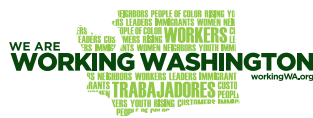




# SCHEDULING AWAY OUR HEALTH:

## How Unpredictable Work Hours Affect Health and Well-being



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## Executive Summary

For many low-wage workers, every week looks different from the next. Receiving a work schedule with little advance notice, fluctuating shift times and working an inconsistent number of hours from week-to-week is the rule rather than the exception. These precarious work hours lead to income instability and make it difficult or impossible to arrange childcare, schooling, or a second job, or for a worker to manage his or her own serious medical condition.

In Seattle, policymakers are working to address widespread scheduling volatility among Seattle's hourly workforce. A recent survey found that half of the Seattle workers interviewed receive schedules one week or less in advance, a finding consistent with national representative data. And among part-time workers, 75% of respondents had weekly schedules that varied by eight hours or more. A focus group of Seattle workers conducted by Human Impact Partners echoed these findings. One retail worker, Holly, said, "There are days I can work a long day and they'll only schedule me 4 hours as opposed to 8 hours. And so that's getting kind of scary when it gets down to the wire, when I really don't have any money and I don't know if you're going to schedule me for 15 hours this week or 4 hours. It's just really hard to deal with." Another former barista, Tyler, said, "My main problems were my shifts being cut. Sometimes I would be scheduled for 8 hours and it would end up being more like 4, or maybe less than 4 with the lunch break... Altogether there was no consistency in the schedule really at all."

In this report, ***Scheduling Away Our Health: How Unpredictable Work Hours Affect Health and Well-being***, we build on a body of evidence analyzing these scheduling practices, and pay special attention to the physical and mental health consequences for workers and their families. As momentum builds for fair workweek policies, the human costs are important to understand as policymakers weigh solutions. Through literature review, original data analysis, and focus groups, we find that the health and well-being of workers is undoubtedly compromised by unpredictable work schedules.

## Specifically, we find that unpredictable work hours:

### Have Direct and Negative Effects on Worker Health and Well-being

- Widespread research shows that higher levels of stress and poor mental health outcomes are associated with unstable schedules that have little advanced notice and fluctuating weekly hours.
- In our analysis of General Social Survey data, hourly workers who received one week or less notice of their schedules are more likely to report their health as poor or fair (rather than good or excellent) than workers with more advance notice. About 20% of those receiving one week or less of schedule notice reported poor or fair health, compared to about 12%-13% for workers with more notice.
- Workers who say they have the necessary flexibility to meet work, family, and personal responsibilities exercise more frequently and are more likely to self-identify their lifestyles as healthy.
- Many hourly workers face fatigue from overwork and inadequate rest. Workers experiencing sleep deprivation and fatigue have been shown to have decreased reaction time, psychomotor coordination, memory, and decision making skills.

### Contribute to Low and Unstable Incomes Which Harm Health and Well-being

- Precarious work hours exacerbate economic instability. People who involuntarily work part-time are far more likely to be in poverty than those who work full-time. Nationwide people with incomes above the federal poverty line typically live more than five years longer than those below.
- Unpredictable schedules mean unpredictable incomes. Less income means less access to healthy housing, food, education, and healthcare. Focus group participants, whose hours varied widely from week to week, reported anxiety about whether their incomes would meet their needs, noting that wage increases would do little to help if their work hours were limited. Increasing incomes contributes to decreasing rates of chronic diseases like high blood pressure, diabetes, and heart failure.
- Erratic work hours can lead to unemployment: variable hours, limited advance notice of schedules and a lack of input into job schedules have all been associated with early job loss. Laid-off workers are more likely to have fair or poor health and more likely to develop a stress-related condition, such as stroke, heart attack, or heart disease.

### Inhibit the Ability of Workers to Access Educational Opportunities

- Young people cite conflicts between work and school as the number one reason for leaving college before obtaining a degree. Students who drop out of school say that the challenge of balancing work and school is a greater barrier than the cost of tuition, while working students report that their jobs limit the number of classes they take, their access to campus facilities, and the courses they choose.

- People with more education generally have longer lifespans and lower rates of chronic disease than people with less—a person with a college degree is likely to live about five years longer than someone who has not graduated from high school. For each four additional years of educational attainment, a person can expect a lower rate of diabetes and heart disease, and a lower likelihood of negative health behaviors like smoking.

### **Contribute to Work-Family Conflict and Childcare Issues, Which Negatively Affect Parent and Child Well-being**

- A study of retail workers found that short advance notice of schedules interfered with their personal needs and family responsibilities, both cutting into their time for other activities and straining their families. When workers have greater input in their schedules, these conflicts can be mediated.
- Unpredictable schedules can cause significant challenges for parents, forcing them into less-than-ideal childcare options. One study of mothers with retail jobs who had limited advance notice of their schedules and frequent schedule changes at their job had difficulty planning for childcare and finding time for other family activities, such as meals and volunteering at their children's schools.
- Parents who work erratic hours and/or had no input into their work schedules are more likely to exit childcare subsidy programs after being enrolled, and variable and unpredictable work schedules are reported as a substantial barrier to finding childcare and meeting subsidy requirements.
- Gaps in childcare subsidies are associated with more frequent switching of childcare providers. Childcare instability in turn affects children's well-being, cognitive and behavioral outcomes and language development, especially for children in low-income families.

## **Recommendations**

Our findings indicate that unpredictable work schedules directly and indirectly contribute to a host of health and well-being impacts. Research cited throughout this report indicates that unpredictable schedules are associated with stress, depression, anxiety, disrupted sleep, food insecurity, and numerous physical health problems, including high blood pressure.

Policy changes that deliver more stability and predictability for workers would go a long way towards addressing these myriad impacts. In light of our report findings that unpredictable work schedules directly and indirectly contribute to a host of health and well-being impacts, we recommend Seattle policymakers and employers take immediate steps to ensure a fair workweek. Specifically, Seattle's hourly employees should be given:

- Predictable schedules, stable hours, and reliable paychecks that enable them to plan ahead to meet responsibilities on and off the job.
- Two to three-weeks' advance notice of schedules and the choice to decline any unscheduled hours that conflict with other obligations.

