're in better health (improved quality of life).

References

- American Health Care Association. N.d. *Nursing Facility Patients by Payor*.
<http://www.ahca.org/research/oscar/pt_payer_200412.pdf> (March 16, 2005).
- Blue Cross and Blue Shield of Texas. N.d. *Health Care Fact Sheet: Doctor's Office vs. E.R.*
<http://www.bcbstx.com/employer/hccc/8710_685_503.doc/> (April 18, 2005).
- Browne, Irene, and Ivy Kennelly. 1999. "Stereotypes and Realities: Images of Black Women in the Labor Market." In *Latinas and African American Women at Work: Race, Gender, and Economic Inequality*, Irene Browne, ed., pp. 302-326. New York: Russell Sage Foundation.
- Calderon-Margalit, Ronit. 2005. "A large-scale gastroenteritis outbreak associated with Norovirus in nursing homes." *Epidemiology and Infection* 133(1): p. 35-40.
- California Employment Development Department. 2008. *LaborMarketInfo*.
<<http://www.labormarketinfo.edd.ca.gov>> (February 17, 2008).
- California Medical Assistance Commission Annual Report to the Legislature in 2007. 2007.
<<http://www.cmac.ca.gov/files/annualreport2k7.pdf>> (April 7, 2008).
- California State Personnel Board. 2004. *Compensation and Benefits*.
<<http://www.spb.cva.gov/employment/benefits.htm>> (July 23, 2006).
- Cantor, David, Jane Waldfoegel, Jeffrey Kerwin, Mareena McKinley Wright, Kerry Levin, John Rauch, Tracey Hagerty, and Martha Stapleton Kudela. 2001. *Balancing the Needs of Families and Employers: Family and Medical Leave Surveys*. Washington, DC: U.S. Department of Labor <<http://www.dol.gov/asp/fmla/main2000.htm>> (January 20, 2001).
- Case, Brady, David Himmelstein, and Steffie Woolhandler. 2002. "No Care for the Caregivers: Declining Health Insurance Coverage for Health Care Personnel and Their Children, 1988-1998." *American Journal of Public Health* 92(3): 404-8.
- CCH Incorporated. 2004a. "Unscheduled Absenteeism Rises to Five-Year High." *Human Resources Management Ideas & Trends* Issue No. 592: 145-148.
- , 2004b. "Flu Vaccination Shortage Means Employers Should Take Special Steps to Combat 'Presenteeism'." *Human Resources Management Ideas & Trends* Issue No. 593.
- Centers for Disease Control and Prevention. 2003. "Norovirus activity--United States, 2002." *Morbidity and Mortality Weekly Report* 52(3): 41-45.
- , 2004. *U.S. National Nursing Home Survey*. <<http://www.cdc.gov/nchs/nnhs.htm>>.
- , N.d. *CDC Technical Fact Sheet About Norovirus*.
<<http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus-factsheet.htm>> (April 8, 2008).
- ComPsych. 2004. *Vast Majority of Employees Work While Sick, According to ComPsych Survey*. Press Release. Chicago: ComPsych. March 8. <<http://www.compsych.com>> (March 17, 2005).
- Cooper, Philip F., and Alan C. Monheit. 1993. "Does Employment-Related Health Insurance Inhibit Job Mobility?" *Inquiry* 30 (Winter): 400-416.

