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# Valuing Good Health in Connecticut: The Costs and Benefits of Paid Sick Days

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**Executive Summary** 

Policymakers across the country are increasingly interested in ensuring that workers have paid sick days. In addition to concerns about workers' ability to respond to their own health needs, there is growing recognition that, with so many dual-earner and single-parent families, family members' health needs can be addressed only by workers taking time from their scheduled hours on the job. Paid sick days policies allow workers with contagious illnesses to avoid unnecessary contact with co-workers and customers and, thus, are a fundamental public health measure. Paid sick days protect workers from being fired when they are too sick to work and offer substantial savings to employers by reducing turnover and minimizing absenteeism.

Connecticut lawmakers are now considering SB 63, which would require employers to provide all workers with paid sick days. The Institute for Women's Policy Research (IWPR) has estimated the costs and benefits of the proposed law, using government-collected data, peer-reviewed research literature, and a thoroughly vetted methodology. Below are key findings from IWPR's cost-benefit analysis.

#### **KEY FINDINGS**

Almost one in five workers will receive new leave

- 553,000 Connecticut workers lack paid sick days—39 percent of the private-sector workforce.
- 257,000 Connecticut workers who work for companies with 50 or more employees do not have access to paid leave of any kind, and will receive new paid sick days under the bill—18 percent of the private workforce.<sup>2</sup>

#### Benefits will substantially outweigh costs

- Connecticut employers will pay \$92 million annually for wages, payroll taxes and payroll-based employment benefits, and administrative expenses (Table 1).
- Benefits for employers will total \$165 million annually, largely from reduced costs of turnover.
- Employers statewide will save \$73 million annually as a result of the proposed law.
- The average weekly cost of the policy for covered workers will be \$6.87 per worker—or about 19 cents per hour worked—and savings will be \$12.32 per worker, for a net savings of \$5.46 per worker per week.

#### Improved public health will save millions of dollars

- Paid sick days reduce the spread of serious contagious diseases such as the flu and norovirus.
- Workers will save \$8.2 million annually on flu-related costs and short-term nursing home stays for relatives.
- Getting timely medical care will improve care and treatment, reducing costs for providers and patients.

# Key provisions of the proposed paid sick days law

- Workers (both full- and part-time) at businesses with 50 or more employees would accrue paid sick time up to a maximum of five days (or 40 hours) per year, usable after 120 days of employment.
- Paid sick time may be used for diagnosis or treatment of a worker's or child's health condition or for preventative care, or
  to address the psychological, physical, or legal effects of domestic violence, sexual assault, or stalking.

Table 1. Summary of Costs and Benefits of the Proposed Law

		Per newly covered worker	
		Per week	Per hour
Costs to Businesses			
Wages, wage-based benefits, payroll taxes, and administrative expenses	\$ 92,000,000	\$6.87	\$0.19
Benefits to Business			
Reduced turnover	\$ 160,000,000		
Reduced flu contagion	\$ 4,000,000		
Other Benefits			
Reduced medical expenses	\$ 570,000		
Fewer nursing home stays	\$ 7,290,000		
Reduced norovirus outbreaks	\$ 330,000		
Total Benefits for Businesses	\$ 165,000,000	\$12.32	\$0.35
Net Savings for Businesses	\$ 73,000,000	\$5.45	\$0.15

Source: Institute for Women's Policy Research. Columns may not sum due to rounding.

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The Institute for Women's Policy Research (IWPR) conducts rigorous research and disseminates its findings to address the needs of women, promote public dialogue, and strengthen families, communities, and societies. The Institute works with policy makers, scholars, and public interest groups to design, execute, and disseminate research that illuminates economic and social policy issues affecting women and their families, and to build a network of individuals and organizations that conduct and use women-oriented policy research. IWPR's work is supported by foundation grants, government grants and contracts, donations from individuals, and contributions from organizations and corporations. IWPR is a 501 (c) (3) tax-exempt organization that also works in affiliation with the women's studies and public policy programs at The George Washington University.

