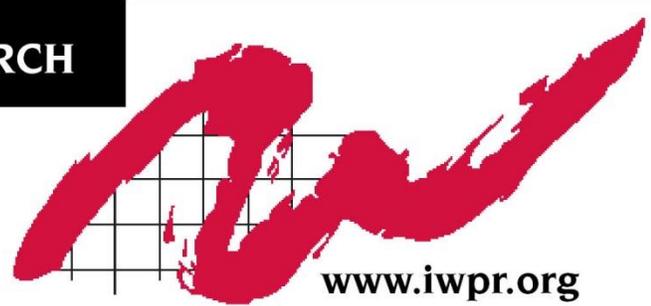


# Briefing Paper



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

### 1. Summary

Policymakers across the country are increasingly interested in ensuring that workers can take paid time off when they are sick. 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 also sometimes require workers to take time off from their job. Allowing workers with contagious illness to avoid unnecessary contact with co-workers and customers has important public health benefits. Paid sick days also protect workers from being disciplined or fired when they are too sick to work, help families and communities economically by preventing lost income due to illness, and offer savings to employers by reducing turnover and minimizing absenteeism.

Legislators in Philadelphia are considering Chapter 9-3300 titled "Promoting Healthy Families and Workplaces." Using the parameters of the proposed legislation and publicly available data, this briefing paper estimates the anticipated costs and some of the anticipated benefits of the law for employers providing new leave, as well as some of the benefits for employees.

This report uses data collected by the U.S. Bureau of Labor Statistics, the U.S. Department of Health and Human Services, the Philadelphia Department of Public Health, and the U.S. Census Bureau to evaluate costs and benefits of Philadelphia's Chapter 9-3300. It estimates how much time off Philadelphia workers would use under the proposed policy and the costs to employers for that sick time. This analysis also uses findings from previous peer-reviewed research to estimate cost savings associated with the policy, through reduced turnover, reduced spread of contagious disease in the workplace, prevention of productivity losses from employees working while sick, minimizing nursing-home stays, and reducing norovirus outbreaks in nursing homes. The study is one of a series of analyses by the Institute for Women's Policy Research (IWPR) examining the effects of paid sick days policies.

The analysis, which quantifies only a subset of potential benefits, still finds a net economic benefit from the proposed legislation. Likely additional benefits from paid sick days, not quantified in this analysis, include: reduced health care spending due to reduced public contagion and more timely and regular preventive care and treatment; improved economic security among families who receive pay on sick days and are less likely to be fired or disciplined for taking sick time; improved school outcomes and reduced contagion in school, when parents can avoid sending sick children to school or child care.

## **Key provisions of Chapter 9-3300: “Promoting Healthy Families and Workplaces”**

- Workers at business with six or more employees within the boundaries of Philadelphia except federal and state workers would accrue sick time. Workers at businesses with 11 or more employees would accrue paid sick time up to a maximum of seven paid sick days (56 hours) per year and businesses with six to ten employees would accrue sick time up to a maximum of four sick days (32 hours) per year. Businesses with fewer than five employees are not covered by Chapter 9-3300.
- Earned sick time may be used for personal illness, to take care of family members, for preventive care, or in case of domestic violence.

## **Who Will Access and Use Paid Sick Days?**

- Approximately 182,600 Philadelphia workers currently lack paid sick days. About 123,900 workers in Philadelphia currently have no paid leave benefits of any kind (including vacation), and 114,600 are eligible to receive new leave under Chapter 9-3300.
- Employees of businesses with 11 or more employees are estimated to use an average of 2.3 days annually out of a maximum of seven that may be accrued, while employees at businesses with six to ten employees are estimated to use an average of two days annually out of a maximum of four days that may be accrued, excluding maternity.
  - Workers covered by the paid sick days law employed in large business will use an average of 1.6 paid sick days for their own medical needs while those employed in small business will use 1.2 paid sick days annually.
  - On average, workers will use half a day to address family members’ medical needs and about a third of a day for doctor visits.
  - Workers will utilize all of their allotted paid sick days after they give birth to or adopt a child. Half of their partners will use the same amount of sick days.
  - Victims of domestic violence will also utilize all of their allotted paid sick days.