- Dodson, Lisa, and Jillian Dickert. 2004. "Girls' Family Labor in Low-Income Households: A Decade of Qualitative Research." *Journal of Marriage and Family* 66 (May): 318 – 332.
- Dodson, Lisa, Tiffany Manuel, and Ellen Bravo. 2002. *Keeping Jobs and Raising Families in Low-Income America: It Just Doesn't Work*. Cambridge, MA: Radcliffe Institute for Advanced Study.
- Earle, Alison, and S. Jody Heymann. 2002. "What Causes Job Loss Among Former Welfare Recipients: The Role of Family Health Problems." *Journal of the American Medical Women's Association* 57 (Winter): 5 – 10.
- Earle, Alison, John Z. Ayanian, and Jody Heymann. 2006. "Work Resumption after Newly Diagnosed Coronary Heart Disease: Findings on the Importance of Paid Leave." *Journal of Women's Health* 15(4): 430-441.
- Employment Policy Foundation. 2002. "Employee Turnover – A Critical Human Resource Benchmark." *HR Benchmarks* (December 3): 1-5 (www.epf.org, January 3, 2005).
- Emsellem, Maurice, Katherine Allen, and Lois Shaw. 1999. *The Texas Unemployment Insurance System: Barriers to Access for Low-Wage, Part-Time & Women Workers*. New York, NY: National Employment Law Project.
- ERC. 2006. *New Hire Turnover and Outsourcing Recruiting*.
<<http://www.ercnet.org/research/studies/06%20New%20Hire%20Turnover%20and%20Outsourcing%20Survey%20Results.pdf>> (March 25, 2008).
- Expedia.com. 2007. *2007 International Vacation Deprivation Survey Results*.
<http://media.expedia.com/.../promos/vacations/Expedia_International_Vacation_Deprivation_Survey_Results_2007.pdf (accessed March 28, 2008).
- Freedman, Vicki A. 1993. "Kin and Nursing Home Lengths of Stay: A Backward Recurrence Time Approach." *Journal of Health and Social Behavior* 34 (June): 138-152.
- Goetzel, Ron Z., Stacey R. Long, Ronald J. Ozminkowski, Kevin Hawkins, Shaohung Wang, and Wendy Lynch. 2004. "Health, Absence, Disability, and Presenteeism Cost Estimates of Certain Physical and Mental Health Conditions Affecting U.S. Employers." *Journal of Occupational and Environmental Medicine* 46 (April): 398-412.
- Greenberg, Paul E., Stan N. Finkelstein, and Ernst R. Berndt. 1995. "Economic Consequences of Illness in the Workplace." *Sloan Management Review* 36 (Summer): 26-38.
- Grinyer, Anne, and Vicky Singleton. 2000. "Sickness Absence as Risk-Taking Behavior: A Study of Organizational Culture Factors in the Public Sector." *Health, Risk and Society* 2 (March): 7 – 21.
- Harris-Kojetin, Lauren, Debra Lipson, Jean Fielding, Kristen Kiefer and Robyn I. Stone. 2004. *Recent Findings on Frontline Long-Term Care Workers: A Research Synthesis 1999-2003*. Washington, DC: U.S. Department of Health and Human Services
<http://aspe.hhs.gov/daltcp/reports/insight.pdf> (April 8, 2008).
- Heymann, Jody. 2000. *The Widening Gap: Why America's Working Families Are in Jeopardy and What Can Be Done About It*. New York: Basic Books.
- Hinkin, Timothy R., and J. Bruce Tracey. 2000. "The Cost of Turnover: Putting a Price on the Learning Curve." *Cornell Hotel and Restaurant Administration Quarterly* 41(3): 14-21.
- Islam, M. N., C. Dennis O'Shaughnessy, and Bruce Smith. 1996. "A Random Graph Model for the Final-Size Distribution of Household Infections." *Statistics in Medicine* 15 (April 15 – May 15): 837-843.
- Johnson, Walter E. and Dan M. Tratensek. 2001. "Employee Turnover." *Do-It-Yourself Retailing* 180 (June).

- Kaiser Family Foundation. 2005. *Average Price of Retail Prescriptions Filled, 2003*.
<<http://www.statehealthfacts.org>> (April 18, 2005).
- , 2006. *Distribution of Certified Nursing Facility Residents by Primary Payer Source, 2006*.
<<http://www.statehealthfacts.org/comparebar.jsp?ind=410&cat=8>>.
- Kavet, Joel. 1977. "A Perspective on the Significance of Pandemic Influenza." *American Journal of Public Health* 67 (November): 1063 – 1070.
- Keech, M., A. J. Scott, and P. J. J. Ryan. 1998. "The Impact of Influenza and Influenza-Like Illness on Productivity and Healthcare Resource Utilization in a Working Population." *Occupational Medicine* 48 (February): 85 – 90.
- King, James C. 2004. Quoted in *Study Shows School-Based Nasal Influenza Vaccinations Significantly Reduce Flu-Related Costs in Families*. Press Release. University of Maryland Medical Center, May 25. <<http://www.umm.edu/cgi-bin/printpage.cgi>> (March 17, 2005).
- Kramarow, E., H. Lentzner, R. Rooks, J. Weeks, and S. Saydah. 1999. "Health Care Access and Utilization." Health and Aging Chartbook. Hyattsville, Maryland: National Center for Health Statistics. <<http://www.cdc.gov>> (April 17, 2005).
- Kristensson-Hallstrom, Inger, Gunnel Elander, and Gerhard Malmfors. 1997. "Increased Parental Participation in a Pediatric Surgical Day-Care Unit." *Journal of Clinical Nursing* 6 (July): 297 – 302.
- Li, Jiehui, Guthrie S. Birkhead, David S. Strogatz, and F. Bruce Coles. 1996. "Impact of Institution Size, Staffing Patterns, and Infection Control Practices on Communicable Disease Outbreaks in New York State Nursing Homes." *American Journal of Epidemiology* 143 (10): 1042 – 1049.
- Longini, Ira M., Jr., James S. Koopman, Michael Haber, and George A. Cotsonis. 1988. "Statistical Inference for Infectious Diseases: Risk-Specific Household and Community Transmission Parameters." *American Journal of Epidemiology* 128 (October): 845 – 859.
- Lo Sasso, Anthony T., and Richard W. Johnson. 2002. "Does Informal Care from Adult Children Reduce Nursing Home Admissions for the Elderly?" *Inquiry* 39 (October 1).
- Lovell, Vicky. 2004. *No Time to be Sick: Why Everyone Suffers When Workers Don't Have Paid Sick Leave*. IWPR Publication No. B242. Washington, D.C.: Institute for Women's Policy Research.
- , 2005. *Valuing Good Health in Massachusetts: An Estimate of Costs and Savings for the Paid Sick Days Act*. IWPR Publication #B249. Washington, D.C.: Institute for Women's Policy Research.
- McClaran, Jacqueline, Robin Tover Berglas, and Eliane Duarte Franco. 1996. "Long Hospital Stays and Need for Alternate Level of Care at Discharge." *Canadian Family Physician* 42 (March): 449 – 461.
- Mehdizadeh, Shahla, and Robert Applebaum. 2003. *A Ten-year Retrospective Look at Ohio's Long-term Care System*. Scripps Gerontology Center of Miami University. May.
<<http://www.scripps.muohio.edu/scripps/publications/documents/SGC0070TenYearRetrospective.pdf>> (April 17, 2005).
- MetLife. 2004. *The MetLife Market Survey of Nursing Home & Home Care Costs*. Westport, CT: MetLife Mature Market Institute.
- Milkman, Ruth. 2008. *New Data on Paid Family Leave*. Los Angeles, CA: UCLA Institute for Research on Labor and Employment.
<<http://www.familyleave.ucla.edu/pdf/NewData08.pdf>> (February 29, 2008).