- The ability to set reasonable limitations on their schedules, including the right to request scheduling accommodations and mutual consent to changes in the schedule.
- Predictability pay for changes to schedules and reporting pay for shortened and on-call shifts.
- The right to rest for at least 11 hours between shifts (in practice, this would do away with “clopings” which require employees to close late at night and open early the next morning).
- Family-sustaining wages and hours, including pay parity between part-time and full-time employees, access to additional hours, and the opportunity to become full-time if they choose.



## I. Introduction

For many low-wage workers, every week looks different from the next. Receiving a work schedule with little advance notice, fluctuating shift times and working an inconsistent number of hours from week-to-week is the rule rather than the exception.<sup>1</sup> This leaves workers with little or no notice about whether and when they will be scheduled for shifts. These precarious work hours lead to income instability and make it difficult or impossible to arrange childcare, schooling, or a second job, or for a worker to manage his or her own serious medical condition.<sup>2</sup> The vast majority of those affected are women and people of color, who are disproportionately employed in retail, food service, and other professions where unstable and unpredictable schedules are the norm.

These increasingly prevalent practices are not going unchallenged. Workers are calling on employers to provide them with greater control, predictability, flexibility, and stability in their work hours. Researchers describe how precarious schedules contribute to destabilizing wage fluctuations, economic insecurity, and myriad other aspects of workers' experience.<sup>3</sup> And policy-makers across the country are considering legislation that requires employers to provide more stable work hours.

In Seattle specifically, workers are pushing for changes that will ensure a fair workweek. Building on recent \$15 per hour minimum wage and paid sick leave ordinances, many in Seattle are working to address widespread scheduling volatility among the city's hourly workforce. According to American Community Survey data, 25% of Seattle's working adults are part-time workers who, on average, work under 35 hours per week.<sup>4</sup> A survey of 300 Seattle workers, conducted by Working Washington, found that half of the workers interviewed receive schedules one week or less in advance, a finding consistent with national representative data of early career adults showing 39% of full-time hourly workers and 47% of part-time workers receive the same short notice.<sup>5</sup> Among part-time workers surveyed by Working Washington, the typical workweek was 25 hours and 75% of respondents had weekly schedules that varied by 8 hours or more. Notably, 39% of those surveyed indicated that their unpredictable work schedules negatively impacted their health.<sup>6</sup>

As momentum builds around fair workweek policies, health and well-being effects are important to understand, particularly as policy initiatives are crafted in response. Here, we build on a body of evidence on scheduling practices, and pay special attention to the physical and mental health consequences for workers and their families. The report begins by describing how unpredictable work hours directly affect worker's health and well-being in negative ways. We also describe how unpredictable hours contribute to low and unstable incomes, work-family conflict, and suboptimal childcare options, and how each of these contributes to adverse health effects. We conclude by summarizing our findings and making a series of recommendations.

**“The schedule usually comes out Friday or Saturday for the next Monday, so 2 or 3 days in advance. And they’ll change it on you.”**

**—Austin, Seattle restaurant server**

**“My main problems were my shifts being cut. Sometimes I would be scheduled for 8 hours and it would end up being more like 4, or maybe less than 4 with the lunch break... Altogether there was no consistency in the schedule really at all.”**

**— Tyler, former Seattle barista**

## II. Unpredictable Work Hours Negatively Affect Worker Health & Well-being

Research on workers in multiple sectors in the United States, Canada, and Europe has found that unstable schedules and a lack of control over when they work are associated with higher rates of stress and poor mental health outcomes. Chronic stress is strongly linked to the development of hypertension and other chronic diseases, and may cause physical problems including cardiovascular phenomena, such as hypertension; metabolic disorders, such as obesity, type-2 diabetes, and cardiovascular disease; osteopenia and osteoporosis; and sleep disorders, such as insomnia or persistent sleepiness and a general lack of energy during the daytime.<sup>7,8</sup>

For retail workers in the United States, receiving little advance notice of their work hours, as well as last minute changes to posted schedules, are associated with higher levels of employee stress— independent of other aspects of nonstandard schedules.<sup>9</sup> Precarious employment among Canadian employees—defined as part-time or contract work characterized with uncertain earnings, schedule volatility and little to no employee control—is associated with stress-related tension and exhaustion when compared to people in standard employment arrangements.<sup>10</sup> Another survey of workers in Canada found that those with unstable employment and little control over their schedules—particularly those who desire more sustainable working situations—report high levels of depression and anxiety along with physical health problems including headaches, stomach problems and high blood pressure.<sup>11</sup>

Among European workers, working fewer weekly hours than desired is strongly associated with lower levels of life satisfaction, and research among supermarket retail workers in the U.K. has found that short notice of work schedules increased employee stress.<sup>12,13</sup> For hotel employees in Canada, work-life conflict associated with volatile employment led to health problems including disrupted sleep, exercise and dietary habits.<sup>14</sup> Families in the U.S. where the head of household works in a job where hours vary from week to week are more likely to experience food insecurity—worrying that they will run out of food before they have money to purchase more.<sup>15</sup>

In order to better understand this interplay between scheduling instability and health, Human Impact Partners (HIP) conducted a focus group of Seattle hourly workers in April 2016. Focus group participants described how their well-being and sense of control were affected by unpredictable schedules:

*It felt like the only thing that people saw that I was good for was for my labor. It was like I'm not supposed to have any sort of life. I'm supposed to live work. I'm supposed to breathe work. I'm supposed to only think about work.*

— Jasmine, former barista

Research on workers in multiple sectors in the United States, Canada and Europe has found that unstable schedules and a lack of control over when they work are associated with stress and poor mental health outcomes.

For retail workers in the United States, receiving little advance notice of their work hours, as well as last minute changes to posted schedules, are associated with higher levels of employee stress—independent of other aspects of nonstandard schedules.