<sup>&</sup>lt;sup>1</sup> This number represents all private-sector workers in Connecticut without paid sick leave regardless of employer size, though the proposed law only requires employers with 50 or more employees to provide paid sick leave. The proposed law also covers government workers; however, all federal and state workers and the vast majority of local government employees in Connecticut already have receive paid sick days.

<sup>&</sup>lt;sup>2</sup> Some Connecticut workers who currently lack paid sick days are covered by paid vacation or other paid leave policies, which are likely to be modified to reflect the requirements of the law should it become law. These workers will receive important protections against dismissal or other penalties under the proposed policy, but IWPR's estimate assumes they will not receive additional leave.

# Valuing Good Health in Connecticut: The Costs and Benefits of Paid Sick Days

Policymakers across the country are increasingly interested in ensuring the adequacy of paid sick days policies. In addition to concerns about workers' ability to respond to their own health needs, there is growing recognition that, with so many dual-earner and single-parent families, family members' 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, 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 Connecticut Department of Health and Human Services, and the U.S. Census Bureau to evaluate the likely impact of the proposed paid sick days law (SB 63). 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 Connecticut under the proposed policy 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 paid sick days law (SB 63)

- Workers (both full and part-time) at businesses with 50 or more employees would accrue
  paid sick time up to a maximum of 5 paid sick days (40 hours) per year, usable after 120 days
  of employment.
- Paid sick time may be used for diagnosis or treatment of a worker's or child's health condition or for preventive care, or to address the effects of domestic violence, sexual assault, or stalking.

# Summary of likely impact of the proposed paid sick days law (SB 63)

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. 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.

# Main research findings regarding the likely impact of the proposed paid sick days law (SB 63)

- About 553,000 Connecticut workers lack paid sick days—38.6 percent of the nonfarm private sector workforce. Of those, about 257,000 are covered by the proposed law but have no paid leave whatsoever and would receive new sick days under the proposed law.
- Workers covered by the proposed paid sick days law (SB 63) will use an average of 2.49 days of paid sick days annually for their own medical needs.
- On average, workers will use half a day to address family members' medical needs and half a day for doctor visits.
- Workers utilizing paid sick days after they or their partner give birth to a child are
  expected to utilize all 5 sick days available to them, as are those workers utilizing leave
  to address the effects of domestic violence, sexual assault, or rape.
- Half of all workers with paid sick days do not take any days off for illness in a given year.
- Connecticut employers will pay about \$91,722,000 annually for wages, payroll taxes and payroll-based employment benefits, and administrative expenses (Table 1).
- Net savings will total \$85,680,000 annually, mainly from reduced costs of turnover, for a net savings to employers of \$72,844,000.
- Workers and their families will enjoy lower expenditures for health care services totaling \$8,196,000 annually. Savings from reduced spread of flu within workplaces total \$4,235,000 annually.
- The cost per worker per week for covered workers will be \$6.87, or about 0.19 cents per hour worked. Benefits for employers will be \$12.32 per worker per week. The net savings for employers will be about \$5.45 per worker per week for covered workers.

<u>Other likely benefits:</u> 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.

Table 1. Summary of costs and benefits of Connecticut's proposed paid sick days law (SB 63)

SUMMARY OF COSTS AND BENEFITS			Average per- worker cost:	
COSTS	oran oran	STREET, IN	Weekly	Hourly
Wages, wage-based benefits, payroll taxes, and administrative	e expense	s of:	and distant	2
PSD for workers currently lacking any paid leave	\$	97,903,000	g to distribute	
Use of PSD for domestic violence	\$	509,000		
Use of PSD for parental leave	\$	993,000		
Currently lost productivity (adjustment to costs)	\$	(7,683,000)		
Employer Costs	\$	91,723,000	\$ 6.87	\$ 0.19
BENEFITS				
Lower turnover	\$	160,332,000	September 1	
Flu Contagion	\$	4,235,000		
Employer Savings	\$	164,568,000	\$12.32	\$ 0.35
Nursing stays	\$	7,295,000		
Norovirus <sup>1</sup>	\$	331,000		
Flu Contagion	\$	569,000		
Workers Savings	\$	8,196,000	\$ 0.96	\$ 0.03
NET SAVINGS FOR EMPLOYERS <sup>2</sup>	\$	72,845,000	\$ 5.45	\$ 0.15
NET SAVINGS	\$	81,040,000	\$ 6.42	\$ 0.18

Source: Institute for Women's Policy Research Analysis

Note: Columns may not sum to total due to rounding. In 2009 dollars.

