



Estimating Usage and Costs of Alternative Policies to Provide Paid Sick Days in the United States

Issue Brief—Worker Leave Analysis and Simulation Series¹

January 2017

According to data from the National Health Interview Survey, more than fifty million workers in the U.S. lack access to paid sick days in their current jobsⁱ. Currently, seven states² and 32 other jurisdictions have passed laws that require employers to provide workers paid sick daysⁱⁱ. However, no national policy exists and the various states and localities provide for different coverage, eligibility, and benefits. Paid sick day policies are generally designed to address short-term illness of the worker or the worker's immediate family care needs and typically range from 1 to 13 days. Under the influence of the federal Family and Medical Leave Act, many mandatory and voluntary paid sick days policies now cover absences for family care, as well as workers' own illness and medical needs.

Among the reasons for *not* providing paid sick days to workers, employers frequently cite the expense for paying workers while on leave, even for a few days.ⁱⁱⁱ This issue brief explores the costs of paid sick time for the U.S. workforce under three alternative models compared with current policy (which encompasses what employers do voluntarily and what they are required to do in some states and localities). Models were selected to provide cost estimates for a range of number of days provided. In addition, San Francisco adopted the first law in 2006 and Vermont adopted one of the more recent in 2016; a national proposal was used to represent the midrange of generosity.

The analyses show that providing paid sick days under any alternative model policy increases the amount of paid time workers are able to take for medical and family needs, as intended, at reasonable costs to employers, ranging from 0.10 percent to 0.29 percent of payroll according to the generosity of the model. Employers of different sizes and in

In this Issue Brief, we explore the costs and benefits of alternative sick leave policies applied at the national level.

The analysis relies on the U.S. Department of Labor 2012 Family and Medical Leave (DOL FMLA) survey for leave taking behavior and the American Community Survey (ACS) 2009-2013 for data about the affected workforce.

This brief is part of the Worker Leave Analysis and Simulation Issue Brief Series and is part of a study funded by the Department of Labor's Chief Evaluation Office. For more findings in the Series, please visit https://www.dol.gov/asp/evaluation /WorkerLeaveStudy/

different industries would experience a range of costs under each model. Employers with establishments of 500 or more workers would experience the largest new costs as a share of payroll (from 0.15 percent to 0.43 percent according to the model's generosity), as would employers in education and health services (from 0.18 percent to 0.51 percent depending on the choice of model policy).

KEY FINDINGS

- Under three national paid sick days policies, paid and unpaid leaves taken increase from 9 to 13 percent.
- The cost of new paid sick days taken ranges from 0.10 to 0.29 percent of payroll for employers across the three different models
- Under all policies, workers take fewer than the maximum amount of paid sick days available.
- New costs for employers would vary from 0.01 percent of payroll for the armed forces to 0.51 percent of payroll for educational and health services, depending on the model policy.

1

¹ This project was funded, either wholly or in part, with Federal funds from the U.S. Department of Labor's Chief Evaluation Office under Contract # DOL-OPS-14-U-00040. The contents of this publication do not represent the views or policies of the Department.

² Connecticut (2011), California (2014), Massachusetts (2014), Oregon (2015), Vermont (2016), Arizona (2016), and Washington (2016).

THREE NATIONAL MODELS ARE ANALYZED TO ESTIMATE USAGE AND COSTS OF A PAID SICK DAYS POLICY

This issue brief analyzes two models taken from actual policies in the states and a federal proposal selected to provide variations in generosity. These models are applied to national workforce data to simulate national costs and benefits and represent a range of policy designs and benefit provisions (see *Table 1*). The San Francisco model, dating from 2006, has the most generous coverage, eligibility, and benefits. Vermont's Act, passed in March 2016, provides fewer sick days and has more restrictive eligibility standards. The federal model provides paid sick days only for those workers in businesses with 15 or more employees, but eligibility is liberal, similar to the San Francisco ordinance. All three models include all government workers and require that the employer pay eligible employees for time taken off for covered reasons.