## **How Much Will Paid Sick Days Cost Businesses?**

- Annually, businesses in Philadelphia are expected to expend \$51 million in providing new paid sick days for employees. This cost of the law for employers—which accrues due to lost productivity and increased wages, including benefits and administrative expenses—is equivalent in size to a \$0.25 per hour increase in wages for employees receiving new leave, or about \$8.59 per week for covered workers (Table 1). Covered workers in large business have on average daily 6.89 work hours, while workers in small business have on average of 6.36 (Table 2).
  - The cost of increased wages and reduced productivity due to typical use of paid sick days by workers receiving new coverage will be about \$44 million annually.

- Covered workers who give birth and half of their partners are expected to use all of their available paid sick days, for an additional annual cost of \$11 million.
- Workers without paid sick days who currently come to work sick work at less than full productivity, resulting in current productivity losses of about \$4 million annually; this represents an adjustment to expected costs of implementing the proposed law.
- Costs will largely accrue to employers with 11 or more employees, with annual costs of \$48 million for businesses in this category, (equivalent to per-worker costs of \$9.00 per week or \$0.26 per hour). Annual costs of \$3 million are anticipated for businesses with between six and 10 employees (equivalent to per-worker costs of \$5.20 per week or \$0.16 per hour).

## **What Benefits Will Paid Sick Days Produce?**

- Providing new paid sick days is expected to yield benefits of \$52 million annually for employers, largely due to savings from reduced turnover. The anticipated savings for employers are expected to have a wage equivalent of a savings of \$0.25 per hour, or about \$8.69 per week for covered workers (Table 1).
- Comparing costs to employers and anticipated benefits for employers, an annual net benefit due to the proposed law for Philadelphia employers of \$574,000 is expected, equivalent to a net savings for employers of about \$0.10 per worker per week for covered workers (Table 1).
- The community will spend about \$18 million less annually on health care expenses as a result of reduced emergency department use and fewer norovirus outbreaks in nursing homes.
- In addition to the benefits listed above, earned paid sick time will likely create many other significant benefits for employers, workers, families, and the broader community. These benefits are likely to include: improved health and more efficient utilization of health care for family members of workers who use paid sick days to provide care; improved public health through reduced spread of contagious disease; improved family economic security as a result of wage replacement and stable employment; reduced expenditures on public assistance programs due to improved family economic security; and other benefits.

The estimates presented in this report assume that all workers eligible for leave under the new policy would know about their new paid or unpaid sick days. On the contrary, during the early years of the program, it is likely that many workers will be unaware of their new leave benefits and not take any time off under the new law.<sup>1</sup> In particular, workers may not be aware of the multiple uses allowed by the law. Thus, both costs and benefits in the early years of a new program may be considerably lower than these estimates.

**Table 1. Summary of costs and benefits of Philadelphia's Chapter 9-3300: "Promoting Healthy Families and Workplaces Ordinance"**

Costs and benefits	Dollars	Average per-worker costs/savings:	
		Weekly	Hourly
<b>COSTS</b>			
Wages, wage-based benefits, payroll taxes, and administrative expenses of:			
PSD for workers currently lacking any paid leave	\$43,737,968		
Use of PSD for domestic violence	\$296,368		
Use of PSD for parental leave	\$10,817,558		
Currently lost productivity (adjustment to costs)	\$3,642,033		
<b>Employers' costs</b>	<b>\$51,209,860</b>	<b>\$8.59</b>	<b>\$0.25</b>
<b>BENEFITS</b>			
Lower turnover	\$49,783,823		
Reduced flu contagion	\$2,000,288		
<b>Employers' savings</b>	<b>\$51,784,112</b>	<b>\$8.69</b>	<b>\$0.25</b>
Reduced nursing stays	\$5,875,620		
Reduced norovirus	\$7,695,412		
Reduced flu contagion	\$293,816		
Savings from reduced emergency department visits	\$10,384,324.99		
<b>Community savings</b>	<b>\$24,249,173</b>	<b>\$4.07</b>	<b>\$0.12</b>
<b>Net Savings</b>	<b>\$24,823,424</b>	<b>\$4.16</b>	<b>\$0.12</b>
<b>NET SAVINGS FOR EMPLOYERS<sup>1</sup></b>	<b>\$574,252</b>	<b>\$0.10</b>	<b>\$0.00</b>

Source: Institute for Women's Policy Research Analysis.

<sup>1</sup>Net savings of the proposed Chapter 9-3300: "Promoting Healthy Families and Workplaces" Ordinance for eligible workers.