*You never get to leave work at work. You're always thinking about it... Any time your phone works or you get a text, it could be somebody from work who needs your help and then you have to decide, 'Can you afford to help them without screwing yourself over?' You never get to stop thinking about it. And it's a nightmare.*

— Ilana, barista

The uncertainty created by unpredictable work hours can also prevent workers from scheduling needed medical care.<sup>9</sup> One focus group participant described how last minute notice of her work hours prevented her from making doctor's appointments, eventually forcing her to leave her job:

*That was really hard because I felt like I couldn't schedule doctors' appointments that far out... I had to schedule them the week of and usually they fill up really quickly if you're on Medicaid... I was forced to quit my job, then I could see the eye doctor. But I couldn't while I was working there.*

— Jasmine, former barista

Research in white-collar workplaces has found connections between employee input over work times and health supporting behaviors. Employees who say they have the necessary flexibility to meet work, family, and personal responsibilities exercise more frequently and are more likely to self-identify their lifestyles as healthy.<sup>16</sup> In another large white-collar workplace, a change in workplace policy to give employees more control over their workdays and times was associated with reduced smoking, and increased exercise and time for preparing healthy meals among participants.<sup>17</sup> While more research is needed on the connections between precarious schedules and health behaviors among low-wage, part-time workers, unpredictable work hours may also interfere with these workers' ability to support their own health.

**Employees who say they have the necessary flexibility to meet work, family, and personal responsibilities exercise more frequently and are more likely to self-identify their lifestyles as healthy.**

Increased employee input and work flexibility is associated positively with a variety of health outcomes, including less anxiety, injury and heart disease, and increased levels of life satisfaction.<sup>18</sup> Other research shows that among women who work in salaried jobs, those with greater control over their work schedules have better self-rated health, fewer signs of psychological distress and fewer work absences due to sickness than workers with less control.<sup>16</sup>

*For me, a lot of these things can be put under issues of autonomy... It can vary somewhat from job to job, but as a worker, you have a very little autonomy about your work. You're not really deciding when you're scheduled. Even if you have a set schedule... you're not deciding what that set schedule is.*

— Dylan, former fast food worker

While hourly workers often experience stress associated with under-employment and income insecurity, many hourly workers also face fatigue from overwork and inadequate rest. Almost 25% of the American workforce has rotating, on-call, irregular, or evening shifts.<sup>19</sup> Of these workers with irregular shifts, two-thirds experience fatigue or difficulty sleeping.<sup>20</sup> Many workers do not receive adequate rest between shifts, especially when asked to work "clopenings"—working a late night closing shift followed by an early morning opening shift the next day. Lack of sleep is correlated with increased accidents both on and off the job, cognitive-behavioral impairments, and lower

productivity.<sup>21</sup> Forty million workers, more than 30% of the U.S. workforce, sleep fewer than six hours each night.<sup>22</sup> Many hourly workers also hold more than one job and face elevated risks of fatigue. Workers experiencing sleep deprivation and fatigue have been shown to have decreased reaction time, psychomotor coordination, memory, and decision making skills.<sup>23</sup>

### Health and Notice of Schedule in the General Social Survey

To further explore the relationship between worker’s notice of their work hours and health outcomes, we analyzed responses to the 2014 General Social Survey (GSS), a biannual, nationally representative survey. See Appendix for more information about our GSS analysis.

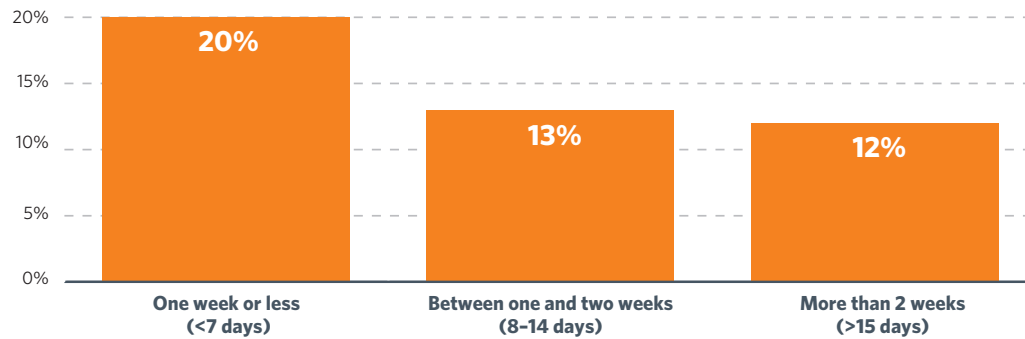
In 2014, the GSS asked respondents for the first time how much advance notice they received of their work hours. We restricted our analysis to hourly workers, and found that 44% of these respondents reported learning of their work schedules with one week or less of advance notice. Another 17% received their schedules with 1-2 weeks of advance notice.

**We found that hourly workers who received one week or less notice of their schedules were more**

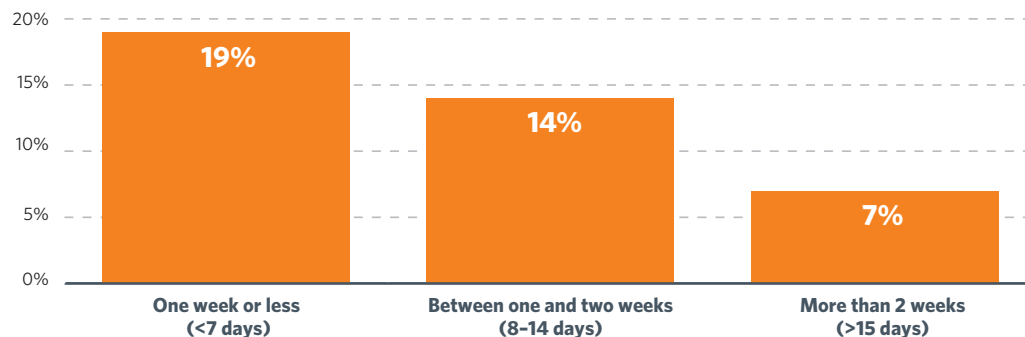
**likely to report their health was poor or fair (rather than good or excellent) than workers with more advance notice. As shown in Figure 1, about 20% of those receiving one week or less of schedule notice reported poor or fair health, compared to about 12%-13% for people with more notice.**

Low-income hourly workers (making less than \$30,000 a year) report worse mental health if they receive less advance notice of their schedules. **As shown in Figure 2, 19% of low-income hourly workers who have one week or less of notice say they had frequent mental health problems\* such as stress and depression in the last month, compared to 14% of those with one to two weeks’ notice, and 7% of workers with more than 2 weeks’ notice.**

**Figure 1: Notice of schedule and self-rated health “Fair/Poor” n=677**



**Figure 2: Notice of schedule and percent with frequent mental health problems, n=323**



\*Respondents are considered to have frequent mental health problems if they said their mental health was “not good” for 14 or more days during the past month. See Appendix for more information.

