

A Health Impact Assessment of Paid Sick Days

New Jersey Addendum
April 2011



RUTGERS
Center for Women and Work



For more information see www.humanimpact.org or call 510-452-9442.

I. INTRODUCTION

On June 11, 2009, researchers at Human Impact Partners (HIP) and the San Francisco Department of Public Health released a Health Impact Assessment (HIA) of the Healthy Families Act of 2009. The act is proposed federal legislation that would guarantee that workers have the right to earn paid sick days. The HIA report included a literature review on the links between health outcomes and paid sick days, national existing conditions data relevant to the policy (e.g., demographics of who currently does not earn paid sick days, communicable disease outbreaks, avoidable hospitalizations), and information from focus groups conducted with workers who do not earn paid sick days. The report also predicts the magnitude and direction of several health outcomes that would be likely to result if the act became law. The full report can be found at: <http://www.humanimpact.org/component/jdownloads/finish/5/68>.

In this addendum to the national report, we provide New Jersey-specific existing conditions data relevant to paid sick days policies being considered by state organizations and municipal leaders. The literature review, data, and predictions in the national report are relevant to any proposed New Jersey policy. The data provided in this addendum supplement the national data in an effort to support the specific context in New Jersey.

In section II of this addendum, we provide information on the prevalence of paid sick days among New Jersey workers and review existing, relevant New Jersey law. In section III, we summarize data regarding preventable hospitalizations and emergency room visits in New Jersey and address our previous findings regarding the impacts of paid sick days on health care service utilization. Data regarding norovirus and influenza outbreaks are presented in section IV. We briefly present results of a focus group discussion in section V. A summary of findings is presented in Section VI.

II. BACKGROUND AND CONTEXT

In 2010, over 1.2 million workers, or 38% of New Jersey’s private sector workforce, lack paid sick days (IWPR 2011). These figures, based on the most recent, available data, are more striking when disaggregated by private sector occupations (Table 1). For example, in service sector occupations such as food preparation and service, 76% of workers do not have paid sick days. In contrast, only 13% of workers in management occupations lack paid sick days.

Private Sector Occupation	% of Workers without Paid Sick Days
Management	13
Business and financial operations	19
Computer and mathematical	18
Architecture and engineering	19
Life, physical, and social science	25
Community and social services	33
Legal	16
Education, training, and library	39
Arts, design, entertainment, sports, and media	26
Healthcare practitioner and technical	30
Healthcare support	36
Protective service	64
Food preparation and serving related	76
Building and grounds cleaning and maintenance	42
Personal care and service	44
Sales and related	48
Office and administrative support	33
Construction and extraction	60
Installation, maintenance, and repair	38
Production	45
Transportation and material moving	53
Source: Institute for Women’s Policy Research estimates from the 2010 National Compensation Survey and other sources.	

Currently, no New Jersey or federal law guarantees workers the right to paid time off when they or their dependents are ill. Organizations in the state are currently pursuing the possibility of introducing paid sick days legislation. While no specific paid sick days law exists, numerous other federal and state laws provide time-off benefits to workers, though not all provide pay.

The federal **Family and Medical Leave Act (FMLA)** provides twelve weeks of unpaid time off in a twelve-month period for workers employed in companies with 50 or more employees. Time can be used for personal illness or disability, to care for a seriously ill family member, or to bond with a newborn or newly adopted child.

In 1990, three years prior to FMLA, New Jersey adopted the **NJ Family Leave Act** (New Jersey Statutes Annotated Title 34:11B-1 to 16), which provides twelve weeks unpaid leave during a 24-month period to workers employed in companies with 50 or more employees. Time can be used to care for a seriously ill family member or to bond with a newborn or newly adopted child.

New Jersey is also one of only five states with a **Temporary Disability Insurance Program** (adopted in 1948) that provides partial wage replacement for workers when they take time for their own medical care or disability. Pregnancy is included as a disability.