## **2. Access and Use of Paid Sick Days under Chapter 9-3300: “Promoting Healthy Families and Workplaces”**

The number of Philadelphia workers who will benefit from the proposed policy and the cost and benefits of the proposal are estimated below.

### **How many workers will be affected?**

The share of workers covered by either vacation or paid sick days (or both) is calculated by occupation from the 2010 National Compensation Survey (NCS) and data on the number of private sector workers by occupation in Philadelphia is from the 2011 American Community Survey (ACS). There are over 543,000 private sector workers in Philadelphia. About 182,600 Philadelphia workers lack paid sick days, 123,900 currently have no paid leave benefits of any kind (including vacation), and 114,600 are eligible to receive new leave under Chapter 9-3300 (IWPR analysis of the 2011 ACS and 2010 NCS).

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 paid sick days law, transforming paid vacation days to paid sick days or general-use paid time off without offering more total days off than they do now.<sup>2</sup>

Some Philadelphia workers who currently have paid sick days will receive additional days under the paid sick days law. This is not likely to have a significant cost impact, because (1) workers with paid sick days are granted an average of eight or nine days, therefore little or no change will be needed for most employer policies (U.S. Bureau of Labor Statistics 2012) and (2) most workers will not use their full allotment of paid sick days (see below).

### **How many paid sick days will workers take?**

To care for their own medical needs, their families' needs, and for doctors' visits, workers in large business are estimated to use an average of 2.3 days annually while workers in small business are estimated to use an average of two days per year. Methods for calculating expected leave amounts are described below.

#### **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 occupation and firm size using data from the 2011 National Health Interview Survey (NHIS).<sup>3</sup> When workers are limited to a maximum of seven days of work loss (large business), workers with paid sick days miss an average of 1.6 days annually for illness and injury, excluding maternity leave. When limited to four days of work loss (small business), workers with paid sick days miss an average of 1.2 days (IWPR analysis of the 2011 NHIS),<sup>4</sup> excluding maternity leave. About half 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.

#### **For family care**

According to the U.S. Department of Labor's 2000 Family and Medical Leave Act Survey of Employees (FMLA) 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).

#### **For doctor visits**

Workers with paid sick days visit the doctor an average of three times per year (IWPR analysis of the 2011 NHIS). These visits may be during or outside of work hours or might already be included in time off

due to illness or injury. For the analysis in this report, the average number of doctor visits is calculated by occupation and by business size from the 2011 NHIS. Each visit is assumed to take 1.0 hours of work-time.<sup>5</sup>

**Table 2. Costs of Chapter 9-3300: “Promoting Healthy Families and Workplaces”**

<b>Cost factor</b>	<b>Value</b>	<b>Source</b>
<b>Workers currently without paid leave of any kind</b>		IWPR analysis of the American Community Survey (ACS) 2011, National Compensation Survey (NCS) 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File 2010 and the Annual Social and Economic Supplement (ASEC) 2009-2012.
Large business	102,583	
Small business	12,061	
<b>Average number of paid sick days workers will take</b>		IWPR analysis of the National Health Interview Survey (NHIS) 2010-2011.
Large business	2.3	
Small business	2.0	
<b>Average additional days taken by new mothers, their partners, and victims of domestic violence</b>		IWPR analysis of the National Health Interview Survey (NHIS) 2010-2011 and the Annual Social and Economic Supplement 2009-2012.
Large business	4.7	
Small business	2.0	
<b>Average hourly wage</b>		IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Large business	\$17.98	
Small business	\$15.66	
<b>Average daily work hours</b>		IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Large business	6.89	
Small business	6.36	
<b>Average cost of benefits and payroll taxes</b>	33 percent of wages	IWPR analysis of the National Compensation Survey (NCS) 2010.
<b>Subtotal</b>	<b>\$54,851,893</b>	
Large business	\$51,268,366	
Small business	\$3,583,527	
<b>Adjustment for lost productivity</b>	<b>\$3,642,033</b>	IWPR analysis of the National Health Interview Survey (NHIS) 2010-2011; Nichol (2001).
Large business	\$3,322,585	
Small business	\$319,448	
<b>Total</b>	<b>\$51,209,860</b>	
Large business	\$40,537,759	
Small business	\$3,200,209	

Note: Monetary amounts are in 2012 dollars

## **For maternity leave**

There are an estimated 36,300 births and adoptions each year to women employed in Philadelphia, and 10,911 of these women currently lack paid vacation and sick leave (IWPR analysis from the 2009–2012 Annual Social and Economic Supplement of the Current Population Survey (ASEC) and 2010 National Compensation Survey).