### III. Unpredictable Work Hours Contribute to Low and Unstable Incomes Which Harm Health and Well-being

Precarious work hours exacerbate economic instability particularly for those working part-time. People who involuntarily work part-time—who want to work at least 35 hours a week but work fewer because additional hours are unavailable—are far more likely to be in poverty than those who work full-time.<sup>24</sup> Part-time workers, who are disproportionately women, incur an “earnings penalty,” making lower hourly wages than their full-time counterparts.<sup>25</sup> A 2010 Congressional study found that part-time sales workers, for example, earned an hourly wage of just 58% of people working full-time in the same industry.<sup>26</sup>

Unstable hours, left to the discretion of managers, then intensify financial strain for hourly workers because unpredictable schedules mean unpredictable incomes, making it challenging to manage personal and household budgets.<sup>27,28,29</sup> Focus group participants, whose hours varied widely from week to week, reported anxiety about whether their incomes would meet their needs, noting that wage increases would do little to help if their work hours were limited.

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*There are days I can work a long day and they'll only schedule me 4 hours as opposed to 8 hours. And so that's getting kind of scary when it gets down to the wire, when I really don't have any money and I don't know if you're going to schedule me for 15 hours this week or 4 hours. It's just really hard to deal with.*

— Holly, retail worker

*I'm supposed to be working just... under full-time at my request, but my schedule can vary as widely as 8 hours one week and 38 the next... Even when you're getting [paid] \$15 [an hour]... oh yeah, sure, but if you're getting 8 hours a week. What is that?*

— Ilana, barista

Even after schedules are set, employees might experience a reduction of their hours, which reduces their anticipated income for the week. For example, they may be sent home at their manager's discretion, told to go on break, or even not to clock in when they arrive at work, if business is slow.<sup>1</sup>

*[T]he real issue... was they would frequently send myself and others home so you would never know going into work whether you were gonna work... Sometimes people would come in and then [management would] delay them... like, 'Oh, don't clock in yet.'... [The managers] would send you on breaks for 30 minutes... you'd come back from break and they'd be like, 'Take another half hour', because it was dying down.*

— Dylan, former fast food worker

Erratic work hours can also lead to unemployment: variable hours, limited advance notice of schedules and a lack of input into job schedules have all been associated with early job loss in a recent study of over 550 childcare subsidy recipients.<sup>30</sup> People who work part-time involuntarily (i.e., those who want to be working full-time) are much more likely than their voluntary counterparts to experience multiple months of unemployment. Low-wage and part-time workers who lose their jobs are also much less likely to receive unemployment insurance than their higher-wage, full-time counterparts.<sup>31</sup>

In our focus group, participants also reported that their incomes were limited because managers hired new people rather than offering additional hours to existing employees:

*Our manager keeps hiring people... There are so many of us that want to work 30-40 hours a week... And then we get [almost] zero hours for 2 weeks because they have to train this person... [S]he just keeps hiring people and more and more of our hours get taken away.*

— Holly, retail worker

*They'll hire a bunch of people and then the old people that have been there for a while, they don't get their hours... They don't even get a check. You're doing this to people who have families... that have bills and have kids... have car payments, mortgage payments... I don't think that's fair at all.*

— Taylor, fast food worker

## Income and Health

No single factor is more important for healthy living than an adequate income and none more harmful to health than persistent poverty. Economic security is necessary for people to thrive, successfully manage stress, and prevent disease. Income impacts health in many ways.

### **Less income means less access to healthy housing, food, education, and healthcare:**

A family's income directly impacts their ability to meet their basic needs. Families living on low-wages often have to choose between paying rent or utility bills and purchasing nutritious foods and necessary medicine. Low-wage workers have less access to health benefits for themselves and their families, and often pay out of pocket for care. For example, of the bottom 10% of earners in the US, only 23% have access to employee-based health insurance.<sup>32</sup> Nationally, one-third of food insecure families had to skip meals or cut portions at some point during the year.<sup>33</sup> And the longer one lives with low income, the more negative health impacts accumulate. Finally, laid-off workers are more likely than those continuously employed to have fair or

poor health and more likely to develop a stress-related condition, such as stroke, heart attack, heart disease, or arthritis.<sup>34</sup>

**Stress is associated with low income:** Beyond lacking financial resources for basic needs, lower income is associated with increased chronic stress.<sup>35</sup> The material circumstances of low-income neighborhoods such as overcrowded housing and policing can also lead to stress. Chronic stress results in the release of stress hormones that wear and tear on the body. Multiple studies have shown an association between work-related stress and income gradients and higher rates of cardiovascular disease.<sup>36</sup>

**Increasing income improves health:** Nationwide people with incomes above the federal poverty line typically live more than five years longer than those below. Lifting working families out of persistent poverty will reduce the number of pre-mature deaths nationally. Increasing income will contribute to decreasing rates of chronic diseases like high blood pressure, diabetes, and heart failure.

Another way that unpredictable schedules contribute to low incomes is through inhibiting the ability of workers to access educational opportunities because of low-quality part-time jobs. Many voluntary part-time workers—6 million nationwide in May of 2016—choose to work part time because they are simultaneously attending school or receiving other training.<sup>37</sup> Yet struggles with work schedules can make it very difficult for workers to pursue higher education, and low-wage workers in many sectors report that their workplaces offer them little to no opportunity for education or additional training that could advance their careers.<sup>38</sup>

Nationally, almost one-third of working post-secondary students aged 26-32 receive less than a week's advance notice of their work hours, and young people cite conflicts between work and school as the number one reason for leaving college before obtaining a degree.<sup>39,40</sup> Students who drop out of school say that the challenge of balancing work and school is a greater barrier than the cost of tuition, while working students report that their jobs limit the number of classes they take, their access to campus facilities, and the courses they choose.<sup>39,40</sup> This reality creates a vicious cycle for young and low-wage workers who are unable to pursue educational opportunities that would bring them higher incomes and a greater degree of economic security.