Finally, in July 2009, New Jersey became the second state in the nation to implement a reimbursed family leave program, entitled the **NJ Family Leave Insurance Program**. The program expands the Temporary Disability Insurance Program to provide 6 weeks of partial wage replacement for workers when they need time to care for seriously ill family members or to bond with a newborn or newly adopted child. The program applies to all workers, and is employee-funded via payroll deduction.

III. PREVENTABLE HOSPITALIZATIONS AND EMERGENCY ROOM VISITS

Section 4.5 of HIP’s national HIA report on the potential health effects of paid sick days describes how the lack of paid sick days may create a barrier to the utilization of primary and preventive care, thereby increasing utilization of more expensive therapeutic and hospital care. Many hospital admissions for common, chronic diseases such as asthma, hypertension, and diabetes are preventable with timely and effective outpatient and primary care (Parker 2005). Even a small percentage-point reduction in these avoidable events as a result of a paid sick days policy could lead to substantial cost savings.

While the relationship between paid sick days, health insurance and hospital use is deeply interrelated, the analysis contained in HIP’s Massachusetts addendum found that even among workers with health insurance in the U.S., those without paid sick days were 15% more likely to use the emergency room and almost 40% more likely to delay necessary medical care relative to those with both health insurance and paid sick days.

Preventable Hospitalizations

According to the New Jersey Department of Health and Senior Services, Office of Health Care Quality Assessment, in 2005, there were over 1,125,000 total hospitalizations in New Jersey (NJ DHHS 2005). Of these hospitalizations, a bit more than 150,000 (13%) were considered *preventable* according to the State’s Prevention Quality Indicators (PQI) report. According to the report, “PQIs are a set of measures....to identify.... conditions for which hospitalization could be prevented with good outpatient care or for which early intervention could prevent complications or more severe diseases.” (NJ DHHS 2005) Table 2 provides the number of preventable hospitalizations for a select group of indicators from the 2005 PQI report.

Condition	Number
Diabetes with Short-term Complications	3,544
Diabetes with Long-term Complications	11,581
Uncontrolled Diabetes	2,054
Chronic Obstructive Pulmonary Disease	13,657
Hypertension	4,243
Congestive Heart Failure	37,505
Urinary Tract Infection	13,845
Asthma	11,149
Source: NH Department of Health and Senior Services, Office of Health Care Quality Assessment. Selected indicators presented from Prevention Quality Indicators Report New Jersey 2005.	

Though not specific to paid sick days, research conducted by the U.S. Agency for Healthcare Research and Quality has examined the relationship between income and preventable hospitalizations. Its research finds that “residents from areas with the lowest median incomes (less than \$25,000) have the highest rates of admission for all preventable hospitalizations” (US DHHS 2000). Low-income workers also have the lowest rates of paid sick days access (HIP and

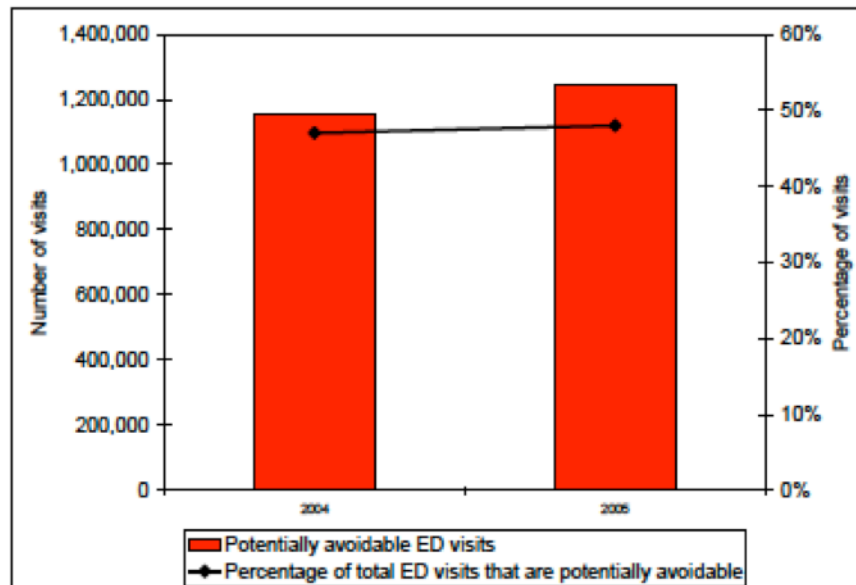
SFDPH 2009). These workers, who are already burdened by a lack of resources and health disparities, face significant challenges to taking the time off necessary to stay healthy and recover from illness.