Each of these workers is expected to take the maximum number of paid sick days, using the additional days for prenatal care and maternity recovery. This report estimates that women employed in large business who give birth or adopt a baby would use an additional 4.7 sick days to bring their total of seven, and women employed in small business who give birth or adopt would use an additional two sick days to bring their total of four.

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.

## **For domestic violence Victims**

Chapter 9-3300 would also guarantee Philadelphia workers the ability to access services for domestic violence and sexual assault, without the risk of losing wages or a job. While a relatively small number of Philadelphia workers will likely need paid time off for these purposes, this job-protected paid time off could be critical to building family safety and security.

For the purposes of this estimate, data were obtained from the U.S. Department of Justice Bureau of Justice Statistics (Catalano 2012). The most recent data indicate that in 2010 the rate of intimate partner victimizations for females was 3.6 victimizations per 1,000 females ages 12 years or older. This figure was used to estimate the incidence of domestic violence in Philadelphia relative to the eligible population, affecting about 400 workers who would receive new sick days under the law. Each of these workers is expected to take the maximum number of paid sick days. This amounts to 4.7 additional days for covered workers employed in large business and two additional days for workers employed in small business.

# **3. Employer Costs of Implementing Paid Sick Days**

## **How much do workers earn?**

Average hourly wages and average daily work hours are calculated by occupation for the private-sector workforce using information for the Northeast region from the 2009–2012 ASEC (see Table 2). Sample sizes are not sufficient to limit these analyses to Philadelphia.

## **What other costs will employers incur?**

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).<sup>6</sup> These costs are calculated for the Middle Atlantic Census Division by occupation from the 2010 NCS.

Administrative expenses are estimated at 18 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.

## **Will employers need to replace workers taking paid sick days?**

By definition, employers pay wages that are equal to each worker's productivity, or the value they produce for the employer. If an employer elects to hire a temporary worker to fill in for a worker using paid sick leave, there is no additional net employer expense; the presence of a replacement worker means no productivity is lost. Thus, while employers hiring replacements will pay wages to two workers, the net impact accounting for both wages and productivity will be the same as if no replacement were hired. As an illustration, assume a worker and her replacement (if any) are paid \$100 for a day's work; replacement workers generate productivity equivalent to their pay (\$100) and thus paid sick leave is only generating additional costs for one worker, not two (Table 3).

Net employer costs, either with or without a replacement worker, are accounted for in the estimate of wages and payroll taxes for workers receiving paid sick days (Table 2). Hiring of temporary workers is likely to be relatively uncommon for the short leaves possible under the proposed law. A 2010 survey of employers providing paid sick days in San Francisco found that only 8.4 percent of employers reported "always" or "frequently" hiring a replacement for a sick worker, with 23.6 percent of employers saying they "rarely" hire replacement workers (Drago and Lovell 2011).

## **Cost adjustment: 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 ten 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). 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 \$2 million per year (Table 2). This reflects a cost of illness already being borne by employers.

## **Total Cost to Employers**

Taking into account all of the above information, the total additional employer cost of implementing Chapter 9-3300 in Philadelphia is estimated to be \$51 million annually (Table 1), equivalent to a per-worker weekly cost of \$8.59 or a per-worker hourly cost of \$0.25 (Table 1).

Costs of implementation will largely accrue to employers with 11 or more employees, with annual costs of \$48 million (equivalent to per-worker costs of \$9.00 per week or \$0.26 per hour) for businesses in this category. Annual costs of \$3 million are anticipated for businesses with between six and 10 employees (equivalent to per-worker costs of \$5.20 per week or \$0.16 per hour, Table 1).