*When I started the first week... training was [also] my first week of school and classes... [I]t was at the same exact time and it was definitely difficult to find a way to make it to my trainings and make that work, so it was like: School or job?*

— Liz, server

*In my job, school is not a thing that is respected... it's seen as, 'You're not at work, what are you doing? Sitting on your butt'. No, I'm working my butt off outside of work too!*

— Ally, barista

## Education and Health

Educational attainment—the number of years or level of schooling that a person completes—has a large and consistent association with positive health outcomes, even when controlling for other health determinants such as income and labor market factors.<sup>41,42</sup> Educational attainment influences health via multiple pathways, including financial stability and job quality, social networks and access to resources, and a sense of personal control and agency.

People with more education generally have longer lifespans and lower rates of chronic disease than

people with less—a person with a college degree is likely to live about five years longer than someone who has not graduated from high school.<sup>43</sup> For each four additional years of educational attainment, a person can expect a lower rate of diabetes and heart disease, and a lower likelihood of negative health behaviors like smoking.<sup>43</sup> Educational attainment among parents is also predictive of their children's health: children of college graduates are about six times less likely to report poor or fair health than the children of parents who have not finished high school.<sup>41</sup>

Finally, unpredictable work schedules intersect with other aspects of economic security, including access to health benefits and public subsidies, which pose risks to health and well-being. Many employer-sponsored benefits, such as health insurance or paid time off, and government benefits, like childcare assistance, unemployment insurance and Temporary Assistance to Needy Families (TANF) are tied to hours thresholds. An unanticipated drop in hours can mean that workers can lose eligibility or see their benefits reduced.<sup>44,45</sup> This loss of benefits can then coincide with a loss of income due to reduced work hours, amplifying financial insecurity rather than providing a buffer when people need it most.



## IV. Unpredictable Work Hours Contribute to Work-Family Conflict and Childcare Issues, Which Negatively Affect Parent and Child Well-being

Evidence from the United States, Canada, and Europe has found that variable schedules determined by employers are associated with greater conflicts between work and family and social commitments.<sup>46</sup> Another 6 million voluntary part-time workers work part time due to family or personal obligations, including one million because of child care problems.<sup>37</sup> And employees with the lowest incomes are the least likely to have the kind of workplace flexibility and control over their work hours that makes it feasible to get involved in their children's education or provide care when a family member is sick.<sup>47</sup>

A study of hotel employees found that precarious schedules characterized by irregular hours and lack of control was related to increased conflict between work and family lives. Similarly, a study with low- and middle-income parents working in the extended-care industry found that low schedule control (little to no choice regarding the hours they worked), meant that parents were more likely to report that they did not have enough time to spend with their children and/or partner.<sup>48</sup> When workers struggle to combine work and caring for their families, their own health can suffer as well: among people working in the extended care industry, those with supervisors who are not supportive of work-family needs are more likely to have risk factors for heart disease, and to report bodily pain.<sup>49,50</sup>

Unpredictable schedules can cause significant challenges for parents, leading them to choose less-than-ideal childcare options.<sup>51,52,53</sup> For example, a study of mothers with retail jobs in Chicago—who had limited advance notice of their schedules and frequent schedule changes—had difficulty planning for child care and finding time for other family activities, such as meals and volunteering at their children's schools.<sup>54</sup> In another study, restaurant employees required to stay later than scheduled had to pay late fines to childcare providers. Income volatility also left some of these employees without enough money to secure any child care at all.<sup>55</sup>

The inflexible and irregular schedules faced by low-income parents can prevent them from using formal childcare centers, even when provided with access to childcare subsidies.<sup>56,57</sup> A recent, multi-year survey of childcare subsidy recipients in Indiana and New York found that parents who worked unexpected hours (meaning they had to go to work unexpectedly or stay later than expected) and/or had no input into their work schedules were more likely to exit childcare subsidy programs after being enrolled.<sup>30</sup> In this same study, participants reported in interviews that variable and unpredictable work schedules were a substantial barrier to finding childcare and meeting subsidy requirements.<sup>30</sup> However working people just with nonstandard schedules (such as night and weekend shifts) did not leave the subsidy program at a faster rate, leading researchers to believe

**A study of retail employees in the U.S. found that short advance notice of schedules interfered with their personal needs and family responsibilities, causing strain. However, employee input into their schedules helped mediate these conflicts.**

**Among people working in the extended care industry, those with supervisors who are not supportive of work-family needs are more likely to have risk factors for heart disease, and to report bodily pain.**

that losing subsidies was more related to “inconsistency in job hours and schedules, ...[leading] to fluctuations in reported income and a mismatch between approved work and child care schedules.”<sup>30</sup>

*Also a big thing at my job is they don't let people off when they're scheduled off. So it's busy, you may stay 2-3-4 hours passed your shift... And that's kind of hard with child care also, 'Hey, I'm gonna be 3 or 4 extra hours.'*

— Crystal, fast food worker

*Especially if they're switching your shifts up on you, it's really hard for trying to get childcare... Or then scheduling you late when you told them you can't work late and that kind of thing... [My manager would] ask me to work a certain day, and I'd call my aunt and ask her if she could watch the kids and she would tell me 'no.' A week that I'm not scheduled that many hours, they'd call me in for an extra shift... and I couldn't come in to work because [I have] nobody to take care of the kids.*

— Crystal, fast food worker

Unsurprisingly, gaps in childcare subsidies, discussed above, are associated with more frequent switching of childcare providers.<sup>2</sup> Childcare instability in turn affects children's well-being, cognitive and behavioral outcomes and language development, especially for children in low-income families.<sup>3</sup> Young children of mothers working in nonstandard hours score lower on cognitive tests and have more behavioral problems, possibly because of their schedules prevent them from accessing high-quality childcare.<sup>58,59</sup> Childcare burdens associated with precarious low-wage work can cause parental stress that can lead to parent-child conflict. A study of low-income working mothers found that frequent changes in childcare providers, along with increases in childcare costs, were likely to increase hostility towards their children, and consequently, to result in mental health issues among children.<sup>60</sup>