One counter argument to paid sick days laws is that they increase business costs and reduce employment. In the decade since the first law passed (San Francisco in 2006), researchers have examined employment following adoption. San Francisco's growth in employment exceeded the average employment growth of surrounding counties after the paid sick days law was passed. In DC, the City's auditors found that the 2008 paid sick days law did not discourage owners from basing businesses in DC or encourage owners to move their businesses from DC. In the 10 months after the adoption of Seattle's Paid Sick and Safe Time Ordinance, King County (where Seattle is located) saw sustained job growth and reduced unemployment rates. All laws allow employers to consider themselves in conformance if they are already providing the number of paid sick days required to the covered workers.

Table 1: Summary of Alternative Paid Sick Days Models

Table 1. Sulfilliary of Alternative Faid Sick Days Models				
	Vermont Act	Proposed Federal Healthy Families Act (HFA)	San Francisco Paid Sick Leave Ordinance	
Coverage & Eligibility	All workers are covered, but eligibility requires workers to average 18 hours per week for 20+ weeks. Accrual begins at date of hire and is usable after the first year.	Workers in 15+ employee firms earn paid sick days. Workers in 1-14 employee firms earn unpaid sick days. Accrual begins at date of hire and is usable after 60 days.	All workers are covered. Eligibility and accrual begins 90 days after date of hire.	
Calculation of Leave Provided	Workers earn 1 hour every 52 hours, capped at 24 hours a year. Accrual increases to 40 hours in 2019.	Workers earn 1 hour every 30 hours, capped at 56 hours a year.	Workers earn 1 hour every 30 hours, capped at 40 hours (1-9 employees). Workers earn 1 hour every 30 hours, capped at 72 hours (10+ employees).	
Reasons for Leave	Personal illness/ injury and preventive care, care for family members, or domestic violence needs.	Personal illness/injury and preventive care, care for family members, or domestic violence needs.	Personal illness/injury and preventive care or care for family members; or domestic violence, added as of 1/1/17.	
Job Protection	The policy prohibits retaliation against workers.	The policy prohibits retaliation against workers.	The policy prohibits retaliation against workers.	

Source: Information on Vermont's policy was gathered from Act 69 of 2016; information on the proposed Healthy Families Act was gathered from House Bill 932 of the 114th Congress; information on San Francisco's Paid Sick Leave Ordinance was gathered from Chapter 12W: Sick Leave of the San Francisco Administrative Code.

LEAVES TAKEN, PAID AND UNPAID, INCREASE FROM 9 TO 13 PERCENT UNDER THESE ALTERNATIVES.

Based on a simulation model that estimates leave-taking behavior, *Table 2* shows the percent distribution of leaves that would be taken each year, both paid and unpaid, by reason for leave if these alternatives were enacted nationally. The simulation model uses data on leave need and qualified leave taking from the 2012 FMLA Employee Survey and assumes that workers newly covered for paid sick days under a proposed policy would behave like similar workers interviewed who received paid sick days from their employers under current policy. These estimates are compared with the current situation of no national paid sick days policy (FMLA job-protected, but unpaid, leave for most workers and voluntary wage continuation provided by employers for some workers). According to the simulation model results for total leaves taken under current policies, nearly 70 percent (19.1 million/27.5 million, data not shown) receive at least partial compensation from employer-provided wages for leave time taken (paid time can come from sick pay, vacation pay, or any other source the employer makes available). Providing paid sick days for medical needs and family care is expected to increase modestly the total number of leaves taken, compared with the current situation. It is estimated that from 9 to 13 percent more leaves would be taken depending on the coverage and eligibility criteria and benefit generosity characterizing each alternative model policy.

³ The simulation model used to calculate leaves taken is based on the 2012 DOL FMLA Employee Survey; in 2012, only San Francisco, the District of Columbia, Seattle, and the state of Connecticut had implemented paid sick days requirements. To the extent covered and eligible workers were included in the 2012 FMLA Employee Survey, their experiences are included in 'current policy.'