Emergency Department Use

According to the state Office of Health Care Quality Assessment, in 2005, there were nearly 3,000,000 emergency department (ED) visits throughout the state. That number has steadily increased, with over 3,100,000 ED visits in 2007 (Mammo, personal communication). According to the Kaiser Family Foundation, this translated into a rate of 366 hospital emergency room visits per 1,000 in 2007, lower than the national rate of 401 per 1,000 (Kaiser Family Foundation 2005).

However, according to a 2007 report prepared for the New Jersey Department of Health and Senior Services by a researcher at Rutgers University (DeLia 2007), “A large volume of patients treated and released from the ED also present with conditions that are either avoidable or treatable outside of the ED.... Specifically, just under half of all treat-and-release patients come to the ED with conditions that are amenable to primary care.” Figure 1 highlights potentially avoidable treat and release ED visits in 2004 and 2005.

Figure 1. Potentially Avoidable Treat and Release ED Visits, New Jersey, 2004-2005



Source: NJ Uniform Billing (UB-92) Records

Source: Figure obtained from DeLia, D. Hospital Capacity, Patient Flow, and Emergency Department Use in New Jersey: A Report to the New Jersey Department of Health and Senior Services. September 2007.

IV. COMMUNICABLE DISEASE TRANSMISSION

Community communicable disease transmission commonly occurs in workplace settings and may involve sick workers at work. Section 4.7 of HIP’s national HIA report on the potential health effects of paid sick days discusses whether and how paid sick days might help reduce the transmission of communicable disease, such as influenza, foodborne diseases, and other infectious diseases in healthcare and daycare facilities, restaurants, and other institutional and community settings. In this section, we examine data from the Centers for Disease Control and the New Jersey Department of Health and Senior Services on employment factors related both to the transmission of selected communicable diseases and to foodborne disease outbreaks in New Jersey.

Norovirus

According to the CDC, “noroviruses are a group of... viruses that cause acute gastroenteritis in humans. The most common symptoms of acute gastroenteritis are diarrhea, vomiting, and stomach pain.” “People can become infected with the virus [*also known as the stomach flu*] in several ways: by eating food or drinking liquids that are contaminated with norovirus; by touching surfaces or objects contaminated with norovirus, and then placing their hand in their mouth; and by having direct contact with another person who is infected (for example, when caring for someone with illness, or sharing foods or eating utensils with someone who is ill).” (<http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus.htm>).

Norovirus can be transmitted in both outbreak and non-outbreak circumstances. Generally, outbreaks are, as a group of cases, associated both with each other (e.g., related by place or time) and with a common source (e.g., person or place). With a common disease such as norovirus, general population surveillance of disease incidence does not exist. Cases identified in outbreaks represent only a share of the total population burden of disease.

New Jersey Data on Norovirus Outbreaks

According to data provided directly by the New Jersey State Department of Health and Senior Services, there were 380 norovirus/acute gastroenteritis outbreaks in New Jersey in 2005 – 2009, and the vast majority (n = 341; 90%) of these outbreaks occurred in workplace and institutional settings. Table 3 highlights the distribution of these outbreaks by setting, suggesting that norovirus outbreaks are associated with diverse types of workplaces. (Genese, personal communication)

Setting	Number of Outbreaks
Daycare	10
Hospital	8
Long-term care facility	273
Restaurant	22
School/University	28
Source: New Jersey Department of Health and Senior Services, Infectious and Zoonotic Disease Program. Data provided via personal communication, April 23, 2010.	