**In one study, participants reported that variable and unpredictable work schedules were a substantial barrier to finding childcare and meeting subsidy requirements.**

## V. Conclusion & Recommendations

Our findings indicate that unpredictable work schedules directly and indirectly contribute to a host of health and well-being impacts. Research cited throughout this report indicates that unpredictable schedules are associated with stress, depression, anxiety, disrupted sleep, food insecurity, and numerous physical health problems, including high blood pressure. Our analysis of the General Social Survey finds that greater numbers of workers with less advance of their hours notice report their health as being poor or fair when compared to workers with more advance notice. Furthermore, low-income hourly workers report worse mental health if they receive less advance notice of their schedules.

The indirect effects on health are also important to note. Workers with unpredictable schedules are more likely to experience low and unstable incomes and are also unable to access educational opportunities that could lead to increased earnings and economic security. The research connecting low incomes to health is unequivocal: No single factor is more important for health than an adequate income and none more harmful to health than persistent poverty. Economic security is necessary for people to thrive, successfully manage stress, and prevent disease. Finally, unpredictable schedules also contribute to work-family conflict and childcare instability, which affects children's well-being, cognitive and behavioral outcomes and language development.

Currently many workers find themselves at the discretion of their managers. Those lucky enough to have supportive managers may have steady and predictable schedules, but these conditions are subject to change with turnover. Yet their experience also shows that scheduling stability is possible when necessary:

*The first manager I had... we got [our schedule] two weeks out at least. He was really nice. Then he was replaced by [another person] who, on average, [gave us the schedule] 3 days before the workday started... [When] I left, it was sometimes the night before. But before she would go on vacation, she would schedule 4 weeks out so I knew it was possible.*

— Jasmine, former barista

Policy solutions that deliver more stability and predictability for workers would go a long way towards addressing these myriad impacts. In light of our report findings that unpredictable work schedules directly and indirectly contribute to a host of health and well-being impacts, we recommend Seattle policymakers and employers take immediate steps to ensure a fair workweek. Specifically, Seattle's hourly employees should be given:

**Research cited throughout this report indicates that unpredictable schedules are associated with stress, depression, anxiety, disrupted sleep, food insecurity, and numerous physical health problems, including high blood pressure.**

**Our analysis of the General Social Survey finds that greater numbers of workers with less advance of their hours notice report their health as being poor or fair when compared to workers with more advance notice. Furthermore, low-income hourly workers report worse mental health if they receive less advance notice of their schedules.**

- Predictable schedules, stable hours, and reliable paychecks that enable them to plan ahead to meet responsibilities on and off the job.
- Two to three-weeks' advance notice of schedules and the choice to decline any unscheduled hours that conflict with other obligations.
- The ability to set reasonable limitations on their schedules, including the right to request scheduling accommodations and mutual consent to changes in the schedule.
- Predictability pay for changes to schedules and reporting pay for shortened and on-call shifts.
- The right to rest for at least 11 hours between shifts (in practice, this would do away with "clopings" which require employees to close late at night and open early the next morning).
- Family-sustaining wages and hours, including pay parity between part-time and full-time employees, access to additional hours, and the opportunity to become full-time if they choose.

## About this Report

**Human Impact Partners** and **The Center for Popular Democracy** collaborated on this research project to understand how unpredictable and unstable work schedules affect health and well-being of workers. Our goal was to use a mixed-methods approach to illuminate these health impacts and their disproportionate effects among low-wage workers.

For this report, we employed the following methods:

- 1) Extensive literature review of scientific studies, government data, and policy reports.
- 2) Key informant interviews with academic researchers.
- 3) One in-person focus group with people working in hourly jobs in the Seattle region.
- 4) Descriptive analysis of work and health-related variables in the 2014 General Social Survey.

See Appendix for more information on focus group and GSS survey methods.

Note: Given that the General Social Survey provides cross-sectional data from one point in time, our analysis is only assessing associations between variables of interest. Furthermore, it does not control for other variables that could be affecting health outcomes assessed.

Human Impact Partners is a national non-profit organization whose mission is to transform the policies and places people need to live healthy lives by increasing the consideration of health and equity in decision making.

The Center for Popular Democracy works to create equity, opportunity and a dynamic democracy in partnership with high-impact base-building organizations, organizing alliances, and progressive unions.

For more information, visit [www.humanimpact.org](http://www.humanimpact.org) and [www.populardemocracy.org](http://www.populardemocracy.org).

To learn more about this project, contact Logan Harris, 510-452-9442 ext. 106, [logan@humanimpact.org](mailto:logan@humanimpact.org) or Elianne Farhat, 612-250-8087, [efarhat@populardemocracy.org](mailto:efarhat@populardemocracy.org).

## Appendix: Description of Research Methods

### Focus Group

Human Impact Partners (HIP) conducted one focus group with 11 people in the Seattle area who were currently working or who had recently worked in jobs where they were paid by the hour and experienced challenges with erratic and unpredictable schedules. The focus group was held on Thursday April 28, 2016 in the office of Working Washington in downtown Seattle. Staff at Working Washington conducted recruitment for the focus group, and each participant received a \$20 grocery store gift card in exchange for participation. Dinner and beverages were also provided.

One HIP staff person facilitated the focus group while a second HIP staff person took notes. Participants provided verbal consent to participate after receiving a detailed description of what would occur, that the discussion would be recorded, and how the results would be used in this report. All participants also gave written permission via a sign-in sheet to use their first names. One and a half hours were allotted for discussion, using a focus group guide designed to facilitate discussion about working conditions related to hours and schedules, and how participants are impacted by precarious and unpredictable schedules.

