Media technologies, including the Internet, cell phones, and video games, are increasingly being used by health professionals to reach tech-savvy youth on sensitive health topics. Online virtual worlds, for example, can help educate about vaccination and the flu, and text messaging can generate birth control reminders.

Media approaches can be tailored to the maturity level and interests of the individual, disseminated broadly regardless of geographic location, and privately accessed when and where the individual is ready. Media technologies hold great promise for public health practitioners as vehicles for health education, intervention, and data collection. While several studies have informed the development of technology-based interventions targeting mainstream youth, no such data have been reported for American Indian and Alaska Native (AI/AN or Native) teens and young adults.

Native Youth Media Survey

In 2009 Project Red Talon (a STD/HIV prevention project housed at the Northwest Portland Area Indian Health Board) surveyed more than 400 Native teens and young adults (ages 13-21 years) in Oregon, Washington, and Idaho about their use of media technologies like the Internet and cell phones, and where they go for health information.

Community-based participatory research (CBPR) strategies helped define the study’s objectives, review the survey tool, and collect the data. Tribal health educators reviewed the data to make sure the intervention is appropriate to their culture, needs, and organizational capacities. Native youth suggested possible media strategies and design options.

Results found technology use to be exceptionally common and diverse among survey respondents, mirroring patterns reported by teens in the general US population. Seventy-five percent of Northwest (NW) Native youth said they used the Internet, 78 percent reported using cell phones, and 36 percent reported playing video games daily or weekly. Fewer than three percent reported never using computers or the Internet and only six percent reported never using cell phones.

Like other US teens, AI/AN youth said they engaged in a wide variety of online activities. The vast majority of respondents reported having a profile on a social-networking site like MySpace or Facebook (87 percent), watching videos on sites like YouTube (77 percent), and posting photos online (71 percent). A significant proportion of youth reported using the Internet for news or information about sports or entertainment (68 percent), and to get news or information about American Indian events, politics, culture, or their tribe (63 percent).

AI/AN youth reported searching online for health information, including diet, nutrition, exercise, or fitness (50 percent); a specific illness or medical condition (47 percent); drugs or alcohol (42 percent); sexual health, STDs, or HIV (32 percent); and depression, anxiety, stress, or suicide (32 percent). When offered several sources to choose from (ranging from parents to friends), 35 percent said they would feel most comfortable getting sexual

Native youth are more likely than their peers to give birth during their teens, be diagnosed with chlamydia, or engage in cigarette use, binge drinking, and illicit drug use than those from other racial and ethnic groups. Unfortunately, despite the obvious need, few health interventions have been designed for or evaluated in Indian Country.
health information from the Internet, and 44 percent reported having done so in the past. Cell phone use was common among AI/AN teens and young adults. More than one-third of survey respondents sent and received more than 40 text messages per day, similar to national figures.

**Tribal Recommendations**

When asked about potential intervention strategies, tribal partners said Internet-based skill-building tools would be most useful for their community, followed by informational websites, electronic assessment or diagnostic tools, and programs that offered youth live instant message or text counseling with an expert. Participants expressed concern about interventions that were labor intensive or required technical expertise.

**Tribal Intervention Strategies**

Guided by this data, Project Red Talon sought and received funding in 2010 to adapt and evaluate several technology-based interventions targeting NW Native youth:

- **Native VOICES Adaptation Project.** The goal of the Native VOICES project is to develop an evidence-based sexual health video for the NW tribes that will provide young people with accurate risk information and demonstrate culturally-appropriate strategies for encouraging condom use and enhancing partner communication.

  The project is supported by a three-year grant from the Indian Health Service, through its Native American Research Centers for Health (NARCH) program. The project is working closely with tribal and Indian Health Service partners to adapt a CDC-recognized intervention, Video Opportunities for Innovative Condom Education and Safer Sex (VOICES). Tools include a series of talking circles, individual interviews, and community feedback sessions with urban and rural AI/AN teens and young adults (15-24 years old), and consultation with tribal clinicians and health educators.

- **It’s Your Game (IYG) Adaptation Project.** Project Red Talon received funding to adapt a multimedia sexual health program for AI/AN youth 12-14 years old, called It’s Your Game…Keep it Real (IYG). Partners include the Alaska Native Tribal Health Consortium, Intertribal Council of Arizona, Indian Health Service, the Bureau of Indian Education, Tribal Boys and Girls Clubs, the University of Texas Prevention Research Center, and Oregon Health and Sciences University. The three-year project is funded by the Centers for Disease Control and Prevention.

  Project Red Talon will work with NW tribes to culturally adapt this Internet-based HIV, STI, and pregnancy prevention program for Native youth. Its second phase will recruit and follow 400 NW Native youth to see if it delays sexual initiation, reduces sexual activity, and increases condom use.

**Multimedia Health Project.** Finally, a new multimedia website will feature resources for Native teens and young adults that promote holistic health and positive identity and development. It is funded by the President’s National HIV/AIDS Strategy and the Indian Health Service’s National HIV/AIDS Program. The site will address the health and social issues that are most important to Native youth, as determined by the 2009 Native Youth Media survey and further listening sessions with Native teens.

  Native youth, elders, and topical experts from throughout the US will serve as authors of blogs, directors of videos, and graphic design artists. MySpace, Facebook, Twitter, and a health text messaging service will send out periodic health tips and promote contests and social service opportunities. These services will all be launched in 2011.

**Conclusion**

No two youth are the same. Integrated, multimedia approaches offer the best opportunity to reach the greatest number of NW Native youth with important health information. While Project Red Talon’s focus is on STD/HIV prevention and sexual health, its findings suggest a more holistic health framework for other health concerns of Native youth.

The technology-based interventions created by Project Red Talon will incorporate traditional and contemporary design elements, teaching strategies, healing practices, and wellness models. The interventions will invite repeated use through incentives and contests, text message and e-mail reminder systems, and fresh, entertaining, and challenging content.

Together, these projects will help fulfill Project Red Talon’s multimedia strategic plan—creating user-friendly health resources made by and for Native youth.

Authors
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