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

<b>Cost factor</b>	<b>Value</b>	<b>Source</b>
<b>Workers currently without paid leave of any kind</b>		
Large business	102,583	IWPR analysis of the American Community Survey (ACS) 2011, National Compensation Survey (NCS) 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File 2010 and the Annual Social and Economic Supplement (ASEC) 2009-2012.
Small business	12,061	
<b>Lost productivity currently paid</b>	0.4 days at 50 percent effectiveness	IWPR analysis of the National Health Interview Survey (NHIS) 2010-2011; Nichol (2001).
<b>Average hourly wage</b>		
Large business	\$17.98	IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Small business	\$15.66	
<b>Average daily work hours</b>		
Large business	6.89	IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Small business	6.36	
<b>Average cost of benefits and payroll taxes</b>	33 percent of wages	IWPR analysis of the National Compensation Survey (NCS) 2010.
<b>Total</b>	<b>\$3,642,033</b>	
Large business	\$3,322,585	
Small business	\$319,448	

Note: Monetary amounts are in 2012 dollars

## 4. 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 improve the 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.

### 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 Philadelphia 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. However, having paid sick days in a current job may increase worker loyalty to the current employer 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 in response to health issues and another 15 percent are in response to 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 16 percent of workers have lost a job for missing work when sick or to care for an ill family member (Smith and Kim 2010). 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).

Careful analyses of the range of impacts associated with turnover provide evidence regarding the true costs to employers. Phillips (1990) reports that replacing a mid-level manager costs 1.5 times the worker's annual salary. 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). A slightly more conservative figure of 20 percent is used in this analysis.

**Table 4. Cost savings from reduced turnover**

<b>Cost factor</b>	<b>Value</b>	<b>Source</b>
<b>Workers currently without paid leave of any kind</b>		IWPR analysis of the American Community Survey (ACS) 2011, National Compensation Survey (NCS) 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File 2010 and the Annual Social and Economic Supplement (ASEC) 2009-2012.
Large business	102,583	
Small business	12,061	
<b>Reduction in voluntary turnover</b>	5.3	IWPR calculation of weighted average from Cooper and Monheit (1993), based on Lovell (2005).
<b>Cost of turnover</b>	20 percent of annual compensation	
<b>Average hourly wage</b>		IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Large business	\$17.98	
Small business	\$15.66	
<b>Average daily work hours</b>		IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Large business	6.89	
Small business	6.36	
<b>Average cost of benefits and payroll taxes</b>	33 percent of wages	IWPR analysis of the National Compensation Survey (NCS) 2010.
<b>Total</b>	<b>\$49,783,823</b>	
Large business	\$45,417,209	
Small business	\$4,366,614	

Note: Monetary amounts are in 2012 dollars

## **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 when employees practice presenteeism or go to work while ill. 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.

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

<b>Cost factor</b>	<b>Value</b>	<b>Source</b>
<b>Workers currently without paid leave of any kind</b>		
Large business	102,583	IWPR analysis of the American Community Survey (ACS) 2011, National Compensation Survey (NCS) 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File 2010 and the Annual Social and Economic Supplement (ASEC) 2009-2012.
Small business	12,061	
Influenza illness rate	5 percent	Nichol (2001)
Contagion rate (i.e., 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	Islam, O'Shaughnessy, and Smith (1996).
Number of missed workdays per infected co-worker	2	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).
<b>Average hourly wage</b>		
Large business	\$17.98	IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Small business	\$15.66	
<b>Average daily work hours</b>		
Large business	6.89	IWPR analysis of the Annual Social and Economic Supplement 2009-2012
Small business	6.36	
<b>Employers' savings</b>	\$2,000,288	
Large business	\$1,831,575	
Small business	\$168,713	
Doctor visits for 45 percent of ill workers	Average cost of \$34	Nichol (2001); American Medical Association (2013)
Prescription drugs for 42 per 100 ill workers	Average cost of \$99	Kavet (1977), Kaiser Family Foundation (2013)
<b>Workers' savings</b>	\$293,816	
Large business	\$262,945	
Small business	\$30,871	
<b>Total savings</b>	<b>\$2,294,104</b>	

Note: Monetary amounts are in 2012 dollars

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>7</sup> 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 ten co-workers. By a low estimate, five 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).