### General Social Survey Analysis

The General Social Survey is conducted biannually by the independent research organization NORC at the University of Chicago, and is a nationally representative sample designed to gather information on American society.<sup>61</sup>

In 2014, the GSS for the first time asked respondents who worked “How far in advance do you usually know what days and hours you will need to work?” Possible responses were: One week or less; between 1 and 2 weeks; between 2 and 3 weeks; and 4 weeks or more. Based on a conversation with a subject matter expert who helped develop the survey question, we learned that these categories roughly corresponded to days as: 7 days or less; 8–14 days; 15–27 days; and 28 days or more respectively. Very few respondents (about 6% of 1229 responses) reported receiving between 2 and 3 weeks notice, and so our analysis collapsed these responses into 3 categories as shown in the report: One week or less; between 1 and 2 weeks; and more than 2 weeks.

In our analysis of self reported health we used the survey question “Would you say that in general your health is Excellent, Very good, Good, Fair, or Poor?” Self-reported health is one of the measures used by the Centers for Disease Control to measure health-related quality of life.<sup>62</sup> In our analysis of mental health we used the survey question “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” We used 14 days as the cutoff for “Frequent Mental Health Problems” based on the Centers for Disease Control’s official definition: “This 14-day minimum period was selected because a similar period is often used by clinicians and clinical researchers as a marker for clinical depression and anxiety disorders, and a longer duration of reported symptoms is associated with a higher level of activity limitation.”<sup>63</sup>

These analyses are limited in that we did not control for other factors that could impact self reported health and mental health. Another limitation is that because the GSS is a cross-sectional survey gathering data at one point in time, we are only able to report associations between advance notice of work schedules and these health measures.



## Notes

- 1 Alexander C, Haley-Lock A, Ruan N. *Stabilizing Low-Wage Work*. Rochester, NY: Social Science Research Network; 2014.
- 2 Cauthen NC. *Scheduling Hourly Workers: How Last-Minute, Just-In-Time Scheduling Practices Are Bad for Workers, Families, and Business*. Demos; 2011.
- 3 Watson L, Johnston E, Robbins KG, Morrison A. *Collateral Damage: Scheduling Challenges for Workers in Low-Wage Jobs and Their Consequences*. National Women's Law Center; 2015.
- 4 US Census. American Community Survey, 5-Year Estimates, 2006-2010, *Work Status in the Past 12 Months—Seattle City*.
- 5 Lambert S, Fugiel R, Henly J. Schedule unpredictability among early career workers in the US labor market: A national snapshot. University of Chicago; 2014.
- 6 Working Washington. Inflexible and out of balance: Unpredictable, insecure schedules in Seattle's service industry. Working Washington; 2015.
- 7 Garrido M, Hash-Converse J, Leventhal H, Leventhal E. Stress and chronic disease management. In: Contrada R, Baum, eds. *The Handbook of Stress Science: Biology, Psychology, and Health*. New York: Springer; 2011.
- 8 Chrousos GP. Stress and disorders of the stress system. *Nat Rev Endocrinol*. 2009;5(7):374-381.
- 9 Henly JR, Lambert SJ. Unpredictable work timing in retail jobs: Implications for employee work-life conflict. *Ind Labor Relat Rev*. 2014;67(3):986-1016.
- 10 Lewchuk W, Wolff A de, King A, Polanyi M. From job strain to employment strain: Health effects of precarious employment. *Just Labour*. 2003;3(0).
- 11 Clarke M, Lewchuk W, de Wolff A, King A. 'This just isn't sustainable': Precarious employment, stress and workers' health. *Int J Law Psychiatry*. 2007;30(4-5):311-326.
- 12 Golden L, Okulicz-Kozaryn A. *Work Hours and Worker Happiness in the US: Weekly Hours, Hours Preferences and Schedule Flexibility*. Social Science Research Network; 2015.
- 13 Wood AJ. Flexible scheduling, degradation of job quality and barriers to collective voice. *Hum Relat*. April 2016.
- 14 Bohle P, Quinlan M, Kennedy D, Williamson A. Working hours, work-life conflict and health in precarious and "permanent" employment. *Rev Saúde Pública*. 2004;38 Suppl:19-25.
- 15 Coleman-Jensen AJ. Working for peanuts: Nonstandard work and food insecurity across household structure. *J Fam Econ Issues*. 2011;32(1):84-97.
- 16 Grzywacz JG, Casey PR, Jones FA. The effects of workplace flexibility on health behaviors: A cross-sectional and longitudinal analysis. *J Occup Environ Med*. 2007;49(12):1302-1309.
- 17 Moen P, Fan W, Kelly EL. Team-level flexibility, work-home spillover, and health behavior. *Soc Sci Med*. 2013;84:69-79.
- 18 Costa G, Sartori S, Akerstedt T. Influence of flexibility and variability of working hours on health and well-being. *Chronobiol Int*. 2006;23(6):1125-1137.
- 19 Golden L. Irregular Work Scheduling and Its Consequences. Briefing Paper #394. Economic Policy Institute; 2015.
- 20 US Department of Health and Human Services. Your Guide to Healthy Sleep. National Institutes of Health; 2011.
- 21 Lerman S, et al. Fatigue risk management in the workplace. *Journal of Occupational & Environmental Medicine*. 2012; 54:231-258.
- 22 Luckhaupt S. Short sleep duration among workers—United States, 2010. *Morbidity and Mortality Weekly Report*. 2012;61(16):281-285.
- 23 National Sleep Foundation. How Atypical Work Schedules Affect Performance. 2012.
- 24 Glauber R. *Wanting More but Working Less: Involuntary Part-Time Employment and Economic Vulnerability*. Carsey Institute, University of New Hampshire; 2013.
- 25 Sen A, Razza C. *Hour by Hour: Women in Today's Workweek*. Center for Popular Democracy; 2015.
- 26 Joint Economic Committee. *The Earnings Penalty for Part-Time Work: An Obstacle to Equal Pay*. United States Congress Joint Economic Committee; 2010.
- 27 Board of Governors of the Federal Reserve System. *Report on the Economic Well-Being of U.S. Households in 2013*; 2014.
- 28 Schwartz A, Wasser M, Gillard M, Paarlberg M. *Unpredictable, Unsustainable: The Impact of Employers' Scheduling Practices in D.C.* DC Jobs with Justice; 2015.
- 29 Haley-Lock A. Place-bound jobs at the intersection of policy and management: Comparing employer practices in U.S. and Canadian chain restaurants. *Am Behav Sci*. 2011;55(7):823-842.