- National Alliance for Caregiving and AARP. 2004. *Caregiving in the U.S.* (April). Bethesda, Maryland and Washington, D.C.
- Nichol, Kristin L. 2001. "Cost-Benefit Analysis of a Strategy to Vaccinate Healthy Working Adults Against Influenza." *Archives of Internal Medicine* 161 (March 12): 749 – 759.
- Office of Personnel Management. 2000a. *Sick Leave*. 26 September. <<http://www.opm.gov/oqa/leave/HTML/sicklv.htm>> (April 17, 2005).
- 2000b. "Sick Leave to Care for a Family Member with a Serious Health Condition." 26 October. <<http://www.opm.gov/oqa/leave/HTML/12week.htm>> (April 17, 2005).
- Palmer, Sarah J. 1993. "Care of Sick Children by Parents: A Meaningful Role." *Journal of Advanced Nursing* 18 (February): 185 – 191.
- Phillips, Douglas J. 1990. "The Price Tag on Turnover." *Personnel Journal* 2162 (December): 58-61.
- Potter, Jan, David J. Stott, Margaret A. Roberts, Alexander G. Elder, B. O'Donnell, Paul V. Knight, and William F. Carman. 1997. "Influenza Vaccination of Health Care Workers in Long-Term-Care Hospitals Reduces the Mortality of Elderly Patients." *Journal of Infectious Diseases* 175 (January): 1-6.
- Prospective Payment Assessment Commission, *Optional Hospital Payment Rates*, Congressional Report no. C-92-03 (Washington: ProPAC, March 1992)
- Rennison, Callie Marie. 2003. *Intimate Partner Violence*. NCJ 197838. Washington, DC: U.S. Department of Justice. <<http://www.ojp.usdoj.gov/bjs/pub/pdf/ipv01.pdf>> (March 13, 2008).
- Rutgers University Center for Women and Work analysis of data from U.S. Department of Labor, *Family and Medical Leave Surveys, 2000 Update*. April 12, 2005.
- Sahyoun, Nadine R., Laura A. Pratt, Harold Lentzner, Achintya Dey, and Kristen N. Robinson. 2001. "The Changing Profile of Nursing Home Residents: 1985-1997." *Aging Trends* 4. Hyattsville, MD National Center for Health Statistics.
- San Francisco Office of Labor Standards Enforcement. 2008. *Paid Sick Leave Ordinance (PSL)*. <http://www.sfgov.org/site/olse_index.asp?id=49389> (March 25, 2008).
- Smith, Andrew. 1989. "A Review of the Effects of Colds and Influenza on Human Performance." *Journal of the Society of Occupational Medicine* 39: 65-68.
- 1990. "Respiratory Virus Infections and Performance." *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences* 327 (April 12): 519 – 528.
- Stone, Robyn I., and Pamela Farley Short. 1990. "The Competing Demands of Employment and Informal Caregiving to Disabled Elders." *Medical Care* 28 (June): 513 – 526.
- Tsouna-Hadjis, Evie, Kostas N. Vemmos, Nikolaos Zakopoulos, and Stamatis Stamatelopoulos. 2000. "First-Stroke Recovery Process: The Role of Family Support." *Archives of Physical Medicine and Rehabilitation* 81(July): 881-887.
- U.S. Bureau of Justice Statistics. 2008a. *Criminal Victimization in the United States, 2005: Statistical Tables*. <<http://www.ojp.usdoj.gov/bjs/abstract/cvusst.htm>> (March 13, 2008).
- 2008b. *Data for Analysis*. <http://bjsdata.ojp.usdoj.gov/dataonline/Search/Crime/Crime.cfm> (March 13, 2008).
- U.S. Bureau of Labor Statistics. 2007. *Job Openings and Labor Turnover*. <<http://data.bls.gov>>
- 2008a. *Employer Costs for Employee Compensation—December 2007*. USDL 08-0331. Washington, D.C.: U.S. Bureau of Labor Statistics. <<http://www.bls.gov/news.release/pdf/ecec.pdf>> (March 12, 2008).