Table 2: Estimated Leaves (Paid and Unpaid) Taken Under Current Situation and Under Three Alternative Paid Sick Days Models by Reason for Leave

Reason for Leave	Leaves Taken (Paid and Unpaid)			
	Current	VT	HFA	SF PSLO
Workers' Health Leave	67.0%	66.4%	66.4%	66.5%
Own Health	59.3%	59.1%	59.2%	59.4%
Maternity-related Disability	7.7%	7.3%	7.2%	7.1%
Caregiving Leave	33.0%	33.6%	33.6%	33.5%
New Child Bonding	8.4%	8.3%	8.2%	8.1%
Family Care	24.5%	25.3%	25.3%	25.4%
Total (in thousands)	27,468	29,930	29,919	30,986
Percent Increase in Total Leaves	N/A	8.9%	8.9%	12.8%

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model. N/A indicated Not Applicable.

NUMBER OF NEW LEAVES RANGES FROM 12.8 MILLION TO 16.5 MILLION DEPENDING ON POLICY ALTERNATIVE.

Table 3 shows the percentage distribution of the new paid leaves that would be taken nationally and would be covered under each of the alternative model policies, compared with current policy. The estimates range from 12.8 million new paid leaves under the HFA, covering workers employed in businesses with 15 employees or more, to 16.5 million new paid leaves under the parameters of San Francisco's PSLO, covering nearly all workers.

Table 3: Estimated New Paid Leaves Taken Under Three Alternatives by Reason for Leave

Reason for Leave	New Paid Leaves Taken Under Model Policies			
	VT	HFA	SF PSLO	
Workers' Health Leave	81.4%	81.8%	80.9%	
Own Health	75.3%	75.5%	74.7%	
Maternity-related Disability	6.1%	6.3%	6.1%	
Caregiving Leave	18.6%	18.2%	19.1%	
New Child Bonding	4.6%	4.3%	4.3%	
Family Care	14.1%	14.0%	14.8%	
Total (in thousands)	13,804	12,813	16,452	

Note: In the absence of a national paid family care policy, it is estimated that paid sick days would be used for maternity and paternity leave by some workers.

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model.

Some of these leaves would have occurred under current policy but are counted here because some workers would be able to take additional days with pay under the new model policies. In addition, many eligible workers at covered employers who would not gain additional days of paid sick leave would gain the added job protection of non-retaliation for use of paid sick days and may therefore increase total days used.

WORKERS TAKE FEWER THAN THE MAXIMUM AMOUNT OF PAID SICK DAYS AVAILABLE.

Table 4 shows the average number of paid sick days U.S. workers are expected to take under the three alternative policy models by reason for leave. The top panel is the overall average per worker, including zero days for many workers, and the lower panel is the average number of days taken among workers who use the leave provided (excluding those who use zero days). Overall, the results show that workers do not take all the paid sick days provided each year. Even when only the workers who took at least one day are considered, it is estimated that only the initial Vermont-based policy, providing up to three days, would result in nearly all the leave being used in a year, most likely because the number of days provided is small. San Francisco provides up to nine days; an average of 3.6 are taken when those who use none are included and an average of 6.4 days are taken by users. The HFA provides seven days; averages of 2.3 (users and nonusers) and 6.4 (users only) are taken. These estimates include any added days compared with current policy: some U.S. employers already provide paid sick days and may provide only an additional paid day or two under these

policies. If employer plans are already more generous than any of these models, no additional paid sick days are shown here or included in any cost estimates of the new policies. As noted above, the new policies would provide workers with additional job security and protection from any penalties when taking eligible leaves.