- 30 Henly JR, Sandstrom H, Claessens A, et al. *Determinants of Subsidy Stability and Child Care Continuity*. Urban Institute; 2015.
- 31 Fagnoni C. *Unemployment Insurance: Low-Wage and Part-Time Workers Continue to Experience Low Rates of Receipt*. United States Government Accountability Office; 2007.
- 32 Bureau of Labor Statistics, U.S. Department of Labor. *Employee Benefits in the United States—March 2015*. U.S. Department of Labor; 2015.
- 33 Human Impact Partners. *Health Impacts of Raising California's Minimum Wage*. Human Impact Partners; 2014.
- 34 Robert Wood Johnson Foundation. *How Does Employment—or Unemployment—Affect Health? Health Policy Snapshot Issue Brief*. Robert Wood Johnson Foundation; 2013.
- 35 Braveman P, Egerter S, Barclay C. *Income, Wealth and Health*. Robert Wood Johnson Foundation; 2011.
- 36 Braveman P, Egerter S, Barclay C. *Stress and Health*. Robert Wood Johnson Foundation; 2011.
- 37 Bureau of Labor Statistics, U.S. Department of Labor. *Labor Force Statistics from the Current Population Survey, Table A-25*. Bureau of Labor Statistics; 2016.
- 38 Oxfam America. *Hard Work, Hard Lives*. Oxfam America; 2013.
- 39 Johnson J, Rochkind J, Ott A, DuPont. *With Their Whole Lives Ahead of Them: Myths and Realities About Why So Many Students Fail to Finish College*. New York, New York: Public Agenda; 2009.
- 40 Ben-Ishai L. *Job Schedules That Work for Students*. CLASP; 2014.
- 41 Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, Dekker M. *Education and Health*. Robert Wood Johnson Foundation; 2011.
- 42 Cutler D, Lleras-Muney A. *Education and Health*. National Poverty Center; 2007.
- 43 Robert Wood Johnson Foundation. *Why Does Education Matter So Much to Health?* Robert Wood Johnson Foundation; 2013.
- 44 Lambert S, Henly J. *Scheduling in Hourly Jobs: Promising Practice for the Twenty-First Century Economy*. The Mobility Agenda; 2009.
- 45 Lambert S, Henly J. Double Jeopardy: The Misfit between Welfare-to-Work Requirements and Job Realities. In: Brodtkin EZ, Marston G, eds. *Work and the Welfare State*. Washington, D.C.: Georgetown University Press; 2013.
- 46 Golden L. *Irregular Work Scheduling and Its Consequences*. Economic Policy Institute; 2015.
- 47 Heymann J. Inequalities at Work and at Home: Social Class and Gender Divides. In: Beem C, Heymann J, eds. *Unfinished Work: Building Equality and Democracy in an Era of Working Families*. New York: New Press, The; 2005.
- 48 Lee S, Almeida DM, Davis KD, King RB, Hammer LB, Kelly EL. Latent profiles of perceived time adequacy for paid work, parenting, and partner roles. *J Fam Psychol*. 2015;29(5):788-798.
- 49 O'Donnell EM, Berkman LF, Subramanian S. Manager support for work/family issues and its impact on employee-reported pain in the extended care setting. *J Occup Environ Med Am Coll Occup Environ Med*. 2012;54(9):1142-1149.
- 50 Berkman LF, Buxton O, Ertel K, Okechukwu C. Managers' practices related to work-family balance predict employee cardiovascular risk and sleep duration in extended care settings. *J Occup Health Psychol*. 2010;15(3):316-329.
- 51 Chaudry A, Pedroza J, Sandstrom H. *How Employment Constraints Affect Low-Income Working Parents' Child Care Decisions*. Urban Institute; 2012.
- 52 Ben-Ishai L, Matthews H, Levin-Epstein J. *Scrambling for Stability: The Challenges of Schedule Volatility and Child Care*. Center for Law and Social Policy; 2014.
- 53 Restaurant Opportunities Centers United. *The Third Shift: Child Care Needs and Access for Working Mothers in Restaurants*. Restaurant Opportunities Center United; 2013.
- 54 Lambert S, Henly J. Nonstandard work and child care needs of low income parents. In: Bianchi SM, Casper LM, King RB, eds. *Work, Family, Health, and Well-Being*. Lawrence Erlbaum, 2005.
- 55 National Women's Law Center. *Listening to Workers: Child Care Challenges in Low-Wage Jobs*. Ms. Foundation for Women; 2014.
- 56 Henly JR, Lyons S. The negotiation of child care and employment demands among low-income parents. *J Soc Issues*. 2000;56(4):683-706.
- 57 Clampet-Lundquist S, Edin K, London A, Scott E, Hunter V. "Making a Way Out of No Way" How Mothers Meet Basic Family Needs While Moving from Welfare to Work. In: Crouter AC, Booth A, eds. *Work-Family Challenges for Low-Income Parents and Their Children*. Mahwah, N.J.: Routledge; 2003.
- 58 Han W-J. Maternal nonstandard work schedules and child cognitive outcomes. *Child Dev*. 2005;76(1):137-154.
- 59 Joshi P, Bogen K. Nonstandard schedules and young children's behavioral outcomes among working low-income families. *J Marriage Fam*. 2007;69(1):139-156.

- 60 Ha Y, Collins ME, Martino D. Child care burden and the risk of child maltreatment among low-income working families. *Child Youth Serv Rev.* 2015;59:19-27.
- 61 NORC at the University of Chicago. About the GSS. The General Social Survey GSS. <http://gss.norc.org/>. Published 2016.
- 62 Centers for Disease Control and Prevention. Health-Related Quality of Life - Methods and Measures. Health-Related Quality of Life (HRQOL). <http://www.cdc.gov/hrqol/methods.htm>. Published May 27, 2016.
- 63 Centers for Disease Control and Prevention. Frequently Asked Questions. Health-Related Quality of Life (HRQOL). <http://www.cdc.gov/hrqol/faqs.htm#10>. Published May 26, 2016.

