Research Aims
This report presents findings from research conducted on well-being among Latina farmworkers in Southwestern Idaho. The objectives of this research were to: (1) identify health related challenges and concerns among Latina farmworkers in Idaho; and (2) to assess social, cultural and workplace-related risk factors for health disparities among Latina farmworkers in Idaho.

Challenges to Latina Farmworker Well-Being
Latina women having become an increasingly important part of the agricultural workforce in Idaho. Farm work is personally, economically and socially important for Latina farmworkers. At the same time a range of factors make Latina farmworkers more likely to suffer, physically, socially and psychologically. For instance, their work is often contingent and low paid; they labor and often live in rural areas where access to resources may be more limited. They are less likely to have access to medical care and insurance, and their work may be dangerous. In addition, immigration status may heighten social isolation and limit access to federally funded safety nets.

It is important to consider the experiences of Latina farmworkers in part because their numbers are increasing in agriculture, but also because gender may further disadvantage Latina farmworkers as it relates to health and well-being, relative to their male peers. Previous research has found that Hispanic women engage in agricultural labor for fewer days per year, relative to Hispanic men, and that women farmworkers are more likely to be seasonally employed, rather than employed year round. Further, while women increasingly engage in labor as farmworkers, they also remain responsible for the emotional, physical and mental labor involved in managing a household, including caring for children.

Key Take-Aways:
Latina farmworkers face multiple challenges including:
- Low Earnings
- Food Insecurity
- Access to Sufficient Child Care
- Access to Medical Insurance
- Workplace Hazards
- Pesticide Exposure

Figure 1: Share of Women in Agricultural Labor*, 2010-2017

Source: Adapted from a USDA Economic Research Service figure. Data is from the U.S. Census Bureau annual American Community Survey.
https://www.ers.usda.gov/topics/farm-economy/farm-labor/#links
*Farm Laborers, Graders, and Sorters
Methods
This research utilized data gathered via surveys, interviews, focus groups, and pesticide biomonitoring. All participants were women who identified as Latina or Hispanic, and were from Idaho’s Treasure Valley in the Southwestern region of the state. Participant lived and worked in Nampa, Caldwell, Wilder, Marsing, Homedale, Parma, Nyssa and Weiser, Payette (Idaho), and Adrian (Oregon). Survey data was collected from 70 Latina farmworkers. The survey included questions covering a range of factors related to well-being, including food security; housing conditions; social isolation; access to medical care; occupational hazards; and socio-demographics. Twenty-two (22) women participated in five focus groups in several rural communities. During focus groups we asked women about the challenges and joys they experienced while working in agriculture. We also asked women to define well-being, and to consider the dimensions of well-being most important to them. Semi-structured interviews were conducted with 11 Latina farmworkers, as well as with 5 farmworker advocates. Interview questions were designed to gather more in-depth data on the experiences of Latina farmworkers, and focused on understanding their experiences as farmworkers, including the factors related to their paid labor that influenced their well-being. Twenty-nine (29) women participated in the pesticide biomonitoring component of the study, including 15 women who gave two urine samples, for a total of 44 samples.

Findings from Surveys
The average age of survey respondents was 37 years old, and on average there were 2.7 children in each household. A large proportion of respondents resided in lower income households; 18% of women lived in households earning $10,000 or less per year, and more than 70% of respondents lived in households earning $24,999 or less per year. Thirty-five percent (35%) of respondents reported engaging in farm work in the winter, suggesting that farm work is not limited to the summer. Respondents had worked in agriculture for an average of 10 years. The data suggest that there is little migration among our participants, as nearly 90% reported living in their current home for the past 12 months. Further, 85% of our study population has not worked out-of-state in the past 12 months, suggesting that most of our respondents only work in Idaho. Notable dimensions of well-being revealed in the survey can be viewed in Figure 2. Of particular note were issues related to food security; occupational hazards such as presence of toilets and engagement with pesticides; health care; and social isolation.

Findings from Focus Groups and Interviews
Focus group data illustrated the dimensions of well-being most important to the women with whom we spoke. As noted in Figure 3, medical insurance, access to good schools (for their kids) and stable employment were the top three dimensions of well-being reported as very important for respondents. Findings from the focus groups and interviews suggest that women have a wide range of feelings about farm work. Many
women discussed their appreciation of working outside. Women also spoke about enjoyment of working in partnership with other women. One statement captures the complexity of feelings about farm work: “Es trabajo pesado. Pero bonito” (it is difficult work, but beautiful work).

