

B. Statistical Methods

1. ASJ Universe and Respondent Selection

The universe is a stratified random sample panel of jurisdictions (i.e., counties, municipalities, boroughs, etc.) identified through the 2005 Census of Jail inmates. A jurisdiction is a county (parish in Louisiana) or municipal government that administers one or more local jails. When a jurisdiction is included in the sample, all jails within the jurisdiction are surveyed. The 2006 Annual Survey of Jails sample included all jails in 876 selected jail jurisdictions, 42 selected privately contracted jails within their selected jurisdictions, and all 64 regional jails. A regional jail is one in which two or more jurisdictions have a formal agreement to operate the facility. BJS requested that all 64 regional jails be included in the sample with certainty. The response rate is expected to be 100%, as it was for the 1994-1998 and 2000-2004 survey cycles for critical items such as rated capacity, average daily population, and the number of inmates confined.

Respondents are selected by grouping jurisdictions by certainty and non-certainty jurisdictions.

All regional jails (64) are in the sample with certainty. Non-regional certainty jurisdictions are based on average daily population (ADP). Large jails and jails that serve more than one jurisdiction are in the sample with certainty. A jurisdiction is a certainty if either

- ! the non-regional jurisdiction held at least one juvenile on Census day and had an ADP of 500 or more; or
- ! the non-regional jurisdiction held adults only on Census day and had an ADP of 750 or more

The 2005 ADP was used to stratify the sample, with allocation to the strata based on the 2005 one-day count, 1999 one-day count, and 1999 ADP. Other 2005 variables were also considered in the final allocation: confined adult males, confined adult females, confined Whites, confined Blacks, confined Hispanics, confined males, confined females, and confined adults.

An optimum allocation (Neyman allocation) to the strata was calculated for each of the variables listed above. Neyman allocation minimizes the variance for a fixed total

$$n_h = n \frac{N_h S_h}{\sum N_h S_h}$$

sample size. The formula for Neyman allocation is

where n_h is the sample size in the given stratum, n is the total sample size, N_h is the total number of units in stratum h , and S_h is the square root of the variance in stratum h .

A compromise allocation was used, based on the average of the allocations for 2005 one-day count, 1999 one-day count, and 1999 ADP. Estimates were included from the 1999 Census of Jails in the compromise allocation because that gives us an idea of how the sample may deteriorate over time.

Once we knew how many units to select in each strata, PROC SURVEYSELECT was used to select a systematic random sample within each noncertainty strata. PROC SURVEYSELECT performed a serpentine sort on jail type, region, and 2005 ADP within each strata.

The six categories of jail type are:

- ! nonregional jurisdiction held at least one juvenile on Census Day, at least one female, 0 nonconfined
- ! nonregional jurisdiction held at least one juvenile on Census Day, at least one female, at least one nonconfined
- ! nonregional jurisdiction held at least one juvenile on Census Day, all males
- ! nonregional jurisdiction held only adults on Census Day, at least one female, 0 nonconfined
- ! nonregional jurisdiction held only adults on Census Day, at least one female, at least one nonconfined
- ! nonregional jurisdiction held only adult males on Census Day.

Nonregional jurisdictions that held no persons on Census Day were automatically defaulted to a jail type of “nonregional jurisdiction held only adult males on Census Day”.

Region is the region of the country where the nonregional jurisdiction is located: Northeast, Midwest, South, or West.

The Survey of Jails in Indian Country is a complete enumeration of all confinement facilities operated by tribal authorities or the Bureau of Indian Affairs.

2. Procedures for Collecting Information

The reference date(s) for the ASJ and the SJIC is the last weekday in June of each year. The survey is conducted by mail. Respondents are asked to mail, fax, or complete the survey by internet web form to the Census Bureau within 3 weeks of receiving it. A telephone non-response follow-up of the survey is conducted after approximately 4 weeks has passed. The Census Bureau will collect, edit, and process the data for the Bureau of Justice Statistics. After follow-up phone calls to non-respondents, the response rate for the survey for the 2004 survey cycle was 100 percent. The same procedures (except web-based form) apply to CJ-5B, but will be collected by an undetermined contractor.

Sampling error. Survey estimates have an associated sampling error because not all

jurisdictions were contacted for the survey. In 2004, the estimated relative sampling error for the total number of persons under the jurisdiction of jail authorities of 784,538 on June 30, 2004 was 0.54%; for persons held in the custody of jail authorities of 713,990, it was 0.55%.

Juveniles. State statutes and judicial practices allow juveniles to be incarcerated in adult jails under a variety of circumstances. Because of the differing statutes and practices, however accurate and comparable data on juveniles are difficult to collect. Beginning in 1994, the ASJ provided estimates of the total number of jail inmates under age 18 (7,615), the number held as adults (6,126), and the number held as juveniles (1,489). New sampling procedures were introduced in 2000 to minimize the standard errors of these estimates. By stratifying jurisdictions based on the authority to house juveniles, the precision of the juvenile counts was improved. In 2004, the relative standard error for juveniles held as adults was 2.63%, and for juveniles held as juveniles, 10.28%.

3. Methods to Maximize Response

Follow-up telephone calls and faxes to non-respondents are planned to encourage a 100 percent response rate. In 2000, BJS added a web reporting option for respondents. These methods have proved effective in reaching the 100 percent response rate while minimizing missing data. The response rates for the 1994 through 1998 and 2000-2004 surveys were 100 percent.

4. Testing Procedures

The current Annual Survey of Jails (CJ-5 and CJ-5A) has been conducted since 2001. The internet web form was developed and pretested in three jurisdictions and demonstrated at the American Jail Association Conference held in May 2000 in Sacramento, California. Since 2000 respondents using the web-form have been encouraged to provide comments.

The Survey of Jails in Indian Country (CJ-5B and Addendum) were reviewed by the Bureau of Indian Affairs, National Institute of Corrections, Indian country jail administrators, and officials from the Department of Justice. These efforts allow BJS staff to present items more efficiently and help to reduce the burden on respondents.

5. Contacts for Statistical Aspects and Data Collection

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