Although the State was unable to provide data on whether ill workers preparing food were the source of these outbreaks, evidence of worker illness as a factor in norovirus transmission has been demonstrated for workers in the food industry. For example, between 48% and 93% of all outbreaks involving norovirus—which is responsible for 50% of all foodborne illnesses in the U.S (Widdowson 2005)—may be linked to ill food service workers (Guzewich 1999). According to a Morbidity and Mortality Weekly Report (MMWR 2009), “The large and increasing number of outbreaks attributed to norovirus indicates a need for improved attention to preventing food contamination at the point of service, because such outbreaks are largely attributed to transmission by infected food handlers.” Where worker illness is a contributing factor to outbreaks, it is possible that many of the norovirus outbreaks in New Jersey may have been prevented if sick workers had been able to stay home with pay.

National data on Foodborne disease outbreaks

Foodborne disease outbreaks, in particular, have been traced to food handling workers with active communicable diseases. These outbreaks occur despite laws and regulation requiring ill workers to be excluded from food handling. For example, the **New Jersey Administrative Code** (Section 8:57-1.11) requires the exclusion from the workplace of food workers diagnosed with several infectious diseases, and places limits on the work a food worker may carry out when suffering from symptoms associated with those diseases; however, it does not require that excluded workers be paid during their time away from work.

The Centers for Disease Control (CDC) provided data as reported by New Jersey health officials through the CDC’s Electronic Foodborne Outbreak Disease Report System (eFORS) during a 5-year period from 2003 to 2007. The database includes reports on single county outbreaks, multi-county outbreaks, as well as multi-state outbreaks, all with exposure in New Jersey. In addition, eFORS tracks outbreaks where the source is food; therefore, many pathogens are included as the cause, and data are not restricted to norovirus.

Based on available, reported data, there were 57 foodborne disease outbreaks for 2003–2007 in New Jersey, with 1,562 related cases of illness. The majority of these outbreaks (67%) and cases (59%) occurred in institutional and workplace settings including schools, day care settings, restaurants or delis, workplace cafeterias, grocery stores, hospitals, and jails. In these settings, workers with a communicable disease have a significant potential to contribute to a communicable disease outbreak if they work when ill.

Of the 38 outbreaks occurring in the specific settings listed above, in 13% of outbreaks ($n = 5$) and 10% of cases ($n = 92$), food-handling by an infected person or carrier of a pathogen was identified as a contributing cause. Norovirus was implicated in one outbreak, with salmonella and *E. coli* O157:H7 responsible for the rest. In an additional four reported outbreaks and 63 related cases during this time period, bare-or glove-handed food contact was identified as a contributing cause of the outbreak. In total, 24% ($n = 9$) of all outbreaks and 39% ($n = 155$) of all cases occurring in an institutional or workplace setting had contributing causes involving a food handler/worker/preparer.

Influenza

Between 2006-2009, there were 84 influenza (including H1N1) and influenza-like outbreaks in New Jersey (Genese, personal communication). Of these, 69 (82%) occurred in long-term care facilities and the rest occurred in schools, daycares, jails and other locations. Section 4.7 of HIP's national HIA report on the potential health effects of paid sick days discussed the impact of paid sick days on seasonal and pandemic influenza. Some findings included:

- 37% of seasonal influenza transmission occurs in schools and workplaces, and 33% in other community settings (Ferguson 2006);
- A sick worker who is in the workplace while contagious is likely to infect 1.8 of every 10 co-workers (Lovell 2005);
- Staying at home when infected may reduce the number of people impacted by pandemic influenza by 15%–34% (Ferguson 2006; Germann 2006; Glass 2006; Wu 2006);
- Between 4 and 5 out of every 10 people said that they would lose pay and have money problems if asked to stay home for 7 to 10 days during a pandemic; 25% of people said they would have “serious financial problems” as a result (Blendon 2006; Blendon 2009);
- Compliance with social distancing measures during pandemic flu could increase by 29% among workers currently without paid sick days, if they were given the benefit (HIP and SFDPH 2009);
- According to one model of pandemic flu, 71,000 people in New Jersey could die during a pandemic and close to 2,585,000 people in the state could become ill (TFAH 2007).