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

Cost factor	Value	Source
Nursing homes that experienced norovirus or GI outbreak in Philadelphia in the last 12 months	16	Personal Communication from the Philadelphia Department of Public Health.
Relative risk of experiencing an outbreak between homes with paid sick days and homes without paid sick days	38 percent	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	16	IWPR calculation based on Li et al (1996).
Number of residents on nursing houses exposed to higher risk each year	114,267	Estimated from data from the Kaiser Family Foundation’s State Health Facts (2010).
Average ratio of staff to residents	3 percent	Estimated from data from the Kaiser Family Foundation’s State Health Facts (2010).
Attack rate for norovirus	30 percent	California Department of Public Health; Morbidity and Mortality Weekly Report (2007).
Excess number of staff and residents in nursing homes without paid sick days exposed	35,206	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 percent	Calderon-Margalit et al. (2005); Johnston et al. (2007); Zigg et al. (2005).
Cost of treatment per patient		American Association of Pediatrics; CeraLyte (oral rehydration); Xiao et al. (2004); American Medical Association 2013; Kaiser Family Foundation 2010 and Mayo Medical Laboratories (2012).
Medicaid	\$168	
Medicare	\$201	
Private Insurance	\$201	
<b>Total</b>	<b>\$7,695,412</b>	

Note: Monetary amounts are in 2012 dollars

Workers with the flu also incur costs for doctor visits (with 45 percent seek medical care; Nichol 2001), hospitalizations (occurring at a rate of 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 Philadelphia’s paid sick days law from reduced spread of the flu in workplaces (Table 5).

## Reduced expenditures for treating victims of norovirus outbreaks in nursing homes

Paid sick days that allow ill workers to stay home can have important public health impacts, by limiting the spread of contagious diseases. Data are not yet available to measure most of this 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 Philadelphia are described in Table 6.

Detailed data are not available to estimate savings from other contagious diseases (see text box below), although are undoubtedly 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 colds, mononucleosis, hepatitis, strep throat, and conjunctivitis (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 or school settings when parents cannot keep their sick children home are not calculated here.

## 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 will 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 29.8 million full-time workers providing care to adults aged 50 and older (IWPR calculation from National Alliance for Caregiving and AARP 2009), nearly 1.4 million nursing facility patients at any one time (Kaiser Family Foundation 2010.), and average per day costs of roughly \$300 (Senior Homes 2013), savings to families and taxpayers from reduced nursing home use 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**

<b>Cost factor</b>	<b>Value</b>	<b>Source</b>
Caregivers of adults aged 50 and older in Philadelphia	134,827	IWPR estimations based on the National Alliance for Caregiving and American Association of Retired Persons 2009, Figure 1, and IWPR analysis of the American Community Survey (ACS) 2011.
Average number of caregivers per care recipient	2	IWPR calculation based on Kramarow et al. (1999).
Percent of private workers with no paid leave	30 percent	IWPR analysis of the American Community Survey (ACS) 2011, National Compensation Survey (NCS) 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File 2010 and the Annual Social and Economic Supplement (ASEC) 2009-2012.
Estimated length of nursing home stay averted with paid sick days	1 day per care recipient	IWPR's calculation based on Kramarow et al. (1999).
Average cost of one day of nursing home stay, semi-private room	\$290	Senior Homes (2013).
<b>Total</b>	<b>\$5,875,620</b>	

Note: Monetary amounts are in 2012 dollars

## Health care savings resulting from reduced use of hospital emergency departments

Paid sick days allow workers to take time away from work for medical appointments, rather than waiting until after their work hours, at which point they might opt to utilize hospital emergency services. Analysis of data from the NHIS has shown that workers with paid sick days are less likely than workers without paid sick days to utilize hospital emergency departments, even after accounting for variables such as age, income, education, and health insurance access. It is estimated that a lack of paid sick days contributes to 1.3 million preventable emergency department visits each year nationally. These visits are more expensive than a visit to a primary care physician for the same condition, and thus if these preventable emergency department visits were replaced by primary care visits, health care costs would be decreased by over \$1.1 billion per year nationally, of which over \$500 million is currently paid by public insurance programs such as Medicaid (Miller, Williams, and Yi 2011).

It has been estimated that in Philadelphia, universal access to paid sick days would prevent about 12,000 emergency department visits per year. These prevented visits would result in a health care cost reduction of about \$10 million (2012 dollars) annually (Williams 2013).

## 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 benefits on society. They include the following:

## **Additional effects of presenteeism on employers and workers:**

Health care expenditures for workers who are sick longer because they are unable to recuperate at home, resulting in 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.

Cost to employers of scheduling uncertainties: For example, costs resulting from workers calling in sick at the start of their shifts when they knew the previous day they would have to stay home with a sick child.

Improved morale and resultant productivity. 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).

