

### THE HEALTH OF MALE AGRICULTURAL WORKERS

The most recent National Agricultural Workers Survey (NAWS) from 2011-2012 indicated that 72% of agricultural workers in the United States are male.<sup>1</sup> A current understanding of men's health issues is of crucial importance to those who provide services to agricultural workers. Male agricultural workers face a wide range of occupational health risk factors, psychological stressors, and discrimination, all of which can contribute to poor health outcomes.<sup>2</sup>

## OCCUPATIONAL HEALTH

- Heat-related illnesses (HRI) are of serious concern to agricultural workers. A recent analysis of heat-related workplace deaths found that workers in the agriculture, forestry, fishing, and hunting industry had a fatality rate 35 times higher than workers in other industries.<sup>3</sup> This study also found that 97% of heat-related deaths occurred in men, and that Hispanic workers were three times more likely to die from a HRI. Among crop workers, nearly all heat-related deaths occurred in foreign-born men aged 20-54 years.<sup>4</sup> A survey of 405 agricultural workers in Georgia found that 77% lacked heat safety training, 34% had no access to regular rest breaks, and 27% lacked access to shade.<sup>5</sup>
- A survey of 141 agricultural workers in Texas and New Mexico found that injuries were common and widespread, particularly among men and those over 40 years of age.<sup>6</sup> Men were 2.9 times more likely to report a back injury in the past 12 months compared to women, and were 3.0 times more likely to report a knee injury.
- Musculoskeletal injuries and chronic pain may be especially prevalent among male agricultural workers. In a survey of 390 male agricultural workers in Virginia, musculoskeletal pain was the most common health condition reported.<sup>7</sup> The workers had a mean age of just 38.5 years.
- In North Carolina, a survey of 300 primarily male agricultural workers found that workers who experienced wage violations were also more likely to experience pesticide safety violations.<sup>8</sup> For example, 29.2% of workers who were not paid minimum wage also reported working in fields while pesticides were being applied. Among workers who were paid at least minimum wage, 15.5% reported working in fields during pesticide application.

# CHRONIC DISEASES

- Among agricultural workers surveyed during the 2011-2012 NAWS (72% of whom were male), 8% reported a current or past diagnosis of high blood pressure, 5% reported a diagnosis of diabetes, and 3% reported a diagnosis of asthma.<sup>9</sup>
- Interviews and physical examinations conducted among 416 male agricultural workers in California found that 27% had high blood pressure, 29% were obese, and 5% had an elevated risk of diabetes.<sup>10</sup>

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• While not yet documented in the United States, chronic kidney disease of non-traditional causes (CKDnT) has been recognized as an epidemic among young male agricultural workers throughout Central America and Asia.<sup>11,12</sup> Long working hours in high ambient temperatures with reoccurring dehydration appears to be the primary cause of CKDnT in agricultural workers, a risk factor present among many U.S. agricultural worker communities.<sup>13,14</sup> Other causes of chronic kidney disease include diabetes and high blood pressure, two conditions which have a high burden among U.S. agricultural workers.<sup>15,16</sup>

### MENTAL HEALTH

- Male agricultural workers who are separated from their families may be more vulnerable to depression, alcoholism, and substance abuse. In the eastern United States, mental health research with agricultural workers has demonstrated that increased time spent in the United States leads to an increased risk of depression.<sup>17</sup>
- Hiott et al., found a depression prevalence of 41.6% among a sample of 125 male agricultural workers.<sup>18</sup> Men who reported feeling social isolation and more stressful working conditions also reported a higher number of symptoms for depression and anxiety.
- Nervios is a "culturally defined condition of psychological stress" in Latin America, the presence of which been shown to act as a reliable indicator of psychiatric vulnerability.<sup>19</sup> Interviews conducted with 422 male agricultural workers in California found a *nervios* prevalence of 20%. Irritability and sadness were the most common symptoms reported by participants, with family problems, personal problems, and illness cited as the most common causes of *nervios*. Men who were unaccompanied by their families reported a greater prevalence of *nervios* (28%). Unaccompanied men also reported worse housing conditions, greater levels of perceived stress, and lower annual incomes compared to men who resided with their families.

### HEALTH RISK FACTORS

- Research findings regarding tobacco use among male agricultural workers varies significantly by region. A study of 390 male agricultural workers in Virginia found that 10.3% reported current use of tobacco products<sup>20</sup>, while a study of 242 male agricultural workers in Oregon reported that 17% used tobacco products.<sup>21</sup>
- Focus groups conducted with 37 male Hispanic agricultural workers found that participants reported that exercise, healthy eating, and preventive health care were important but felt that their work demands prohibited them from doing these activities.<sup>22</sup> The participants reported that they would only go to the doctor if they were very sick, but the researchers did not explore reasons for this behavior with the participants.
- A small pilot study conducted with 100 migratory male agricultural workers in North Carolina found that of the 25% of men who had sex in the previous three months, two-thirds reported consistently using a condom.<sup>23</sup> Sixteen percent of the total sample reported paying a woman to have sex in the past three months.

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<sup>10</sup> Villarejo, D., McCurdy, S.A., Bade, B., Samuels, S., Lighthall, D., & Williams, D. (2010). The health of California's immigrant hired farmworkers. *American Journal of Industrial Medicine*, *53*(4):387-97. DOI: 10.1002/ajim.20796 <sup>11</sup> Almaguer, M., Herrera, R., & Orantes, C.M. (2014). Chronic kidney disease of unknown etiology in agricultural communities. *MEDICC Review*, 16(2). Retrieved from <u>http://www.scielosp.org/scielo.php?pid=S1555-79602014000200003&script=sci\_arttext</u>

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