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# FISCAL IMPACT REPORT

ORIGINAL DATE 02/03/12

SPONSOR Jeff	LAST UPDATED 02/13/12 HB	271/aHAFC
SHORT TITLE	Native American Diabetes Reduction Program SB	
	ANALYST	Esquibel
	ANALISI	Esquibei

# **APPROPRIATION (dollars in thousands)**

Appropr	iation	Recurring or Nonrecurring	Fund Affected
FY12	FY13		
	None		

(Parenthesis ( ) Indicate Expenditure Decreases)

#### **SOURCES OF INFORMATION**

LFC Files

Responses Received From
Children, Youth and Families Department (CYFD)
Department of Health (DOH)
Human Services Department (HSD)

#### **SUMMARY**

### Synopsis of HAFC Amendment

The House Appropriations and Finance Committee amendment to House Bill 271 eliminates the \$250 thousand appropriation, and specify that the Department of Health's tribal liaison will be responsible for coordinating with tribal public health programs, implementing protocols to prevent diabetes among Native American youth, and communicating with interim legislative committees.

# Synopsis of Original Bill

House Bill 271 (HB271) appropriates \$250 thousand from the general fund to the Department of Health (DOH) to coordinate with tribal public health programs and the Indian Health Service (IHS) to develop protocols to prevent the occurrence of diabetes among Native American youth.

DOH would implement the protocols among Native American youth in urban centers as well as provide the support needed by tribal public health programs to implement those protocols. DOH would also be required to report on the progress of the diabetes prevention protocols to the appropriate interim legislative committee by November 2014 and at least every second year following the first report.

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HB 271 includes an appropriation of \$250,000 to DOH for expenditure in fiscal year 2013 to coordinate with tribal public health programs to develop and implement youth diabetes prevention protocols.

### FISCAL IMPLICATIONS

The HAFC amendments strike the appropriation of \$250 thousand previously contained in this bill that was a recurring expense to the general fund.

# **SIGNIFICANT ISSUES**

The Department of Health indicates there are few New Mexico state agency programs that specifically address diabetes in Native American youth. One DOH program is Healthy Kids New Mexico (HKNM), which focuses on obesity prevention by encouraging communities, including tribal communities, to adopt practices and behaviors for active living and healthy eating through strategies such as reduced consumption of sugar-sweetened beverages, smaller portion sizes, and less screen time.

Another program, from the National Institute of Diabetes and Digestive and Kidney Diseases at the Department of Health and Human Services' National Institutes of Health, is the Diabetes Education in Tribal Schools (DETS) curriculum. The curriculum encourages students to gain an understanding of diabetes-related biomedical sciences through enquiry-based learning. DETS supports the integration of American Indian/Alaska Native culture and tribal community knowledge with diabetes-related science. Several Native American schools in New Mexico were involved in the development of the curriculum.

In addition to the above, the Indian Health Service (IHS) maintains Best Practices for Diabetes Prevention, which was updated in April 2011 (<a href="http://www.ihs.gov/MedicalPrograms/Diabetes/">http://www.ihs.gov/MedicalPrograms/Diabetes/</a>). The IHS has also developed a "Healthy Weight for Life" initiative with actions for communities, individuals, families, health care teams and leaders (<a href="http://www.ihs.gov/healthyweight/">http://www.ihs.gov/healthyweight/</a>).

The proposed program could build on existing tribal and IHS programs that target Native American youth, and might include strengthening physical activity programs in schools, implementing nutrition policies and education programs, and engaging students, faculty, families and communities in promoting healthy eating and regular physical activity.

### OTHER SUBSTANTIVE ISSUES

The Children, Youth and Families Department indicates diabetes is a major health issue for the New Mexico population, and even more so for individuals who live at or below the poverty level. Lack of exercise and poor nutrition are both significant contributors to the onset of diabetes. Untreated diabetes can lead to blindness, amputation, nerve and kidney disease, heart disease and stroke.

According to the U.S. Health and Human Services, American Indian/Alaska Native adults are more than twice as likely as their white counterparts to get diabetes, and twice as likely to die from it. Today, 16% of adults served by the Indian Health Service have diabetes, with rates varying from 5.5% among Alaska Native adults to 33.5% percent among American Indian adults in southern Arizona. According to researchers, diabetes education and prevention among the

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youth is the most effective long term community-based prevention model. Indian Health Services has been conducting and funding diabetes prevention and education programs in Indian communities throughout the country.

The New Mexico Department of Health American Indian Health Disparities in New Mexico Report Card gives an "F" in terms of New Mexico health systems effectiveness in addressing diabetes in American Indian communities. The 2007 – 2009 American Indian rate is 73.2 per 100,000, compared to a rate among the White population of 22.2 per 100,000. American Indians have the highest death rates due to diabetes at three times that of Whites and 1.5 times that of African Americans.

The DOH indicates HB271 would create a program in the DOH to prevent and reduce diabetes among Native American youth. Of note, youth can develop both Type 1 (formerly called "childhood onset") and Type 2 (formerly called "adult onset") diabetes, but only Type 2 is potentially preventable. Therefore, this analysis will specifically address the prevention of Type 2 diabetes in Native American youth in New Mexico (NM).

There is no estimate available specifically for the rate of Type 2 diabetes in Native American youth in NM. The closest proxy data comes from the National Institutes of Health's SEARCH for Diabetes in Youth Study (SEARCH study), which ascertains rates of new diabetes cases geographically defined populations amongst vouth in five across the U.S. (http://searchfordiabetes.org/), including the Navajo Nation. The SEARCH study identified all established cases of Type 2 diabetes in 2001 and all new cases in 2002-2005 among Navajo youth. Of note, 3 of the 6 IHS facilities included in the study were located in NM (Crownpoint, Gallup, and Shiprock.) Among adolescents ages 15-19 years, the rates of established Type 2 diabetes cases in 2001 were 2.63 per 1000 (or 1 in 380) for females and 2.07 per 1000 (or 1 in 483) for males. Rates of new cases in the same age group during 2002-2005 were 38.2 per 100,000 per year for females and 32.4 per 100,000 per year for males. Of all racial/ethnic groups in the SEARCH study, Navajo youth ages 15-19 years had the greatest risk of Type 2 diabetes.

Prior to the 1990's, the development of Type 2 diabetes in youth was rare. In the SEARCH study, however, 85% of the new cases of diabetes in Navajo youth during 2002-2005 were Type 2. This is related to increasing rates of youth obesity, which have tripled in the past three decades nationwide. Obesity is a significant risk factor for diabetes. In 2009, 13.5% of NM high school students were obese (New Mexico Youth Risk and Resiliency Survey, 2009). American Indian students had the highest rate of obesity at 20.1%, which was significantly higher than rates in White students (9.1%). In 2010, height and weight data were collected on 3,442 elementary kindergarten and third grade students in schools (http://nmhealth.org/plans/BMISurveillance.pdf). These data showed that 13.2% and 22.6% of kindergarten and third grade students were obese, respectively. American Indian kindergarten and third grade students had the highest rates of obesity at 25.5% and 36.6%, respectively.

RAE/svb:lj