## **Health and health care utilization impacts on family members when workers cannot provide care**

Keeping children at home with contagious diseases like the flu can prevent illness and work absences 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 child care and school 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) and 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 providing more timely care.

## **Other effects 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.

- 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).
- 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 (Family and Medical Leave Act) leave and do not receive their full wages during the leave turn to public assistance for support (Cantor et al. 2001).
- 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.
- The value of workers and their family members feeling better: Better health improves the quality of life for workers and their families.

## References

- American Association of Pediatrics. 2008. *Medicaid Reimbursement Survey: Pennsylvania* <[http://www.aap.org/en-us/professional-resources/Research/Medicaid%20Reimbursement%20Reports/2007-2008\\_MedicaidReimbursement\\_PA.pdf](http://www.aap.org/en-us/professional-resources/Research/Medicaid%20Reimbursement%20Reports/2007-2008_MedicaidReimbursement_PA.pdf)> (accessed January 2013).
- American Medical Association. 2013. *Current Procedural Terminology*. <[https://catalog.ama-assn.org/Catalog/cpt/cpt\\_search\\_result.jsp?\\_requestid=692968](https://catalog.ama-assn.org/Catalog/cpt/cpt_search_result.jsp?_requestid=692968)> (accessed January 2013).
- 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): 35-40.
- Cantor, David, Jane Waldfogel, 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/whd/fmla/toc.pdf>> (accessed August 2011).
- Catalano, Shannan. 2012. *Intimate Partner Violence, 1993-2010*. Bureau of Justice Statistics <<http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=4536>> (accessed January 2013).
- CCH Incorporated. 2004a. "Unscheduled Absenteeism Rises to Five-Year High." *HR Management: Ideas and Trends Newsletter* (592): 145-148.
- CCH Incorporated. 2004b. "Flu Vaccination Shortage Means Employers Should Take Special Steps to Combat 'Presenteeism'." *HR Management: Ideas and Trends Newsletter* (593).
- Centers for Disease Control and Prevention. 2011. *National Health Interview Survey, Sample Adult File*. <[http://www.cdc.gov/nchs/nhis/nhis\\_2011\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2011_data_release.htm)> (accessed June 2012).
- Centers for Disease Control and Prevention. 2010. *National Health Interview Survey, Sample Adult File*. <[http://www.cdc.gov/nchs/nhis/nhis\\_2010\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2010_data_release.htm)> (accessed June 2012).
- ComPsych. 2004. *Vast Majority of Employees Work While Sick, According to ComPsych Survey*. Press Release. Chicago: ComPsych. March 8. <<http://www.compsych.com>> (accessed March 2005).
- Cooper, Philip F., and Alan C. Monheit. 1993. "Does Employment-Related Health Insurance Inhibit Job Mobility?" *Inquiry* 30 (Winter): 400-416.
- Drago, Robert and Vicky Lovell. 2011. *San Francisco's Paid Sick Leave Ordinance: Outcomes for Employers and Employees*. IWPR Publication No. A138. Washington, DC: Institute for Women's Policy Research. <<http://www.iwpr.org/publications/pubs/San-Fran-PSD>> (accessed March 2012).
- Dodson, Lisa, and Jillian Dickert. 2004. "Girls' Family Labor in Low-Income Households: A Decade of Qualitative Research." *Journal of Marriage and Family* 66 (5): 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* 3 (December): 1-5 (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.
- Freedman, Vicki A. 1993. "Kin and Nursing Home Lengths of Stay: A Backward Recurrence Time Approach." *Journal of Health and Social Behavior* 34(6): 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 (4): 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 (3): 7 – 21.
- 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 (4): 837-843.
- Johnston, Cecilia, Haoming Qui, Jhon R. Ticehurst, Conan Dickson, Patricia Rosenbaum, Patricia Lawson, Amy B. Strokes, Charles J. Lowenstein, Michael Kaminsky, Sara E. Cosgrove, Kim Y. Green and Trish M. Perl. 2007. "Outbreak Management and Implications of a Nosocomial Norovirus Outbreak." *Clinical Infectious Diseases* 45(5): 534-40.
- Kaiser Family Foundation. 2013. *State Health Facts 2010: Pennsylvania: Nursing Homes*. < <http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=97&rgn=40>> (accessed January 2013).
- Kavet, Joel. 1977. "A Perspective on the Significance of Pandemic Influenza." *American Journal of Public Health* 67 (11): 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 (2): 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/news/releases/flumist\\_study.htm](http://www.umm.edu/news/releases/flumist_study.htm)> (accessed March 2009).
- 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>> (accessed April 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 (7): 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 (10): 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 (10).
- Lovell, Vicky. 2004. *No Time to be Sick: Why Everyone Suffers When Workers Don't Have Paid Sick Leave*. IWPR Publication No. B242. Washington, DC: 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 (3): 449 – 461.
- 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>> (accessed February 2008).
- Miller, Kevin, Claudia Williams, and Youngmin Yi. 2011. *Paid Sick Days and Health: Cost Savings from Reduced Emergency Department Visits*. IWPR Publication No. B301. Washington, DC: Institute for Women's Policy Research. <<http://www.iwpr.org/publications/pubs/paid-sick-days-and-health-cost-savings-from-reduced-emergency-department-visits>> (accessed April 2012)
- National Alliance for Caregiving and AARP. 2009. *Caregiving in the U.S.* Bethesda, MD, and Washington, DC. <<http://www.caregiving.org/data/CaregivingUSAllAgesExecSum.pdf>> (accessed February 2010)
- Nichol, Kristin L. 2001. "Cost-Benefit Analysis of a Strategy to Vaccinate Healthy Working Adults Against Influenza." *Archives of Internal Medicine* 161 (3): 749 – 759.
- Palmer, Sarah J. 1993. "Care of Sick Children by Parents: A Meaningful Role." *Journal of Advanced Nursing* 18 (2): 185 – 191.
- Phillips, Douglas J. 1990. "The Price Tag on Turnover." *Personnel Journal* 2162(12): 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 (1): 1-6.