<sup>&</sup>lt;sup>1</sup> Based on Korey Capozza's Methodology in Valuing Good Health in California: The Costs and Benefits of Paid Sick Days (in 2009 dollars). In addition to these workers, some Connecticut workers who currently have paid sick days will receive additional days under the proposed paid sick days law (SB 63). 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 of workers with paid sick days already meet the standard of the proposed paid sick days law (SB 63); and (2) most workers will not use their full allotment of paid sick days. (Workers are estimated to take an average of 2.6 days of leave under the proposed paid sick days law SB 63.) For some number of workers, though, these additional days will be very important in addressing health needs.

<sup>&</sup>lt;sup>2</sup> The row Net Savings for Employers refers to the sum of Employer Costs and Employer Savings. Additional savings for workers are calculated and included in the row Net Savings.

# Methodology for estimating the cost and benefits of the proposed paid sick days law (SB 63)

The number of Connecticut workers who will benefit from the proposed policy and the cost and benefits of the proposal are estimated using the following methodology.

# 1. How many workers will be affected? <sup>2</sup>

There are about 1,432,000 nonfarm private sector workers in Connecticut. 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 New England region and data on the number of workers in Connecticut by industry from the Bureau of Labor Statistics (BLS). About 553,000 Connecticut workers lack paid sick days—38.6 percent of the nonfarm private sector workforce.

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 proposed paid sick days law (SB 63) without offering more total days off than they do now.<sup>3</sup> 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 New England region and data on the number of workers in Connecticut by industry from the Bureau of Labor Statistics (BLS).

About 257,000 workers in Connecticut currently have no paid leave benefits and are eligible under the proposed legislation; this report assumes they will receive paid sick days under the proposed law.<sup>4</sup>

### 2. How many 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 2008 National Health Interview Survey (NHIS). When workers are limited to a maximum of 5 days of work loss, workers with paid sick days miss an average of 1.6 days annually for illness and injury, excluding maternity leave (IWPR analysis of the 2008 NHIS). (Those without paid sick days miss an average of 1.4 days annually.) More than half (54 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.

#### b. For family care:

According to the U.S. Department of Labor's 2000 Family and Medical Leave Act Survey of Employees, workers take 0.3 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 times per year (IWPR analysis of the 2008 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 number of doctor visits is calculated by industry from the 2008 NHIS. Each visit is assumed to take 1.0 hours of work-time.<sup>8</sup>

For these three leave circumstances, workers are estimated to use an average of 2.61 days annually.

#### d. For maternity leave:

- i. There are an estimated 2,283 births each year to women employed in Connecticut who currently lack paid vacation and sick leave (IWPR analysis from the 2003-2009 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 employed women who give birth would use an additional 2.6 sick days to bring their total of 5.
- iii. Half of these pregnant workers are assumed to have an employed spouse or partner who would also use all their paid sick days to accompany the woman to doctor visits or provide care during her pregnancy.

#### e. To address needs resulting from domestic violence, sexual assault, or stalking:

- i. For the purposes of this estimate, data were obtained from the Connecticut Department of Public Safety Division of State Police, as well as the U.S. Department of Justice Bureau of Justice Statistics.
- ii. The most recent data from the Connecticut Department of Public Safety Division of State Police indicates that 17,946 family violence victims were reported in 2008. These figures were used to estimate the incidence of domestic violence and sexual assault in Connecticut relative to the estimated population (3,503,000), for an estimated incidence of 0.5 percent, affecting about 1,314 workers who would receive new sick days under the proposed law.
- iii. It is assumed that workers utilizing sick days to address needs arising from domestic violence, sexual assault, or stalking will utilize days in addition to the average use for other needs. This amounts to 2.6 additional days for covered workers to bring their total usage to 5.