Table 4: Estimated Number of Paid Sick Days Used per Year under Three Alternatives, by Reason for Leave

Reason for Leave	Average Number of Paid Sick Days Taken Under Alternative Model Policies			
	VT	HFA	SF-PSLO	
	All Workers (Includes Zero Days)			
Workers' Health Leave	1.5	3.2	4.6	
Own Health	1.6	3.3	4.8	
Maternity-related Disability	1.0	2.1	3.1	
Caregiving Leave	0.7	1.1	1.7	
New Child Bonding	0.6	1.1	1.6	
Family Care	0.7	1.2	1.7	
Overall	1.2	2.5	3.6	
	Workers Taking Leave (Excludes Zero Days)			
Workers' Health Leave	3.0	6.7	7.9	
Own Health	3.0	6.7	7.9	
Maternity-related Disability	3.0	6.6	7.8	
Caregiving Leave	2.7	5.1	5.6	
New Child Bonding	2.7	5.3	6.1	
Family Care	2.7	5.0	5.5	
Overall	2.9	6.4	7.4	

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model.

NATIONAL COSTS ARE ESTIMATED AT 0.10 TO 0.29 PERCENT OF PAYROLL DEPENDING ON POLICY GENEROSITY.

Table 5 shows that the cost of the additional time taken in paid sick days under the three alternative model policies for employers would range from an estimated \$7.0 billion (Vermont model) to an estimated \$19.7 billion (San Francisco Model). The Healthy Families Act falls in the middle of the range, at an estimated \$13.8 billion, indicating that in the aggregate, its larger number of paid sick days provided more than make up for the fewer number of workers covered due to excluding workers employed in smaller establishments. Covering more eligible workers and offering more days of paid leave increase the estimated costs. According to the Census Bureau's Current Population Survey, in 2013 U.S. payrolls totaled \$6.8 trillion; the cost of the new leave benefits would range from 0.10 percent to 0.29 percent of total wages paid. Economists, however, note that over time much of this cost is likely to be passed on to workers through slower wage growth, as well as to consumers in Research on business impacts of paid sick days laws have found that most employers report no or modest impacts on their costs or business operations and that the administrative burden is minimal viii.

Table 5: Estimated Annual Cost for Wage Replacement of Paid Sick Days under Three Alternatives, by Reason for Leave

Reason for Leave	Cost of Paid Sick Days Taken Under Alternative Model Policies (in millions)		
	VT	HFA	SF PSLO
Workers' Health Leave	\$5,781.4	\$11,858.7	\$16,999.5
Own Health	\$5,458.9	\$11,193.6	\$16,044.7
Maternity-related Disability	\$322.4	\$665.2	\$954.9
Caregiving Leave	\$1,233.4	\$1,912.7	\$2,737.7
New Child Bonding	\$365.9	\$586.8	\$843.3
Family Care	\$867.6	\$1,325.9	\$1,894.4

⁴ The 2011-2015 Current Population Survey payroll data was averaged and all years were converted to 2013 dollars using the CPI-U-RS.

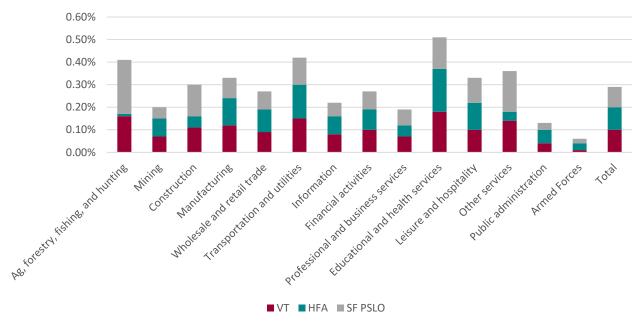
Total	\$7,014.8	\$13,771.5	\$19,737.2
Cost as a Percentage of Total Wages Paid	0.10%	0.20%	0.29%

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model. Total earnings based on IWPR analysis of 2011-2015 Current Population Surveys Annual Social and Economic supplements. Earnings were adjusted for inflation using the CPI-U-RS to 2013 dollars.

COST ESTIMATES ACROSS INDUSTRIES VARY, RANGING FROM 0.01 PERCENT OF PAYROLL FOR THE ARMED FORCES TO 0.51 PERCENT OF PAYROLL FOR EDUCATIONAL AND HEALTH SERVICES INDUSTRIES, DEPENDING ON THE MODEL POLICY.

