Several studies demonstrate that foreign-born workers (FBW) are at higher risk for fatal work-related injuries. CDC reported that Hispanic and FBWs had the highest work-related fatal injury rates from 2004–2009 (4.4 deaths/100,000 workers, 4.0 deaths/100,000 workers, respectively). The most common fatal injury events were transportation incidents, followed by assaults, contact with objects or equipment, and falls.

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The foreign-born population in Kentucky increased from 0.9% of the total population in 1990 to 3.4% in 2013.

The authorized FBW percentage of Kentucky’s total workforce was 4.5%, and the unauthorized percentage was 1.2%, amounting to 5.7% of total workforce.

Figure 1. Foreign-born vs. native-born worker fatality rates in Kentucky vs. U.S., 2001-2014

Methods

Data Collection

- Occupational injury fatality data was obtained from the Kentucky Fatality Assessment and Control Evaluation (FACE) Program fatality database.
- Interviews of employers, witnesses, and others with knowledge of the fatal incident were conducted in FACE fatal incident investigations. Work sites and equipment were examined.

Inclusion Criteria

- Work-related fatal injury inclusion criteria required that the fatal injury occur in KY, and that employees were performing work tasks at the time of the fatal injury.

Data Elements

- North American Industry Classification System (NAICS) codes were used to identify the employment industry at time of fatal injury.
- Standard Occupational Classification System (SOC) was used to code and classify occupation at time of fatal injury.
- International Classification of Disease, Tenth Revision, (ICD-10) was used to code external causes of mortality.

Top Injury Scenarios

- Top injury scenarios were derived from review of individual case narrative text.

Analysis

- Fatality rates for U.S. and Kentucky were calculated for three time periods and plotted to compare FBW and NBW injury fatality rates.

From 2001-2014 there were 1444 total worker fatalities in KY:

- 87 were FBWs (6%)
- 1,361 were NBWs (94%)

Kentucky FBW fatal injury rates were higher than NBWs for the following industries: Construction (26%), Services (22%), and Transportation, warehousing, and utilities (18%).

Average age of FBW death was 38 compared to 47 years of age in NBWs.

More than half of the FBWs spoke Spanish as their first language (63%).

The authorized FBW percentage of Kentucky’s total workforce was 4.5%, and the unauthorized percentage was 1.2%, amounting to 5.7% of total workforce.

These findings highlight the importance of FACE data in the identification of high risk industries, occupations, and environments for fatal FBW injuries. The use of FACE surveillance and investigation data supplements general data sources such as CP01 and OSHA data. Data from surveillance and investigation programs such as FACE programs can help inform targeted prevention efforts, and support the development and dissemination of culturally competent materials and interventions to improve FBW safety and health.

Table 1. Demographic characteristics of foreign-born vs. native-born worker fatalities in Kentucky, 2001–2014

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Fatalities</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
<tr>
<td>Black</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
<tr>
<td>Asian</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
<tr>
<td>Other</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
</tbody>
</table>

Table 2. Foreign-born vs. native-born worker fatalities in Kentucky (by external cause), 2001-2014

<table>
<thead>
<tr>
<th>Cause of Injury</th>
<th>FBW Fatalities</th>
<th>NBW Fatalities</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>220 (15%)</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
<tr>
<td>Overdose</td>
<td>220 (15%)</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
<tr>
<td>Accidental</td>
<td>220 (15%)</td>
<td>220 (15%)</td>
<td>0.0082</td>
</tr>
</tbody>
</table>

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References and Citation


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