V. FOCUS GROUP FINDINGS

Introduction

This narrative summarizes the findings of two focus groups conducted in New Jersey on paid sick days. These focus groups were organized and conducted by the Rutgers University Center for Women and Work. The purpose of the focus groups was to gather qualitative information on the effect of having/not having paid sick days on the health of workers and their families.

Given the limited availability of data addressing how access to paid sick days affects health, findings from focus groups help to fill some data gaps. While these findings are not representative of all workers, the results provide powerful perspectives often overlooked in a discourse dominated by economic cost-benefit analyses.

Methods

The focus groups took place in July and August 2009. The focus groups were recorded with permission of the participants, and transcriptions of the recordings were provided to Human Impact Partners staff for analysis. Participation in the group was completely voluntary, and participants were told that names and identifying information would be kept confidential. Each participant received a \$25 gift card and light snacks as compensation.

The nine participants included three men and six women who worked in a variety of jobs including as a child care provider, personal trainer, dental technician, and cafeteria worker. Seven participants were employed full-time, one was employed part-time, and one was unemployed but shared experiences from previous employment. Five of the participants received paid sick days.

Findings

During the discussions, participants raised a variety of issues related to paid sick days and taking time off from work. Issue areas can be divided into the following topics:

- Access to healthcare, delayed care, and recovery from illness
- Ability to care for dependents
- Workplace pressures, economic consequences, and employer retaliation

Access to healthcare, delayed care, and recovery from illness

Several focus group participants discussed their inability to access healthcare services for themselves or their family members because they could not take time off. One stated, “I’ve gone to work with something I thought was minor but that developed into something more – once had a tickle in my throat that developed into strep throat.” Another participant told a story about how delaying care led to an emergency room visit, “Yes I was working that day at the pizzeria and I felt like I was losing my breath and didn’t have enough oxygen. During the whole day I kept saying to my boss that I should go to the doctor, that I wasn’t feeling good. Finally at 5pm, when a replacement came in, I went to the doctor’s office and they sent me to the

emergency room. They said I was having an asthma attack. I think that if I could have had it addressed sooner, I could have gotten it under control without going to the emergency room.”

Another story came from a parent who described her experience delaying care for her child because she could not use her sick time for a dependent. She stated, “I picked him up [from school] on my break and brought him to work and then took him to the doctor after I got off work. I couldn’t take sick time even though I had it because I wasn’t the one sick. They preferred me to do this because they needed me to serve lunch to a cafeteria of high school kids. So that was at least 3 lunch periods I had to serve so I put him under the meat slicer while I worked. When I got off work, I took him to the doctor and found out he had the flu.”

In contrast, those who had paid sick time and were able to successfully use the time to access healthcare and recover from surgery reported experiencing positive outcomes. For example, one participant reported that, “I took time when I broke my shoulder and had to have surgery. That was good....paid sick days gave me a full paycheck for the whole time I was out.” She went on to state that she experienced no complications during her recovery, and was fully recovered by the time she went back to work.

Ability to care for dependents

Several participants who had paid sick days described difficulty in using sick days to care for dependents. With respect to caring for children, participants described that it was easier – mostly because it was more “believable” – to get a call from the school nurse to go and get their child from school than to call in sick before going to work. One parent stated, “I sent my child to school with a migraine knowing that I would get a call within two hours saying come and pick her up. It was easier to say, ‘sorry, school nurse says I gotta come pick up my daughter’ than to call out sick and say I can’t come in because my child needs me.” Another participant, a teacher, confirmed that she had heard this argument from parents many times – she stated, “I’ve had parents say I can’t call out but if you call me, they will let me out, but I just can’t take the day sick.”

