

# Rural MSM and HIV Prevention

**H**IV and AIDS are evident in the rural United States.<sup>1,2,3,4,5</sup> AIDS rates in non-metropolitan have been lower than rates in metropolitan areas.<sup>1,2</sup> AIDS cases attributed to men who have sex with men (MSM) and MSM who were injection drug users (MSM/IDU) accounted for more than half of rural men diagnosed with AIDS through 1999.<sup>5</sup> In 2000, nearly half of all rural AIDS cases, regardless of risk, were African American cases.<sup>2</sup>

## Risk factors

Limited efforts toward rural AIDS prevention have been associated with low rural seroprevalence and regional differences in risk-related conditions such as poverty in the southeast, seasonal migration in Florida, and injection drug use in the southwest.<sup>3</sup> Many rural MSM cannot identify in-state prevention programs or local testing sites,<sup>6</sup> do not believe that HIV is a local threat,<sup>6,7</sup> and do not engage in HIV risk reduction.<sup>8,9</sup> Geographic isolation limits access to health and social services<sup>10</sup> and local sex partners.<sup>6</sup> Rural venues where MSM openly socialize are scarce, resulting in some men seeking sex partners in public sex environments such as highway rest stops,<sup>7</sup> through the Internet,<sup>12</sup> or regularly traveling to higher seroprevalence areas.<sup>6</sup> Public sex environments are associated with less condom use, more alcohol and drug use, more sex partners, and less HIV testing.<sup>13-15</sup> Internet dating is associated with increased risk for sexually transmitted diseases<sup>16</sup> including HIV,<sup>17</sup> and among rural MSM, less condom use and more sex partners.<sup>15</sup>

Social challenges for rural MSM, whether they are HIV negative or HIV positive, are more pervasive and intense than for urban MSM.<sup>18,19</sup> Many rural people tend to be more conservative and religious, expect greater conformity, and are less tolerant of diversity than urban people.<sup>10,20</sup> A powerful stigma remains associated with both MSM and HIV/AIDS.<sup>21</sup> Rural gay and bisexual men avoid stigma, social hostility, and expected violence by hiding their sexuality<sup>10</sup> and assimilating into the heterosexual culture.<sup>22,23</sup> Some rural MSM report

feeling disenfranchised from both the broader community and the local gay community,<sup>6</sup> and may hide their sexuality to protect their families from stigmatization.<sup>23</sup> For these reasons, some MSM may engage in substance abuse<sup>24</sup> and high-risk sexual behaviors.<sup>21</sup> Methamphetamine use (MA) has been associated with increased HIV risk among MSM,<sup>13,25</sup> and the MA epidemic has spread to rural areas.<sup>26</sup> Barriers to caring for HIV positive individuals include lack of knowledge about HIV, lack of supportive and financial resources, lack of transportation and the need to travel long distances to access medical personnel, lack of adequately trained medical and mental health professionals, and stigma.<sup>27</sup>

## Prevention

There has been progress in the last several years in prevention programs for rural MSM, but there continue to be gaps in prevention for rural MSM. Although additional research is needed, some guidelines are available. The first guideline suggests a model for developing interventions for rural MSM that includes 3 assumptions: (1) there is a distinct rural culture and within that, subcultures of MSM; (2) risky sexual behavior by MSM is a function of social determinants (stigma and gay affirmation) and individual determinants (mental health); and (3) both stigma and gay affirmation are influenced by attitudes of reference groups.<sup>20</sup> The second guideline suggests 4 levels for interventions: population, community, small group, or individual level.<sup>28</sup> Lastly, CDC provides numerous evidence-based interventions that may be applicable with rural MSM.<sup>29</sup>

Social norms marketing campaigns and diffusion of innovations<sup>30</sup> are two prevention approaches that may be useful for rural areas. Popular Opinion Leader (POL)<sup>31</sup> HIV prevention intervention model utilizes diffusions of innovation and has been used successfully with MSM in rural Mississippi<sup>32-34</sup> and Pennsylvania.<sup>20</sup> The POL approach may be suited to other rural areas because it utilizes existing network structures to diffuse

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information and to connect the rural gay community through friendship groups.<sup>35</sup> POLs can endorse risk reduction norms that address both social and individual factors while providing support for the community. The PROMISE program<sup>36</sup> uses diffusion plus social norms marketing by providing targeted information through large or small media. Similar to the POL program, peers are utilized to provide safer sex messages, but the messages are distributed through role model stories rather than personal verbal endorsements.

The Mpowerment project<sup>37,38</sup> utilizes both social marketing and diffusion with the additional focus of empowerment. The focus of this program is to build community and empower it by bringing young MSM together to create their own social supports. The diffusion of innovation concept is used with peers providing formal and informal outreach, conducting safer sex groups and distributing safer sex materials. It has been implemented but not evaluated in a number of rural states.<sup>39</sup> Rural weekend retreats have expanded on the diffusion model where opinion leaders provide safer sex messages in a concentrated period of time with the additional benefit of increasing community networks in the rural areas.<sup>7</sup> Retreats have been successfully conducted in Minnesota, Maine, Montana, Idaho, and Wyoming<sup>40</sup> although no data on their efficacy was reported.

Finally, the Internet is an accessible and relatively low-cost medium for MSM across the United States<sup>12</sup> to make connections with other MSM<sup>6</sup>, suggesting that it may be an excellent tool for contacting and engaging rural MSM. A Wyoming project provides preliminary data for the success of this approach using the Internet to deliver HIV risk reduction information through role-model stories.<sup>41, 42</sup>

In summary, MSM, and especially minority MSM in rural areas, continue to be at risk for HIV/AIDS while demonstrating little risk-reduction behavior. Social conservatism among rural people in general exacerbates the risk for MSM by isolating them and limiting the potential for them to socialize. As a result, MSM may increase their risk for HIV/AIDS by using drugs such as MA, dating through the Internet, and traveling to higher seroprevalence areas to find sex partners. Strategies are needed to reach rural populations at risk.<sup>2</sup>

Several efficacious interventions may be applied in rural areas, including POL, Promise, and Mpowerment. The Internet provides a virtual community for rural MSM and may provide an effective and lower-cost medium for peer-mediated interventions. Work is still needed to identify effective recruitment and retention strategies for HIV prevention among rural MSM and especially minority MSM. Useful approaches for reducing HIV and MSM stigma among the general public, rural MSM, and rural health care providers are needed.

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*This information brief was prepared by Anne Bowen, PhD, of the University of Wyoming, with the assistance of the Academy for Educational Development.*

*Note: The findings and conclusions in this report are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention*