

## Empty Cupboards, Empty Feelings

*Food insecurity, depression and suicide are intertwined*

by Joy Margheim and Michael Leachman

Oregon adults in households without adequate access to food are significantly more likely to be depressed than those with secure food access.

OCPP's analysis of the Behavioral Risk Factor Surveillance System (BRFSS), a statewide telephone survey, shows that:

- In 2005, Oregon adults in food insecure households were more than twice as likely to suffer from depression as adults in households with adequate food.
- Suicide surfaces more often in households experiencing food insecurity.
- Women are more vulnerable than men to both food insecurity and depression.
- In 2005, depressed adults in food insecure homes were twice as likely as those with adequate access to food to say that they had *never* received treatment for depression and three times as likely to report that they had no health insurance.
- Oregon adults in food insecure households were nearly as likely as those in food secure households to be employed in 2005. Yet, among those who were employed, only 55 percent of adults in food insecure households had some form of health care coverage, while 86 percent of adults in households with secure access to food had health care coverage.

OCPP recommends that the state's Interagency Council on Hunger and Homelessness (ICHH) examine ways for Oregon to better link its anti-hunger efforts with its mental health improvement services. Specifically, the ICHH should improve coordination among hunger advocates, mental health advocates, and state agencies; seek mental health expertise to inform its activities; and use the Oregon BRFSS to measure progress.

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It may seem obvious that people living close to hunger are likely to be sad, but the issue is more serious. Depression is more than unhappiness or the blues. It is an illness with a physical basis in biology and brain chemistry. It limits people's ability to work and engage with their family and community.

The interplay between food insecurity and depression is complex and not fully understood by researchers. Yet effective treatments for both problems exist, and recognition of the interconnection between the two could open up opportunities to better address both.

OCPP's analysis of the Behavioral Risk Factor Surveillance System (BRFSS), a statewide telephone survey of adults that gathers information on hunger as well as physical and mental health issues, reveals that food insecurity and depression often surface together in Oregon households. Policymakers should use the BRFSS data to understand the ways in which these two burdens go hand in hand and to find ways to address both problems more effectively.

### **Depression, Food Insecurity and Hunger**

*Depression*, as used in this analysis, includes adults who scored high on a depression screening, were diagnosed as depressed by a health professional, or were on prescription medication for depression.

*Food insecurity* is "limited or uncertain availability of nutritionally adequate and safe foods or uncertain ability to acquire acceptable foods in socially acceptable ways."<sup>1</sup> Some food insecure households are able to obtain enough food to avoid actually going hungry.

*Hunger* is the "uneasy or painful sensation caused by a lack of food; the recurrent and involuntary lack of access to food."<sup>2</sup> Both hunger and food insecurity describe a condition experienced by households taken as a whole; individuals within these households may experience differing levels of deprivation. In households that are counted as experiencing hunger, according to the U.S. Department of Agriculture, "at times during the year, the food intake of household members was reduced and their normal eating patterns were disrupted because the household lacked money and other resources for food."<sup>3</sup> In most cases, the survey respondent reported that at some time during the year he or she went hungry because there was not enough money for food.

In 2006, the U.S. Department of Agriculture eliminated its use of *hunger* and instituted four categories representing a range of food security conditions: high, marginal, low, and very low food security.<sup>4</sup> OCPP continues to use *hunger* rather than *very low food security*, because hunger is a meaningful term for most members of the general public. In addition, Oregon statutes use the term *hunger*, stating that "All persons have the right to be free from hunger" and that "freedom from hunger means all persons have food security."<sup>5</sup> Under legislation that will take effect on January 1, 2008, the state instituted the goal that "Oregon will rank among the top 10 states in providing food security without hunger by 2015."<sup>6</sup>

**Depression and suicidal thoughts often accompany food insecurity**

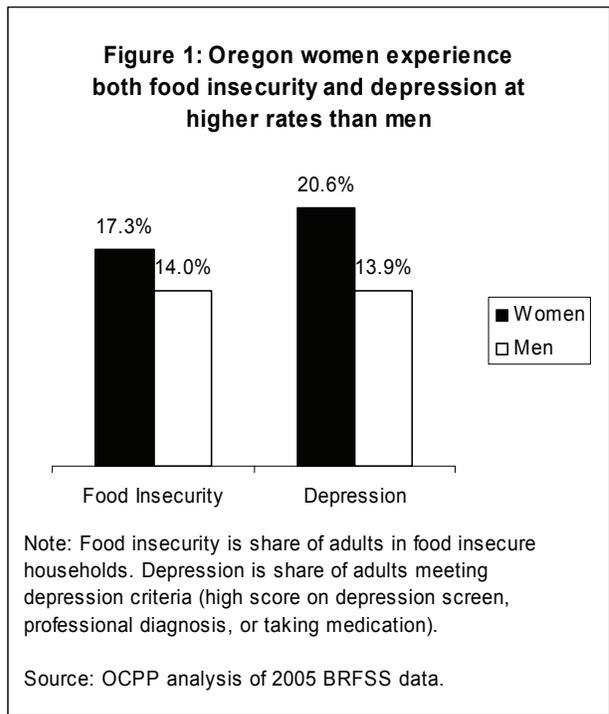
**Oregon adults in food insecure households were more than twice as likely to suffer from depression as adults in households with adequate food.**