Alternatively, one participant described how having paid sick days and being able to use them to care for her husband provided a significant amount of needed support that improved his health. She stated, “I did have the occasion where I had to take some time off to care for my husband after surgery for lung cancer. For the first two weeks, he was unable to get out of the bed....I was able to take half days during that time....I was able to be there, making sure he was comfortable, taking his medications, making sure his wound was cleaned. This was vital to his quick recovery and being able to take the time and not feeling like I was doing something I shouldn’t....[being] able to use [the paid sick days benefit] was very good for him and me – he was not stressed out about me taking time.....This would not have been as quick a recovery if I had not been there to help him.”

Workplace pressures, economic consequences, and employer retaliation

The challenge most often faced by workers when wanting to use paid sick time was the experience of disapproval or difficulty in actually using paid sick days benefits. In line with the experiences of parents (described above) who found it easier to leave work at the request of a school nurse, numerous other focus group participants described their workplace culture as one

that frowned upon the use of paid sick time, found it an inconvenience, or that placed standards or restrictions on how that time should be used. The following statements illustrate the challenges of workplace context in employees actually using paid sick time:

- “I do have paid sick days and I am able to take them. But if they have advance notice, they are better about it. When you just call in that day you are sick, they are not happy.”
- “Their preference is that if you have a doctor’s appointment or other medical treatment, you make it on your own time after work or on the weekend. They also frown upon any attempt to flex your schedule to accommodate a doctor or other appointment. . . . It makes it uncomfortable and limits your options so you call out sick in order to go to the doctor.”
- “I’ve gone to work sick because [the] work pressures in taking time off would cause more work pressure so it’s relatively rare that I would take a sick day, primarily because of the work pressure.”

In terms of applying restrictions to the use of sick time, two participants described needing to find someone to cover their shifts/work in order to take time off. For example, one participant (the personal trainer) described what happened when she awoke and was diagnosed with swine flu, “Well, because I work strictly with clients, I had to make sure there was someone there to cover my work and keep them happy. As long as they got the service they needed at the gym, my boss was okay.” Another participant stated that “I get paid sick days. . . . However, I’ve gone to work sick a great many times. Many reasons for this, one is that I work with children and it throws off their schedule when I’m not there. . . . and [my employers] give me a hard time when I call out, I’m inconveniencing them, they need to find coverage, hire other people.”

Participants who did not receive pay when taking sick days made it clear that the loss of pay when taking time off had a measurable impact on their lives. For example, one participant described the impact that lost pay due to calling out sick had on her household budget. She said, “I once paid my electric bill on my Visa. You do what you have to.” Another participant described the retaliation she experienced when she called out sick. She stated, “At my last job. . . we needed to let them know two days in advance that we needed a replacement if we were going to be out for any reason, including being sick. But there was one situation where I was very, very sick and could not find a replacement just a few hours before work. And after that they just stopped scheduling me for work so I lost my job.”

Conclusions

Collectively, the stories and experiences of participants illustrate that the absence of paid sick days affected the health of participants via a number of different pathways. Focus group participants clearly understood the paid sick days issue as a health-related issue, both through the direct impacts on health (e.g., delayed care, longer recovery times) and through indirect impacts (e.g., loss of job or wages). While several participants received paid sick days, virtually all reported a work environment that created pressures for them to come to work when they, or their dependents, were ill. While employers should be acknowledged for providing paid sick days to workers, the public health benefits of paid sick days are only conferred when an employee uses sick time to care for themselves, or a dependent, when ill.

VI. SUMMARY OF FINDINGS

Our findings, based on the New Jersey data, are presented below.

1) Access to paid sick days varies considerably by industry. Generally, industries that pay less provide paid sick days less often, and as a result, lower income workers, who are already burdened by a lack of resources and health disparities, face significant challenges to taking the time off necessary to stay healthy and get well from illness.