#### 3. How much do workers earn?

Average hourly wages and average daily work-hours are calculated by industry for the private-sector workforce using findings for Connecticut from the 2003-2009 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). These costs are calculated for the New England Census Region by industry from the 2009 Employer Costs for Employee Compensation survey (ECEC).
- b. Administrative expenses are estimated at 19 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 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 adding a paid sick days policy to an existing payroll system.

This estimate does not include any costs to employers of replacing workers who are taking paid sick days. 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 compared with a worker who is absent without pay. 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, 12.7 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.

Table 2. Proposed paid sick days law (SB 63)

Cost Factor	Value	Source
Workers currently without paid leave in Connecticut	256,798	IWPR analysis of the Quarterly Census of Employment and Wages (QCEW) 2009, National Compensation Survey (NCS) 2006, Job Openings and Labor Turnover Survey (JOLTS) 2008 and the Annual Social and Economic Supplement (ASEC) 2003-2009
Average number of paid sick days workers will take	2.41	IWPR analysis of the National Health Interview Survey (NHIS) 2008
Average additional days taken by pregnant women and their partners and workers addressing needs resulting from domestic violence and sexual assault	2.59	IWPR analysis of the National Health Interview Survey (NHIS) 2008
Average hourly wage	\$17.55	IWPR analysis of the Annual Social and Economic Supplement 2003-2009
Average daily work hours	7.14	IWPR analysis of the Annual Social and Economic Supplement 2003-2009
Average cost of benefits and payroll taxes	19.0%	IWPR analysis of the 2009 Employer Cost for Employee Compensation (ECEC)
Administrative Expenses	18.0%	U.S. Social Security Administration (2007)
TOTAL	\$ 91,722,736	

Monetary amounts are in 2009 dollars

#### 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 are 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).

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 Connecticut 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, although a recent national survey found that 11 percent of workers have lost a job for missing work when sick or to care for an ill family member (Smith 2008). 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 proposed paid sick days law (SB 63) from reduced turnover.

Table 3. Cost savings from reduced turnover

Cost Factor	Value	Source
Workers currently without paid leave in Connecticut	256,798	IWPR analysis of the Quarterly Census of Employment and Wages (QCEW) 2009, National Compensation Survey (NCS) 2006, Job Openings and Labor Turnover Survey (JOLTS) 2008 and the Annual Social and Economic Supplement (ASEC) 2003-2009
Percentage point reduction in voluntary turnover when paid sick days are provided	5.3	IWPR calculation of weighted average from Cooper and Monheit (1993), based on Lovell (2005).
Cost of turnover	25.0%	
Average hourly wage	\$17.55	IWPR analysis of the ASEC 2003-2009
Average daily work hours	7.14	IWPR analysis of the ASEC 2003-2009
Benefits as percent of total compensation	31.4%	IWPR analysis of the 2009 Employer Cost for Employee Compensation (ECEC)
TOTAL	\$160,332,000	39

Monetary amounts are in 2009 dollars.

#### 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 \$217.07, using low productivity loss estimates, and \$1,566.63, using average productivity loss estimates (in 2001 dollars).

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). The National Federation of Independent Business, a small-business association, reminds employers that "working when you're sick and not up to your best stifles and muddles creativity and depletes energy and stamina" (Townes 2006).

Workers without paid sick days miss an average fewer days due to illness and injury than workers with paid sick days, when constrained to the maximum provided for by the Connecticut proposed paid sick days law (SB 63) (IWPR analysis of the 2008 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 \$7.6 million per year.