In 2005, Oregon adults in food insecure households were more than twice as likely to suffer from depression as adults in households with adequate food. One in three adults (32.6 percent) in food insecure households reported being depressed, compared to only one in seven adults (14.4 percent) from households where access to food was not a problem.<sup>7</sup>

Suicide, which is commonly associated with depression, also surfaces more often in households experiencing food insecurity.<sup>8</sup> In 2002, the most recent year for which data on suicide is available in the BRFSS, nearly one in four adults (23.1 percent) in Oregon households that experienced hunger reported having seriously considered suicide in the previous 12 months. Among those in food insecure households, one in eight (13.2 percent) had seriously considered suicide. By contrast, in households that did not have difficulties obtaining food, only about one in 70 adults (1.4 percent) had seriously considered suicide.<sup>9</sup>

**Women are especially at risk for food insecurity and depression**

Women are more vulnerable than men to both food insecurity and depression, for several reasons. Higher rates of poverty among women increase their exposure to food insecurity and to stress, which contributes to depression.<sup>10</sup> In addition, women frequently juggle major responsibilities at work and home, including single parenthood and caring for children and elderly parents.<sup>11</sup> Such responsibilities are not only stressful but also may limit income and employment options.<sup>12</sup> Women also experience higher rates of sexual and physical abuse, which are associated with depression and higher risk of suicide.<sup>13</sup>



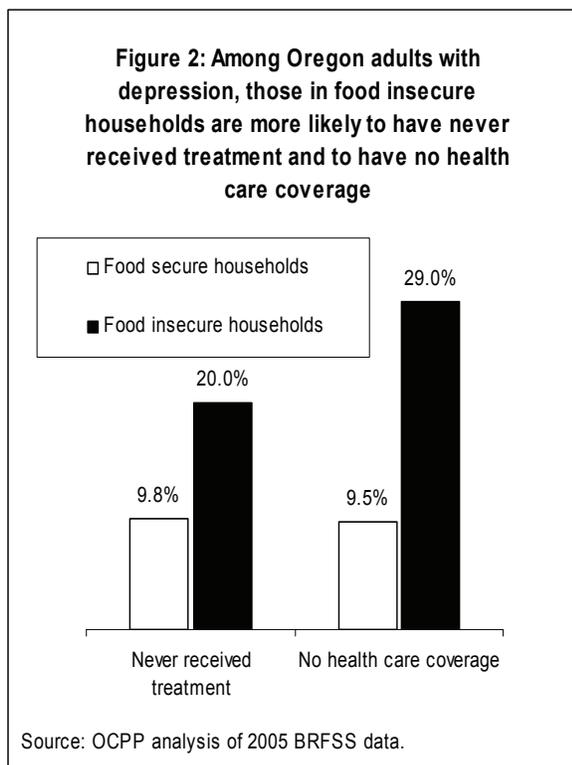
In Oregon, one in six women (17.3 percent) lived in a food insecure household in 2005, while one in 15 (6.6 percent) lived in a household that experienced hunger. By contrast, one in seven Oregon men (14.0 percent) lived in a food insecure household and one in 22 (4.6 percent) lived in a household with hunger. That same year, one in five Oregon women (20.6 percent) experienced depression, compared to about one in seven men (13.9 percent) (Figure 1).

**Depressed adults in food insecure homes are far less likely to get treatment or to have health insurance**

Appropriate treatment can help more than 80 percent of those who suffer from depression, but many do not receive the treatment they need.<sup>14</sup>

In 2005, depressed adults in households that experienced food insecurity or hunger were more than twice as likely as depressed adults in homes with adequate access to food to report that they had never received depression treatment (Figure 2).

That year, among Oregon adults who were depressed but had adequate access to food, only one in 10 (9.8 percent) said they had *never* received treatment for depression from a counselor, therapist, or doctor. By contrast, two in 10 depressed adults in food insecure households (20.0 percent) and almost one in four depressed adults in households that experienced hunger (23.2 percent) said they had *never* received that treatment.



