# SUPPORTING STATEMENT B FOR

#### NATIONAL DIABETES EDUCATION PROGRAM

SURVEY OF THE PUBLIC

August 2012

#### National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

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#### **B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

As the collection of information will employ statistical methods, the following information is provided.

#### **B.1. Respondent Universe and Sampling Methods**

A telephone survey of the civilian non-institutionalized adults living in telephone households will be conducted. This public survey will include people with diabetes and their families and people who are at risk for diabetes. To improve estimates for minorities, we will use a targeted random-digit dialing (RDD) survey for minority households. For example, African American households will be sampled from the 3.1% of directory listed telephone household exchanges that represent one -fifth of African American households and improve the hit rate or the likelihood of reaching an African American household member from 11.5% to 76.1%. Similarly, Hispanic households will be targeted by selecting households for the 3.2% of directory listed telephone household exchanges that represents 22.9% of Hispanic households to produce a hit rate of 74.9%. The survey will be conducted in English and Spanish.

The survey of population that includes people with diabetes and their families and people at risk for diabetes will be conducted by a two-stage telephone survey relying on a list-assisted RDD sample of households and a short screening questionnaire to identify the eligible respondent. 2100 total interviews will be conducted, an estimated 1240 from the national sample and 860 completed interviews from the over-sample of Black and Hispanics. Special targeted list-assisted RDD sampling methods will be employed to target African American and Hispanic populations.

The RDD sampling approach was selected as the appropriate methodology for the public because it does not create an inordinate burden on the population. A screening interview will help identify eligible adults in the household. Within each household, if there is more than one adult eligible for the survey, one will be selected based on the "most recent birthday" method of respondent selection. Once the eligible respondent is identified, questions will be asked questions to determine if the respondent has diabetes or pre-diabetes or is at high risk of developing diabetes. According to the 20011 NDEP survey of the public, it is estimated that 18% of adults 35 years of age and older have diabetes and an additional 5% have pre-diabetes and 50% have risk factors that put them at high risk of developing diabetes.

<b>B.1 – 1: E</b> stimates of Confidence Intervals based on 95% confidence level at various sample sizes						
Sample Size	Proportion					
	50%	30%	10%	1%		
2100	2.14	1.96	1.28	0.43		
(total population)						
1050	3.02	2.77	1.81	0.60		
(men or women)						
525	4.28	3.92	2.57	0.85		
(persons 65+)						
300	5.66	5.19	3.39	1.13		

#### **B.2. Procedures for the Collection of Information**

The RDD telephone survey will be conducted by trained interviewers using computer-assisted telephone interviewing. Telephone interviewers will use state-of-the-art binaural noise-cancellation headsets. Supervisors use silent monitoring equipment to observe 10 percent of each interviewer's cases for quality control and interviewer purposes.

A representative sample of households will be contacted via RDD sampling. Each household will receive an original call and up to 12 callbacks before being classified as "unreachable." Additional callback attempts will follow a differential callback schedule (AM/PM, alternate days of the week, etc.) to ensure the highest possible contact rate. Once a household is contacted, interviewers will use screening questions to identify eligible survey respondents. If there are multiple eligible survey respondents in the household, the survey will be administered to the adult respondent that had the most recent birthday.

We expect that the sample will be balanced with respect to gender and age, and will reflect the composition of the target population.

#### **B.3. Methods to Maximize Response Rates and Deal With Nonresponse**

Our goal is to achieve a response rate of 80%. We will send an advance letter to those households where we can obtain an address, to encourage participation in the survey. To maximize response rates in telephone surveys, interviews will be scheduled at the convenience of the respondent. Some measures we will take include:

- Explaining the purpose of the survey to the respondent and clarifying that we are not trying to sell anything
- Using CATI technology to administer the survey smoothly
- Limiting the interview length and ensuring the survey is completed in the set time
- Assuring the respondent of complete confidentiality
- Pretesting the questionnaire to ensure that questions are easy-to-understand. No pretest will involve more than 9 people.
- Calling at convenient and varied times of the day
- Making up to 12 call attempts

Incentives will not be offered to adults who participate in these surveys.

In computing response rates, we use the rules recommended by the Council of American Survey Research Organizations (CASRO).

### **B.4. Test of Procedures or Methods to be Undertaken**

To enhance the reliability and validity of the data collected, a pretest of the survey questionnaires was conducted with a small sample of 9 respondents.

#### Data Collection Instruments: Screening and Interviewing Questionnaire

The telephone-administered survey questionnaire for the general population will assess:

• Awareness of NDEP campaigns and diabetes control and prevention strategies

- Awareness of diabetes
- Awareness of the relationship between diabetes and heart disease
- Knowledge of A1C testing
- Attitudes towards diabetes prevention behaviors
- Demographics age, race/ethnicity, socioeconomic status (SES)

NDEP members and experts reviewed the questionnaire for the 2006 RDD survey of people with diabetes, people with pre-diabetes and people at risk for diabetes. This questionnaire is included in Attachment A.

The respondent universe for this survey includes the target audiences of NDEP programs and messages:

- People at risk for diabetes, from the civilian non-institutionalized population, with special emphasis on racial/ethnic populations
- People with diabetes and their families

Surveys of people with diabetes and their families and people at risk for diabetes will be conducted by a two-stage telephone survey relying on a RDD sample of households and a short screening questionnaire to identify the eligible respondent -- persons at risk for diabetes, those who have been diagnosed with diabetes or who have a family member who is diagnosed with diabetes.

#### **Analysis Plan**

Results of the 2011 survey indicated that 50% of the U.S. population 35 years of age and older have one or more risk factors for diabetes and yet only 30% of them feel they are at risk. Risk factors that increase one's risk for diabetes include being older, being overweight, having a family history of diabetes, and being African American, American Indian, Asian American, Pacific Islander or Hispanic American /Latino race or ethnicity; for women, having a history of gestational diabetes also increases risk. Results of the 2011 survey indicate that people with a family history of diabetes are more likely to feel at risk for diabetes than those without a family history of diabetes. Individuals who are older, Hispanic/Latino, or African American are not more likely to feel at risk for diabetes. These results indicate that NDEP needs to continue to increase awareness of diabetes, its risk factors, and strategies to prevent diabetes among people at risk, with special attention to racial/ethnic minorities. The 2011 results analysis is being finalized; results will be compared to the results of the 2006 and 2008 surveys to document trends and changes in the public's awareness of diabetes and its risk factors.

The National Diabetes Education Program National Diabetes Survey: Trends and Findings (2006, 2008, 2011) is included as an attachment to this package.

#### **B.5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or** <u>Analyzing Data</u>

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