- In 2010, 38% of the private-sector workforce in New Jersey did not have paid sick days.
- Food preparation and service workers lacked paid sick days at the highest rates, with 76% not having access to paid sick days. Protective service and construction workers were the next highest, with 64% and 60%, respectively, not having paid sick days.
- In contrast, 87% of those working in management, and 84% of those working in legal occupations, received paid sick days.

2) There are a large number of preventable hospitalizations and emergency department visits in New Jersey that may be avoided based on increased access to paid sick days.

- In 2007, 361 out of every 1,000 people in the state visited an ER, translating into over 3,100,000 visits for that year.
- In 2005, there were over 150,000 hospitalizations in New Jersey – for diseases such as asthma, diabetes, and hypertension – that were considered avoidable according to the State. In other words, these hospitalizations could have been prevented with appropriate care in a doctor's office.

3) A substantial burden of communicable disease outbreaks are attributable to norovirus, the majority of which are likely due to transmission by infected food handlers. In addition, many foodborne disease outbreaks are associated with ill, working food service workers. Paid sick days may facilitate accountability to workplace exclusion policies that are designed to prevent such outbreaks.

- Between 2005 – 2009, there were 380 norovirus/acute gastroenteritis outbreaks in New Jersey. Of these, 90% (n = 341) occurred in workplace and institutional settings, including long-term care facilities, restaurants, and schools/daycares.
- Between 2003 – 2007, there were a total of nine outbreaks and 155 associated cases of illness occurring in workplace settings where the contributing cause involved a food handler/worker/preparer.
- The New Jersey Administrative Code (Section 8:57-1.11) requires the exclusion from the workplace of food workers diagnosed with several infectious diseases and places limits on the work a food worker may carry out when suffering from symptoms associated with those diseases. It does not, however, require that excluded workers be paid during their time away from work.

4) Long-term care facility residents, many of whom are particularly vulnerable, face significant exposure to disease outbreaks. Paid sick days could reduce this exposure and prevent illness and mortality among seniors.

- From 2005 – 2009, there were 273 outbreaks of norovirus within long-term care facilities in New Jersey.
- Between 2006 – 2009, there were 84 influenza (including H1N1) and influenza-like outbreaks in New Jersey. Of these, 69 (82%) occurred in long-term care facilities.

5) Workers report that the lack of paid sick days and the inability to use paid sick days (among those who have them) has clear consequences on their own health and the health of family members.

- Several focus group participants described the experience of delaying care for themselves and their dependents because they could not take sick time, which then led to onset of more severe illness. In one case this led to the use of emergency room services. In contrast, those who had paid sick time and were able to successfully use the time to access healthcare services reported faster recoveries and more positive health outcomes.
- Parents, in particular, experience significant challenges in taking time to care for children. For example, a number of participants described that it was easier to get called away from work by school nurses rather than voluntarily keeping their children home from school.
- The challenge most often faced by participants when wanting to use paid sick time was the experience of disapproval or difficulty in actually using paid sick days benefits. Numerous focus group participants described their workplace culture as one that frowned upon the use of paid sick time, found it an inconvenience, or that placed standards or restrictions on how that time should be used.