Figure 1 shows the estimated cost of new paid sick days model policies to employers in various industries, as a percent of payroll in each industry. Costs of new policies are expected to vary substantially among industries. Some more physically challenging industries can be expected to have higher costs as a percent of payroll (agriculture, forestry, fishing, and hunting, for example), while others have higher estimated costs because currently they have very low rates of paid sick days coverage (educational and health services, for example). The costs of new policies range from 0.06 percent of payroll for those employed by the armed forces to 0.51 percent of payroll in educational and health services under the most generous San Francisco model, and from 0.01 percent to 0.18 percent of payroll in the same industries under the least generous Vermont model. Among private sector workers, those with more union representation, as well as a large share of higher paid, white collar workers tend to have more access to paid sick days currently than those who work in other industries ix.

Figure 1. Estimated Annual Cost, as a Percent of Total Wages, for Added Paid Sick Days, by Industry of Employer and Policy Alternative

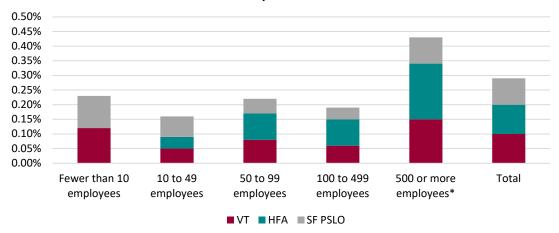


Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model.

THE COSTS ACROSS ESTABLISHMENT SIZE RANGE FROM 0.05 PERCENT AMONG ESTABLISHMENTS WITH 10 TO 49 EMPLOYEES TO 0.43 PERCENT AMONG THOSE WITH 500 OR MORE EMPLOYEES, DEPENDING ON POLICY MODEL.

Figure 2 shows the cost as a percent of payroll to employers under the three alternative model policies by size of establishment. The costs as a percent of payroll range from a low of 0.16 percent for establishments with 10 to 49 employees to 0.43 percent for establishments with 500 or more employees under the most generous model (San Francisco), and from a low of 0.05 percent to 0.15 percent of payroll for the same size establishments under the least generous model (Vermont).

Figure 2. Estimated Annual Cost, as a Percent of Total Wages, for Added Paid Sick Days, by Size of Employing Establishment and Policy Alternative



Note: *Includes public administration and armed forces. Total earnings based on IWPR analysis of 2011-2015 Current Population Surveys Annual Social and Economic supplements. Earnings were adjusted for inflation using the CPI-U-RS to 2013 dollars.

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model.

PAID SICK DAYS POLICIES HAVE BENEFITS FOR EMPLOYERS, WORKERS, AND PUBLIC HEALTH

The benefits of implementing paid sick days policies are potentially substantial to employers and include reduced contagion in the workplace, ^x improved productivity^{xi}, fewer workplace injuries^{xii}, and decreased employee turnover^{xiii}. In addition to reduced contagion and fewer injuries, public health benefits include more timely treatment for illness, increased use of preventive care, and improved family health^{xiv}. Workers and their families also benefit from more stable income and improved labor force attachment (and potentially greater earnings from increased seniority since workers would be less likely to lose their jobs for staying home sick). ^{xv} Emergency department use would fall since workers could access their regular doctors more easily, reducing health care costs and taxpayer health care subsidies. ^{xvi} Where paid sick days have been implemented, research studies find that costs were minimal, the policies were easy to implement, their use was not abused, they improved morale and work life balance, and they did not lead to slower job growth but rather sustained or above average job growth. ^{xvii}