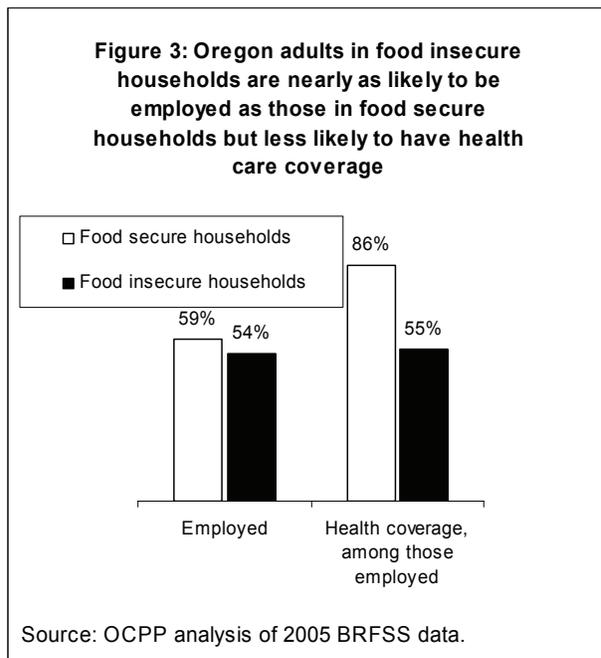
In 2005, among Oregon adults who were depressed but had adequate access to food, only one in 10 said they had *never* received treatment for depression. By contrast, two in 10 depressed adults in food insecure households said they had *never* received treatment.

Of Oregon adults in food insecure households who suffered from depression, nearly one in three (29.0 percent) reported that they lacked health insurance in 2005. Among depressed adults with secure access to food, by contrast, only about one in 10 (9.5 percent) reported having no health insurance (Figure 2).

## Employment isn't helping many food insecure adults obtain health insurance

Most Oregonians who have health insurance obtain it through employment.<sup>15</sup> For many Oregonians in food insecure households, however, employment is not providing access to health insurance.

Of those who were employed and lived in food insecure households, only 55 percent had some form of health care coverage. By contrast, 86 percent of employed adults in households with secure access to food had health care coverage.



Oregon adults in food insecure households are nearly as likely as those in food secure households to be employed or self-employed; employment rates among the two groups in 2005 were 54 percent and 59 percent, respectively. Yet the food insecure and the food secure do differ in terms of access to health insurance. Of those who were employed and lived in food insecure households, only 55 percent had some form of health care coverage. By contrast, 86 percent of employed adults in households with secure access to food had health care coverage (Figure 3).

## Conclusion: Addressing food insecurity and depression

Recognition of the overlap of food insecurity and depression could present new opportunities for intervention. Policies designed to improve one condition may help alleviate the other.

On the one hand, fighting hunger may be an important part of reducing the incidence of depression. While treatable, depression is difficult to prevent because several of the primary risk factors — low socioeconomic status, female gender, and genetic disposition — are difficult or impossible to change.<sup>16</sup> Food insecurity, however, is a risk factor that can be addressed head on. Food stamps, for example, have proven both efficient and effective in alleviating food insecurity.<sup>17</sup>

On the other hand, treatment for depression could help clear the way for some food insecure adults to obtain a better job. The additional income, in turn, might improve the household's food security.

In each instance, policy responses should be attentive to the position of women, who are at greater risk for both food insecurity and depression.

OCPP recommends that the Interagency Council on Hunger and Homelessness (ICHH) — the successor agency to the Interagency Coordinating Council on

Hunger — examine ways for the state to better link its anti-hunger efforts with its mental health improvement services.<sup>18</sup> Specifically, the ICHH should:

- Improve coordination among Oregon’s anti-hunger advocates, mental health advocates, and state agencies. Improving coordination could be accomplished in part by organizing a series of strategic planning sessions during regular ICHH meetings, sponsoring a planning retreat on the connections between food insecurity and depression, or other means.
- Request that the Assistant Director of the Department of Human Services in charge of the Addiction and Mental Health (AMH) Division, or a designee with an appropriate level of expertise and policy authority, attend future meetings of the ICHH beginning with the meeting scheduled for January 2008. In addition, the ICHH should request that the Legislative Assembly amend ORS 458.525(2) to provide explicitly for a seat on the ICHH for a Department of Human Services representative with expertise in mental health issues. The involvement of the AMH division is particularly important now that the council’s role has been expanded to include not only hunger but homelessness issues, as well.
- Help measure progress by continuing to secure funding to ensure that the Oregon BRFSS gathers data on food insecurity annually.
- Help measure progress by securing funding to ensure that the Oregon BRFSS gathers data on depression annually and that these data are gathered on the part of the BRFSS containing questions on food security.

## Endnotes:

<sup>1</sup> Panel to Review U.S. Department of Agriculture’s Measurement of Food Insecurity and Hunger, National Research Council, *Measuring Food Insecurity and Hunger: Phase 1 Report* (Washington, D.C.: National Academies Press, 2005), citing Anderson 1990.