- , 2008b. *Job Openings and Labor Turnover: February 2008*. USDL 08-0454. Washington, DC: U.S. Bureau of Labor Statistics. <<http://www.bls.gov/news.release/pdf/jolts.pdf>> (April 8, 2008).
- U.S. Census Bureau. 2008. *American FactFinder Annual Population Estimates*. <<http://factfinder.census.gov>> (April 3, 2008).
- U.S. Social Security Administration. 2007. *Annual Statistical Supplement, 2006*. Washington, DC: U.S. Social Security Administration. <<http://www.ssa.gov/policy/docs/statcomps/supplement/2006/9c.pdf>> (March 17, 2008).
- Van Houtven, Courtney Harold, and Edward C. Norton. 2004. "Informal Care and Health Care Use of Older Adults." *Journal of Health Economics* 23 (November): 1159 – 1180.
- Woloshin, Steven, Lisa Schwartz, Anna Tosteson, Chiang-Hua Chang, Brock Wright, Joy Plohman, and Elliott Fisher. 1997. "Perceived Adequacy of Tangible Social Support and Health Outcomes in Patients with Coronary Artery Disease." *Journal of General Internal Medicine* 12 (October): 613-618.
- Xiao, Hong, Janet Barber, and Ellen S. Campbell. 2004 "Economic burden of dehydration among hospitalized elderly patients." *American Journal Health-System Pharmacy*. 61(23): 2534-40.

¹ While it is the clear intent of the proposed California paid leave policy that workers have a separate benefit of paid sick days, in addition to any other paid leave they have, as drafted the proposal would accept a paid leave program that could be used for illness as meeting the requirements of the proposal. Workers in firms that convert vacation leave to a general paid time off policy would not receive additional paid time off under the law, but they would receive important protections against dismissal or other penalties for using their statutorily mandated paid sick days and would be able to use their paid time off for domestic violence.

² In addition to these workers, some Californians who do have paid sick days will receive additional days under the Healthy Families, Healthy Workplaces Act. This is not likely to have a significant cost impact, because (1) workers with one year of job tenure who have paid sick days are granted an average of eight days (IWPR analysis of the March 2006 National Compensation Survey), and (2) most workers will not use their full allotment of paid sick days. For some number of workers, though, these additional days will be very important in addressing health needs and/or domestic violence.

³ No adjustment is made for the eligibility criterion of seven days of employment in California, as this is expected to have an insignificant impact on use and cost of the program.

⁴ The National Health Interview Survey is not representative at the state level.

⁵ This assumes that work-loss reported in the 2006 NHIS includes own medical needs only, excluding doctor visits. However, due to respondent discretion in interpreting the survey's questions, reported work-loss "because of illness or injury" may include time off work to care for others and for doctor visits, in addition to time for workers' recuperation. To the extent that this occurs, the estimates presented here of days taken under the paid sick days proposal may overestimate actual leave-taking.

⁶ Days missed exclude maternity leave.

⁷ This is consistent with online survey research finding that a substantial share of workers with paid vacation leave do not use their full allotment (35 percent; Expedia.com 2007).

⁸ This estimate of the time involved in visiting the doctor is very conservative, in order to allow for some workers who may seek treatment at times when they are not scheduled to work. With travel and waiting time, a doctor visit could easily take two to four hours.

⁹ This rate may understate domestic violence, as it only includes violence "by current or former spouses, boyfriends, or girlfriends" (Rennison 2003, 1) and not that committed by parents, children, or other relatives.

¹⁰ Other employer-provided benefits such as health insurance and paid holidays are typically costed as a monthly premium or annual allotment. A worker who is granted leave with pay would not cost an employer any more for these benefits than would a worker taking time off without pay.

¹¹ The voluntary turnover rate was 21.6 percent in February 2008 (IWPR calculation using U.S. BLS 2008b).

¹² This is the mean of six rates derived from data on three disease outbreaks.