Table 4. Cost savings from not paying ill workers for unproductive time on the job

Cost Factor	Value	Source
Workers currently without paid leave in Connecticut	256,798	IWPR analysis of the Quarterly Census of Employment and Wages (QCEW) 2009, National Compensation Survey (NCS) 2006, Job Openings and Labor Turnover Survey (JOLTS) 2008 and the Annual Social and Economic Supplement (ASEC) 2003-2009
Lost productivity currently paid	0.4 days at 50 percent effectiveness	IWPR analysis of the National Health Interview Survey (NHIS) 2008; Nichol (2001)
Average hourly wage	\$17.55	IWPR analysis of the Annual Social and Economic Supplement 2003-2009
Average daily work hours	7.14	IWPR analysis of the Annual Social and Economic Supplement 2003-2009
Average cost of benefits and payroll taxes	19.3%	IWPR analysis of the 2009 Employer Cost for Employee Compensation (ECEC)
Administrative Expenses	18.0%	U.S. Social Security Administration (2007)
TOTAL	\$7,683,000	i vitroreno essal Wilay conventivi

Monetary amounts are in 2009 dollars.

# 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; <sup>10</sup> intrahousehold 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 workloss 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 Connecticut proposed paid sick days law (SB 63) from reduced spread of the flu in workplaces (Table 5). Detailed data are not available to estimate savings from other contagious diseases (see text box), although they would without doubt be significant.

#### 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, hepatitis, 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.

Table 5. Cost savings from reduced spread of the flu within workplaces

Cost factor	Value	Source
Workers currently without paid leave in Connecticut	256,798	IWPR analysis of the Quarterly Census of Employment and Wages (QCEW) 2009, National Compensation Survey (NCS) 2006, Job Openings and Labor Turnover Survey (JOLTS) 2008 and the Annual Social and Economic Supplement (ASEC) 2003-2009
Influenza illness rate	5.0%	Nichol (2001), Table 6.
Contagion rate (i.e., each co-worker's chance of contracting the flu)	18.0%	Islam, O'Shaughnessy, and Smith (1996).
Assumed number of close daily work contacts	5 co-workers	Islam, O'Shaughnessy, and Smith (1996).
Number of missed workdays per infected co-worker	Matin off 21 have made	Nichol (2001).
Number of missed workdays for employed caregivers of ill workers	An 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	\$17.55	IWPR analysis of the ASEC 2003-2009
Average daily work hours	7.14	IWPR analysis of the ASEC 2003-2009
Average cost of benefits and payroll taxes	19.3%	IWPR analysis of the 2009 Employer Cost for Employee Compensation (ECEC)
Employers' savings	\$4,235,000	
Doctor visits for 45 percent of ill workers	Average cost of \$60	Nichol (2001); BlueCross BlueShield of Texas n.d.
Prescription drugs for 42 per 100 ill workers	Average cost of \$58	Kavet (1977), Kaiser Family Foundation webtool (2005, adjusted for inflation).
Workers' Savings	\$594,000	
TOTAL	\$4,829,000	

Monetary amounts are in 2009 dollars.

# Cost savings #4: Reduced expenditures for treating victims of norovirus outbreaks in nursing homes

Paid sick days that allow 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 estimates of those costs for Connecticut are described in Table 6.

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

Cost factor	Value	Source
Nursing homes that experienced norovirus or GI outbreak in Connecticut in the last 12 months	86	Personal Communication from the Connecticut Department of Health and Human Services.
Relative risk of experiencing an outbreak between homes with paid sick days and homes without paid sick days	38.0%	Li et al. (1996).
Share of nursing home workers with access to paid sick days (nationally)	73.0%	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	26	IWPR calculation based on Li et al (1996).
Number of residents on nursing nouses exposed to higher risk each year	2,674	IWPR analysis of Kaiser Family Foundation's State Health Facts (2009), Natioanl Compensation Survey (2006) and
Average ratio of staff to residents	53.0%	Estimated from data from the Kaiser Family Foundation's State Health Facts (2009).
Attack rate for norovirus	30.0%	California Department of Public Health; Morbidity and Mortality Weekly Report (2007).
Excess number of staff and residents n nursing homes without paid sick days exposed	1,228	Based on methodology developed by Korey Capozza and David Graham-Squire for Valuing the Good Health in California: The Costs and Benefits of the Healthy Families, Healthy Workplaces Act of 2008 (2008).
Percent of norovirus victims who will require hospitalization	10.0%	Calderon-Margalit et al. (2005).
Cost of treatment (varies between staff and residents; between those requiring nospitalization vs. out-patient reatment; and by payer)	\$200 for patients covered under Medicaid, \$ 213for those with Medicare coverage, and \$ 203 for those with private insurance	American Association of Pediatrics; MediCal Rates 2008; CeraLyte (oral rehydration); Xiao et al. (2004); American Medical Association 2008; Kaiser Family Foundation 2008 and Mayo Medical Laboratories