REFERENCES

- Blendon RJ, Benson JM, Weldon KJ and Herrmann MJ. (2006) Pandemic Influenza and the Public: Survey Findings. Presented at the Institute of Medicine on Oct 26, 2006. Available at: <http://www.hsph.harvard.edu/news/press-releases/2006-releases/press10262006.html>.
- Blendon RJ, SteelFisher GK, Benson, JM, Weldon KJ, and Herrmann MJ. (2009) Influenza A(H1N1)/Swine Flu Survey III. Available at: <http://www.hsph.harvard.edu/news/press-releases/2009-releases/national-survey-americans-influenza-a-h1n1-outbreak-fall-winter.html>.
- DeLia D. (2007) Hospital Capacity, Patient Flow, and Emergency Department Use in New Jersey. A Report to the New Jersey Department of Health and Senior Services, September 2007. Available at: <http://www.cshp.rutgers.edu/Downloads/7510.pdf>.
- Ferguson NM, Cummings DA, Fraser C, Cajka JC, Cooley PC, Burke DS. (2006) Strategies for mitigating an influenza pandemic. *Nature*. 442:448-52.
- Germann TC, Kadau K, Longini IM Jr, Macken CA. (2006) Mitigation strategies for pandemic influenza in the United States. *Proc Natl Acad Sci USA*. 103:5935-40.
- Glass RJ, Glass LM, Beyeler WE, Min HJ. (2006) Targeted social distancing design for pandemic influenza. *Emerg Infect Dis*. 12:1671-81.
- Guzewich J, Ross M. (1999) Evaluation of risks related to microbiological contamination of ready-to-eat food by food preparation workers and the effectiveness of interventions to minimize those risks. Available at: <http://www.cfsan.fda.gov/~ear/rterisk.html>.
- HIP and SFDPH. (2009) A Health Impact Assessment of the Healthy Families Act of 2009. Oakland, California. June 2009. Available at: <http://www.humanimpact.org/PSD>.
- Institute for Women's Policy Research (IWPR). (2011) Access to Paid Sick Days in the States, 2010. March 2011. Available at: http://www.iwpr.org/publications/pubs/access-to-paid-sick-days-in-the-states-2010/at_download/file.
- Kaiser Family Foundation. (2007) State Health Facts. New Jersey: Hospital Emergency Room Visits per 1,000 Population, 2007. Available at: <http://statehealthfacts.kff.org/index.jsp>.
- Lovell V. (2005) Valuing good health: An estimate of costs and savings for the Healthy Families Act. Washington, D.C.: Institute for Women's Policy Research. Available at: <http://www.iwpr.org/pdf/B248.pdf>.
- Mammo, Abate (Program Manager, Office of the Commissioner, Health Care Quality Assessment/DHSS). Email communication regarding the number of emergency department visits in New Jersey, 2005-2008. April 9, 2010.
- MMWR (Morbidity and Mortality Weekly Report). (2009) Surveillance for Foodborne Disease Outbreaks, United States, 2006. 58(22); 609-615.
- New Jersey DHSS. Office of Health Care Quality Assessment. (2005) Prevention Quality Indicators in New Jersey 2005. Available at: <http://www.nj.gov/health/healthcarequality/ub/cases05.pdf>.

Genese, C (Coordinator, Infectious Disease Team, NJ DHHS, Infectious and Zoonotic Disease Program). Email communication regarding communicable disease data in New Jersey, 2005-2009. May 17, 2010.

Genese, C (Coordinator, Infectious Disease Team, NJ DHHS, Infectious and Zoonotic Disease Program). Email communication regarding influenza data in New Jersey, 2005-2009. May 17, 2010.

Parker JP, Simon V, Parham C, Teague J, li Z. (2005) Preventable hospitalization in California: statewide and county trends (1997-2003). Sacramento, CA: Office of Statewide Health Planning and Development.

TFAH (Trust for America's Health). (2007) Pandemic flu and the potential for U.S. economic recession: A state-by-state analysis. Available at <http://healthyamericans.org/reports/flurecession/>.

US DHHS, Agency of Healthcare Research and Quality. (2000) Preventable Hospitalizations: A Window Into Primary and Preventive Care, 2000. HCUP Fact Book No. 5. Available at: <http://www.ahrq.gov/data/hcup/factbk5/index.html#contents>.

Widdowson MA, Sulka A, Bulens SN, Beard RS, Chaves SS, Hammond R, Salehi EDP, Swanson E, Totaro J, Woron R, Mead PS, Bresee JS, Monroe SS, Glass RI. (2005) Norovirus and foodborne disease, United States, 1991-2000. *Emerging Infectious Disease*. 11(1):95-102.

Wu JT, Riley S, Fraser C, Leung GM. (2006) Reducing the impact of the next influenza pandemic using household-based public health interventions. *PLoS Med*. Sep;3(9):e361.