APPENDIX A: NOTE ON METHODOLOGY

The Institute for Women's Policy Research, together with Massachusetts economists Randy Albelda and Alan Clayton-Matthews, has developed and updated a simulation model to estimate the usage and costs of family and medical leave. The model simulates specific leave-taking behavior (including number, length, benefit levels, and benefit eligibility) onto individual workers working in a state, locality, or the nation using data from five years (2009 to 2013) of the Census Bureau's American Community Survey (ACS). The simulation model estimates several aspects of leave taking behavior, conditional on demographic characteristics and leave type, including the worker's own health needs, maternity-related disability, new child bonding, and family care for spouse, children, or parents.⁵ These include the probability of needing a leave, of taking a leave, of getting paid for a leave, of extending a leave if some or more pay was received, and so on. A series of models are estimated to predict leave need, level of paid leave offered by an employer (if any), leave taking, duration, and other characteristics of covered workers and eligible leaves types. The model predicts the leave behaviors and characteristics as a function of the person's demographic characteristics for employed individuals in the ACS assuming that they behave similarly to the employees in the DOL FMLA Employee Survey. After each person has been passed through the entire flow, the result is a history of leave-taking behavior for a one-year period. See descriptions of the model provided by Albelda and Clayton-Matthews 2010 and Clayton-Matthews and Albelda 2016. **

The model uses observable leave-taking behavior available in a national, comprehensive survey of family and medical leaves, the 2012 FMLA Employee Survey conducted by Abt Associates under contract to the U.S. Department of Labor, for estimating the occurrence and leave behaviors around qualifying family events experienced by U.S. workers. (In 2012 paid sick time policies had been adopted covering workers in San Francisco, CA; Washington, DC; Seattle, WA; and service workers in Connecticut.) The survey data on observed behaviors are coupled with a few assumptions about unobservable behavior in the presence of a leave program including:

- How employer benefits affect leave participation The model assumes eligible workers compare weekly benefit amounts available with the paid sick days policies to the "next best option" (already existing employer-paid wages or uncompensated leave in most cases).
- Policy take up rates The model applies a specific definition of take up at the point where an eligible worker has experienced a qualifying medical or family event and decided to take leave in order to allow the analyst to specify the share that will take the new paid sick days offered. Reasons for less than full take up include lack of knowledge, difficulty of use, and lack of job security.

The total cost estimates generated by the IWPR-ACM Model are reasonable and compare favorably to cost estimates derived from other methods.

_

⁵ Family and medical leave is defined in the 2012 DOL FMLA Employee Survey as leave for one's own serious health condition; caregiving for a serious health condition of a parent, spouse, relative, or child; for a new child; or to respond to the military deployment of a family member.

APPENDIX B: TABLES

Table A-1: Estimated Annual Cost for Wage Replacement of Added Paid Sick Days under New Policies, by Industry of Employer

Industry	Cost (in millions)		
	VT	HFA	SF PSLO
Agriculture, forestry, fishing, and hunting	\$61.8	\$65.6	\$155.4
Mining	62.5	128.4	169.7
Construction	374.9	541.7	998.6
Manufacturing	919.9	1,872.0	2,544.8
Wholesale and retail trade	802.2	1,614.5	2,314.0
Transportation and utilities	401.4	807.3	1,116.7
Information	191.3	400.3	536.8
Financial activities	626.9	1,262.3	1,734.2
Professional and business services	885.3	1,564.4	2,411.9
Educational and health services	1,686.7	3,542.8	4,850.5
Leisure and hospitality	319.9	660.3	1,015.7
Other services	202.6	261.4	519.8
Public administration	478.3	1,046.7	1,363.2
Armed Forces	1.2	3.9	6.0
Total	7,014.8	13,771.5	19,737.2

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model. Total earnings based on IWPR analysis of 2011-2015 Current Population Surveys Annual Social and Economic supplements. Earnings were adjusted for inflation using the CPI-U-RS to 2013 dollars.

Table A-2: Estimated Annual Cost for Wage Replacement of Added Paid Sick Days under New Policies, by Size of Employing
Establishment

Establishment				
Size of Establishment	Costs (in millions)			
	VT	HFA	SF PSLO	
Fewer than 10 employees	829.9	\$0.0	1,633.4	
10 to 49 employees	685.6	1,275.1	2,123.4	
50 to 99 employees	546.3	1,243.2	1,607.1	
100 to 499 employees	1,017.5	2,333.5	2,999.9	
500 or more employees*	3,935.5	8,919.6	11,373.5	
Total	7,014.8	13,771.5	19,737.2	

Note: *Includes public administration and armed forces. Total earnings based on IWPR analysis of 2011-2015 Current Population Surveys Annual Social and Economic supplements. Earnings were adjusted for inflation using the CPI-U-RS to 2013 dollars.