The women we spoke with also discussed a range of challenges they experience working in agriculture, including challenges related to being a farmworker while simultaneously raising young children. Many women discussed struggling with their lack of time to be with family, and challenges in work/life when laboring long hours. Managing housework was a recurrent topic. Women expressed that there is inequality in the amount of domestic work that falls on women. Unequal sharing of domestic and child-rearing tasks becomes a greater burden on women during planting and harvesting when women tend to work longer hours. These challenges were even more difficult for single mothers. One woman explained: “women who are single mothers...say that it’s difficult for them to pay rent or groceries because sometimes they don’t have families either, they are alone.”

Other important themes that emerged from the focus groups and interviews included challenges accessing medical care, which was associated with working long hours, lack of health insurance, lack of transportation and expense. Lack of childcare, including finding care that was good quality, affordable and aligned with their work hours, was frequently mentioned as a challenge. In addition, many women as well as farmworker advocates spoke of sexual harassment and sexual assault as ongoing issues for women who labor in agriculture in Idaho. They noted that many women did not inform authorities about their experiences with sexual harassment or assault due to fear of losing their jobs. Finally, occupational health hazards were a common theme in both the focus groups and interviews. These included lack of access to clean toilets; frequency of workplace injuries; and an inability to seek adequate treatment after injury, either acute or chronic.

Findings from Pesticide Exposure Assessment
Of the 70 women who completed the surveys, a subset of 29 also provided at least one urine sample, which were analyzed for a suite of pesticide metabolites. Fifteen (15) of these women also provided a second urine sample, for a total of 44 samples. Ideally, we aimed to collect one urine sample during the time of year when pesticides are not typically applied in agriculture, termed the “non-spray season” (between January 1 and April 15), and a second sample when pesticides are more regularly applied, termed the “spray season” (between April 15 and June 30). Urine samples were collected during Head Start meetings, Mobile Health Clinics, community events, focus groups, interviews, or at the participant’s home.
Samples were stored at -80°C and shipped on dry ice to the New York State Department of Health, where they were analyzed for four specific metabolites of organophosphorus insecticides, five metabolites of pyrethroid insecticides, and two herbicides. MDA, a metabolite specific to the common organophosphate insecticide malathion, was detected in all urine samples. The highest MDA concentrations were measured in samples that were collected during the spray season from women who reported that they applied pesticides at work but had not received any training on pesticide safety. This violates federal regulations that require that all individuals who handle pesticides receive appropriate training, and is of concern.

As with MDA, all urine samples contained detectable concentrations of 3-PBA, a metabolite common to multiple pyrethroid insecticides. Concentrations of 3-PBA were significantly higher in samples collected during the spray season compared to those collected during the non-spray season, suggesting agricultural work as a likely exposure source. In addition, the highest 3-PBA concentration was measured in a sample collected during the spray season from a participant who reported applying pesticides at work. In terms of herbicide exposures, all samples contained detectable concentrations of 2,4-D, a common weed killer. Again, the highest concentration was measured in a sample collected during the spray season from a woman who reported applying pesticides at work. Collectively, these results suggest that women who are applying pesticides may not be adequately protected from exposures to these chemicals.

Conclusion and Recommendations
Our findings suggest that while Latina farmworkers enjoy many aspects of their work, they are often poorly paid, at times are treated poorly in their work, can lack sufficient resources (social, economic, and institutional) to balance work and family, and may face increased risks from occupational hazards. These findings can be used to inform program development and policies that support farmworkers, women and families in our region. Specific policy recommendations include:

- Many women who participated in this research expressed appreciation for and comfort with health care services in the region, particularly the Terry Riley Clinics and the St. Alphonsus Mobile Clinic. Such organizations provide vital health care services, and do so in a way that feels respectful for those being served. Continued, and increased, funding of these services will help to ensure that women continue to receive the health care they need.

- Childcare emerged as an important issue for Latina farmworkers as they manage their responsibilities as both mothers and as paid laborers. Migrant and Seasonal Head Start was frequently mentioned as a place where good quality and affordable childcare could be found. An increase in affordable, year-round childcare with extended hours of service in the rural communities of the Treasure Valley could greatly improve the well-being of Latina farmworkers in the region.

- Access to affordable, safe housing is essential. As the region experiences population growth, farm workers are losing access to low-and-middle income housing. Rural farmworkers should not be forgotten in these public policy discussions.

- Growers and labor contractors need to be aware of the increasing presence and importance of women working in agriculture when instituting controls on workplace hazards. This includes ensuring that all workers have personal protective equipment that is appropriately sized and that all workers who handle pesticides are adequately trained.

The authors would like to thank the women who participated in this research, the Community Council of Idaho for their on-going support of this research, and the following funding sources: Boise State University College of Arts and Sciences; Boise State University School of Public Service; and the Mountain West Clinical Translational Research – Infrastructure Network and the National Institute of General Medical Sciences of the National Institutes of Health under Award Number 2U54GM104944.