<sup>2</sup> Ibid.

<sup>3</sup> Nord, Mark, Margaret Andrews, and Steven Carlson, *Household Food Security in the United States, 2006*, U.S. Department of Agriculture (USDA), Economic Research Report Number 49, November 2007, p. 5. Available at [www.ers.usda.gov/publications/err49/err49.pdf](http://www.ers.usda.gov/publications/err49/err49.pdf).

<sup>4</sup> USDA, ERS, “Food Security in the United States: Hunger and Food Security,” Briefing Room, November 15, 2006, [www.ers.usda.gov/Briefing/FoodSecurity/labels.htm](http://www.ers.usda.gov/Briefing/FoodSecurity/labels.htm).

<sup>5</sup> ORS 458.530(1)(b) and (c).

<sup>6</sup> HB 2073, 2007 session, section 2(1)(d).

<sup>7</sup> OCPP analysis of 2005 BRFSS data. The BRFSS asks different sets of questions on separate surveys. In 2006, questions about hunger and about depression and general mental health were asked on separate surveys, so the responses cannot be analyzed together. This report therefore focuses on results from the 2005 survey.

<sup>8</sup> National Institute of Mental Health (NIMH), “Suicide in the U.S.: Statistics and Prevention,” [www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention.shtml](http://www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention.shtml).

<sup>9</sup> OCPP analysis of 2005 BRFSS data.

<sup>10</sup> On women, poverty, and food insecurity, see Nord, Mark, and Margaret Andrews, “Putting Food on the Table: Household Food Security in the United States,” *Amber Waves*, USDA-ERS, February 2003, pp. 23-29; Nord, Mark, Margaret Andrews, and Steven Carlson, *Household Food Security in the United States, 2005*, USDA, Economic Research Report ERR-29, November 2006. On women, poverty, stress, and depression, see NIMH, “Depression: What Every Woman Should Know,” [www.nimh.nih.gov/health/publications/depression-what-every-woman-should-know/summary](http://www.nimh.nih.gov/health/publications/depression-what-every-woman-should-know/summary); Patel, Vikram, “Gender in Mental Health Research,” *World Health*

Organization, 2005, p. 8; U.S. Dept. of Health and Human Services (DHSS), *Mental Health: A Report of the Surgeon General*, 1999, chap. 4.

<sup>11</sup> NIMH, “Depression: What Every Woman Should Know.”

<sup>12</sup> For an overview of the income and employment consequences of dependent care, see Campbell, Nancy Duff, et al., “Making Care Less Taxing: Improving State Child and Dependent Care Tax Provisions,” National Women’s Law Center, April 2006.

<sup>13</sup> NIMH, “Depression: What Every Woman Should Know”; DHHS, “Mental Health and Mental Disorders,” *Healthy People 2010*, vol. 2, 2<sup>nd</sup> ed., November 2000; Patel, “Gender in Mental Health Research,” p. 15.

<sup>14</sup> NIMH, “Depression: What Every Woman Should Know”; DHHS, *Mental Health: A Report of the Surgeon General*, chaps. 2, 6.

<sup>15</sup> U.S. Census Bureau, Current Population Survey, Table H105: Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2006. Available at [pubdb3.census.gov/macro/032007/health/toc.htm](http://pubdb3.census.gov/macro/032007/health/toc.htm).

<sup>16</sup> Heflin, C.M., K. Siefert, and D.R. Williams, “Food Insufficiency and Women’s Mental Health: Findings from a Three-Year Panel of Welfare Recipients,” *Social Science and Medicine* 61 (2005): 1971-1982.

<sup>17</sup> After it was found likely to have one of the nation’s highest hunger and food insecurity rates in the late 1990s, Oregon loosened its food stamp rules to make more Oregonians eligible and conducted an outreach campaign. As of August 2007, there were more than 442,000 Oregonians receiving food stamps, double the 219,000 on the caseload in August 1999. Oregon’s hunger and food insecurity rates declined along with the expansion in food stamps, from one of the worst rates among the states to a middling level, with state hunger and food insecurity rates similar to the national rates. Specifically, Oregon’s hunger rate declined from 5.8 percent in 1999-01 to 4.4 percent in 2004-06. The national hunger rate in 2004-06 was 3.8 percent. Oregon’s overall food insecurity rate fell from 13.7 percent in 1999-01 to 11.9 percent in 2004-06. The national food insecurity rate in 2004-06 was 11.3 percent.

<sup>18</sup> HB 2073, enacted during the 2007 legislative session, establishes the ICHH, an expansion of the current Interagency Coordinating Council on Hunger. HB 2073 will take effect January 1, 2008.

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