Source: Estimates based on IWPR-ACM Family Medical Leave Simulation Model.

Romich, Jennifer with Wes Bignell, Tracy Brazg, Chantel Johnson, Cori Mar, Jennifer Morton, and Chiho Song, "Implementation and Early Outcomes of the City of Seattle Paid Sick and Safe Time Ordinance," (April 23, 2014).

Stewart, Walter F., Judith A. Ricci, Elsbeth Chee, and David Morganstein, "Lost Productive Work Time Costs From Health Conditions in the United States: Results From the American Productivity Audit," American College of Occupational and Environmental Medicine (December 2003) http://www.nationalpartnership.org/research-library/work-family/psd/lost-productive-work-time-american-productivity-audit.pdf (accessed April 26th, 2016).

De Ringe, LeaAnne, Patricia Stoddard-Dare, and Linda Quinn, "Workers Without Paid Sick Leave Less Likely to Take Time Off For Illness Or Injury Compared To Those With Paid Sick Leave," *Health Affairs* 35(3): 520-527 (2016).

[.]

¹ Xia, J., Hayes, J., Gault, B. & Nguyen, H. 2016. "Paid Sick Days Access and Usage Rates Vary by Race/Ethnicity, Occupation, and Earnings." Washington, DC: Institute for Women's Policy Research. http://www.iwpr.org/publications/pubs/paid-sick-days-access-and-usage-rates-vary-by-race-ethnicity-occupation-and-earnings>

ii A Better Balance. "Overview of Paid Sick Time Laws in the United States." (November 2016) http://abetterbalance.org/web/images/stories/Documents/sickdays/factsheet/PSDchart.pdf (accessed November 23, 2016).

iii WORLD Policy Analysis Center. 2016. "Paid Sick Leave: Is It Feasible for National Economies To Be Competitive While Guaranteeing It?" Los Angeles, CA: WORLD Policy Analysis Center. http://www.worldpolicycenter.org/sites/default/files/WORLD_Factsheet_Sick_Leave_2016.pdf

iv Kevin Miller and Sarah Towne, "San Francisco Employment Growth Remains Stronger with Paid Sick Days Law Than Surrounding Counties," Institute for Women's Policy Research (September 2011) http://iwpr.org/publications/pubs/san-francisco-employment-growth-remains-stronger-with-paid-sick-days-law-than-surrounding-counties (accessed March 18, 2016).

^v Office of the District of Columbia Auditor. "Audit of the Accrued Sick and Safe Leave Act of 2008." (June 19, 2013). http://www.dcauditor.org/sites/default/files/DCA092013.pdf >(accessed November 21, 2016)

vi The Main Street Alliance of Washington, "Paid Sick Days and the Seattle Economy: Job growth and business formation at the 1-year anniversary of Seattle's Paid Sick and Safe Leave law," (September 2013) http://www.thestranger.com/images/blogimages/2013/09/10/1378841347-psd-1-year-report-final.pdf (accessed January 12, 2016).

vii Summers, L. 1989. "Some Simple Economics of Mandated Benefits." The American Economic Review 79, no. 2: 177-183. http://eml.berkeley.edu/~saez/course131/Summers89.pdf.