Monetary amounts are in 2009 dollars.

Source: Based on methodology developed by Korey Capozza and David Graham-Squire for Valuing the Good Health in California: The Costs and Benefits of the Healthy Families, Healthy Workplaces Act of 2008 (2008).

# Cost savings #5: 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 8.60 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 Table 7.

Table 7. Cost savings from reduced short-term nursing home stays

Cost factor	Value	Source
Employed caregivers of adults aged 50 and older	306,100	IWPR estimations based on the National Alliance for Caregiving and American Association of Retired Persons 2009, Figures 1, 22.
Average number of caregivers per care recipient	2	IWPR calculation based on Kramarow et al. (1999).
Percent of private workers with no paid leave		IWPR analysis of the Quarterly Census of Employment and Wages (QCEW) 2009, National Compensation Survey (NCS) 2006, Job Openings and Labor Turnover Survey (JOLTS) 2008 and the Annual Social and Economic Supplement (ASEC) 2003-2009
Estimated length of nursing home stay averted with paid sick days	1 day per care recipient	Author's calculation based on Kramarow et al. (1999).
Average cost of one day of nursing home stay, semi-private room	\$ 180.08	MetLife (2004), monetary amounts are inflated to 2008 dollars.
TOTAL	\$7,295,000	

Monetary amounts are in 2009 dollars.

#### Other benefits to measure when data needed 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

For example 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

Workers would not be suspended or 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

Workers who lose their jobs due to having inadequate paid sick days would be less reliant on public assistance. 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 incomes are not interrupted by unpaid leave, families experience greater financial stability and economic well-being.

# 7. The value of workers and their family members feeling better

Better health improves quality of life for workers and their families.

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<sup>2</sup> Information on average hourly wages and average daily work hours are calculated from 2005-2008 Annual Social and Economic Supplement to the Current Population Survey for all businesses in the New England census region. Sample sizes are not sufficient to limit these analyses to Connecticut.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>3</sup> While it is the clear intent of the proposed paid sick days law 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 time off leave program that could be used for illness as meeting the requirements of the proposal. This estimate assumes that employers that currently offer paid vacation leave, but no paid sick days, would convert their vacation leave into a general paid time off program covering both vacation and sick leave and, thus, workers in such firms would not receive additional paid time off under the law. They would, however, receive important protections against dismissal or other penalties for using their statutorily mandated paid sick days.

<sup>&</sup>lt;sup>4</sup> In addition to these workers, some Connecticut workers who do have paid sick days will receive additional days under the proposed law. 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.

<sup>5</sup> State-level data are not available from the National Health Interview Survey.

This is consistent with online survey research finding that a substantial share of workers with paid vacation leave

does not use their full allotment (35 percent; Expedia.com 2007).

<sup>8</sup> 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.

<sup>9</sup> 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.

<sup>10</sup> This is the mean of six rates derived from data on three disease outbreaks.

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The Institute for Women's Policy Research conducts rigorous research and disseminates its findings to address the needs of women, promote public dialogue, and strengthen families, communities, and societies. The Institute works with policymakers, scholars, and public interest groups around the country to design, execute, and disseminate research that illuminates economics and social policy issues affecting women and families, and to build a network of individuals and organizations that conduct and use women-oriented policy research. IWPR, an independent, non-profit, research organization also works in affiliation with the graduate programs in public policy and women's studies at The George Washington University.

<sup>&</sup>lt;sup>6</sup> This assumes that work-loss reported in the 2008 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.