NSDUH Sample Design

- Annual household survey, since 1971
- Civilian noninstitutional pop., age 12+
- Representative nationally and in each State
  - 3,600 interviews in “large” states; 900 in “small”
- Oversample age 12 to 25
- Zero, one or two persons can be selected in each HH
NSDUH Sample Design:
900 Regions

Approx. 75 interviews per year in each region
NSDUH Questionnaire Design and Administration

• Collect information on substance use and treatment, mental health, risk factors, various demographics

• Face to face, computer-assisted, self-administered (ACASI)

• Questionnaire includes core and non-core components
Why Redesign?

• Update questionnaire and sample design to meet current data needs and measure new phenomena
  – Are State and substate estimates still a priority?
  – Are we collecting the most critical data?
  – Prescription drug questions outdated; new drugs are abused now

• Implement better data collection and estimation methods
  – List frame could produce substantial cost savings
  – Current estimation methods are complex, costly

• Reduce cost to expected budget levels
Redesign Plan

• Assess data needs

• Methods research and development
  – Explore various design alternatives in terms of cost and impact on data quality and analytic capability
  – Assess impact on estimates, and whether redesign could be done with a split sample to “bridge” old and new estimates
  – Field test promising data collection methods

• Present plan to leadership to gain acceptance

• Award contract for redesigned survey
Assessing Data Needs

• Consult with data users
  – State data users survey
  – E-mail contacts with key data users
  – Seminars with SAMHSA leadership and staff
  – Expert consultant meetings
Prior Relevant Studies

• **Mode/setting/context effects studies**
  – Effects can be large for sensitive data

• **Validity Study (2000-2001)**
  – Hair, urine collected from 4,000 NSDUH respondents
  – Showed feasibility, but questions remain as to how data can be used in statistical reports

• **Reliability Study (2006)**
  – Re-interviewed 3,000 NSDUH respondents
  – Very good reliability for most variables

• **Impact of incentives on reporting**
  – Significant impact found in 2002

• **Interviewer Effects Analysis**
  – Interviewer experience impacts respondent reporting of drug use
Methods Studies-Sampling

- **USPS Frame Study**
  - Field test using frame constructed from residential mailing lists

- **Sample Issues Study**
  - Determine optimal cluster sizes
  - Assess impact of changing sampling rates for demographic and geographic groups
  - Assess feasibility of interviewing kids under 12

- **Investigation of Census/ACS Options**
  - Assess the use of the ACS for sampling, small area estimation, and weighting activities

- **Contact Materials Study**
  - Develop improved informational documents that respondents receive
Methods Studies- Estimation

• **Imputation and Editing Evaluation**
  – Evaluating different methods to simplify procedures and reduce processing time

• **Weighting Assessment**
  – Examining different predictor variables to improve weighting adjustments

• **Small Area Estimation**
  – Studying ways to estimate change and trends more efficiently and evaluate the quality of substate estimates
Methods Studies-Questionnaire

• **Questionnaire Structure Study**
  – Test “ensemble” vs. “interleafed” format
  – Explore moving more questions to core

• **Text-to-Speech Software Study**

• **Prescription Drug Module Redesign**
  – Update definitions for nonmedical use and therapeutic classes
  – Incorporate drugs that have emerged since original design
  – Move methamphetamine out of context of prescription drugs
Implementation Issues

- Uncertain budget/priorities
- Preserving trends
  - Old vs. new design
  - After new design is implemented
- Communication between survey design staff and senior management/decisionmakers
Where We Are & Where We Go From Here

• Some studies are completed
• Continue those studies not completed
• Make results public
• Consolidate and summarize all the information for policy makers
• Continue work with uncertain budget and priorities