Gruber, J. 1994. "The Incidence of Mandated Maternity Benefits." The American Economic Review 84, no. 3: 622-641. http://economics.mit.edu/files/6484>

viii Appelbaum, Eileen, Ruth Milkman, Luke Elliott, and Teresa Kroeger. 2014. "Good for Business? Connecticut's Paid Sick Leave Law." Washington, DC: Center for Economic Policy Research and New York, NY: The Murphy Institute, City University of New York.

ix Bureau of Labor Statistics. 2016. National Compensation Survey, Employee Benefits Survey. http://www.bls.gov/ncs/ebs/benefits/2016/ownership/private/table32a.htm

x Smith, Tom W. and Jibum Kim, "Paid Sick Days: Attitudes and Experiences," Public Welfare Foundation (June 2010) http://www.nationalpartnership.org/research-library/work-family/psd/paid-sick-days-attitudes-and-experiences.pdf> (accessed January 12, 2016).

xi Keech,, M., A.J. Scott, and P. J. J. Ryan, "The impact of influenza and influenza-like illness on productivity and healthcare resource utilization in a working population," Occupational Medicine 48 (2): 85-90 (1998).

xii Asfaw, Pana, Regina Pana-Cryan, and Roger Rosa, "Paid Sick Leave and Nonfatal Occupational Injuries," *American Journal of Public Health* 102(9): e59-e64 (September 2012).

xiii Hill, Heather. 2013. "Paid Sick Leave and Job Stability," Work and Occupations 40(2): 143-173.

xiv Institute of Medicine, "Care Without Coverage: Too Little, Too Late," (May 2002) https://iom.nationalacademies.org/~/media/Files/Report%20Files/2003/Care-Without-Coverage-Too-Little-Too-Late/Uninsured2FINAL.pdf (accessed January 12, 2016).

xv See note x.

Romich, Jennifer with Wes Bignell, Tracy Brazg, Chantel Johnson, Cori Mar, Jennifer Morton, and Chiho Song, "Implementation and Early Outcomes of the City of Seattle Paid Sick and Safe Time Ordinance," (April 23, 2014).

Drago, Robert and Vicky Lovell, San Francisco's Paid Sick Leave Ordinance: Outcomes for Employers and Employees, Institute for Women's Policy Research (February 2011) http://iwpr.org/publications/pubs/San-Fran-PSD (accessed March 18, 2016).

Milli, J., Xia, J. & Min, J. 2016. "Paid Sick Days Benefit Employers, Workers, and the Economy." Washington, DC: Institute for Women's Policy Research. http://www.iwpr.org/publications/pubs/paid-sick-days-benefit-employers-workers-and-the-economy

Xia, J., Hayes, J., Gault, B. & Nguyen, H. 2016. "Paid Sick Days Access and Usage Rates Vary by Race/Ethnicity, Occupation, and Earnings." Washington, DC: Institute for Women's Policy Research. http://www.iwpr.org/publications/pubs/paid-sick-days-access-and-usage-rates-vary-by-race-ethnicity-occupation-and-earnings>

xviii Albelda, Randy and Alan Clayton-Matthews, 2010. *The Institute for Women's Policy Research and Labor Resource Center Paid Family and Medical Leave Simulation Model.* Washington, DC: Institute for Women's Policy Research, Report #A143. http://www.iwpr.org/publications/pubs/the-institute-for-women2019s-policy-research-and-labor-resource-center-paid-family-and-medical-leave-simulation-model (accessed November 23, 2016).

Clayton-Matthews, Alan and Randy Albelda, 2016. A Report and Simulation Model Presented to the Women's Bureau on the U.S. Department of Labor, under grant no. WB-26510-14-60-A-25. https://www.dol.gov/wb/media/MA%20Full%20Simulation%20Model.pdf (accessed November 23, 2016).

xvi Miller, Kevin, Claudia Williams, and Youngmin Yi, "Paid Sick Days and Health: Cost Savings from Reduced Emergency Department Visits," Institute for Women's Policy Research (November 2011) http://iwpr.org/publications/pubs/paid-sick-days-and-health-cost-savings-from-reduced-emergency-department-visits (accessed March 18, 2016).

xvii Appelbaum, Eileen, Ruth Milkman, Luke Elliott, and Teresa Kroeger. 2014. "Good for Business? Connecticut's Paid Sick Leave Law." Washington, DC: Center for Economic Policy Research and New York, NY: The Murphy Institute, City University of New York.