Prospective Payment Assessment Commission. 1992. *Optional Hospital Payment Rates*. Congressional Report no. C-92-03 (Washington: ProPAC).

Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.

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.

Senior Homes. 2013. *Philadelphia Nursing Homes*. <http://www.seniorhomes.com/c/pa/philadelphia/nursing-homes/> (accessed January 2013).

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 (4): 519 – 528.

Smith, Tom W and Jibum Kim. 2010. *Paid Sick Days: Attitudes and Experiences*. National Opinion Research Center, for the Public Welfare Foundation. <<http://www.publicwelfare.org/resources/DocFiles/psd2010final.pdf>> (accessed April 2012).

Stone, Robyn I., and Pamela Farley Short. 1990. "The Competing Demands of Employment and Informal Caregiving to Disabled Elders." *Medical Care* 28 (6): 513 – 526.

Tsouana-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(7): 881-887.

U.S. Bureau of Labor Statistics. 2010. Unpublished data from 2010 National Compensation Survey. Washington, DC.: U.S. Bureau of Labor Statistics.

U.S. Department of Commerce. Bureau of the Census. 2010, Current Population Survey, Displaced Worker, Employee Tenure and Occupational Mobility Supplement File

U.S. Department of Commerce. Bureau of the Census. American Community Survey. 2011. Calculations by the Institute for Women's Policy Research based on Ruggles et al., *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010. <<http://usa.ipums.org/usa/>> (accessed August 2010).

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>> (accessed March 2008).

Van Houtven, Courtney Harold, and Edward C. Norton. 2004. "Informal Care and Health Care Use of Older Adults." *Journal of Health Economics* 23 (11): 1159 – 1180.

Williams, Claudia. 2013. *Paid Sick Days in Philadelphia Would Lower Health Care Costs by Reducing Unnecessary Emergency Department Visits (Forthcoming)*. Washington, DC: Institute for Women's Policy Research.

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(10): 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.

Zingg, Walter, Carlo Colombo, Thomas Jucker, Walter Bossart, and Christian Ruef. 2005. "Impact of an Outbreak of Norovirus Infection on Hospital Resources." *Infection Control and Hospital Epidemiology* 26(3): 263.

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<sup>1</sup> It can be 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 knew 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>2</sup> While it is the clear intent of the 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 law would accept a paid time off leave program that could be used for illness as meeting the requirements of the law. 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>3</sup> State-level data and below are not available from the National Health Interview Survey.

<sup>4</sup> This assumes that work-loss reported in the 2010 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.

<sup>5</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>6</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>7</sup> This is the mean of six rates derived from data on three disease outbreaks.

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