

Introduction

The following memo outlines a revised NEISS-All Injury Program sample size to enable more robust estimation for the All Injury Program (or AIP) portion of the National Electronic Injury Surveillance System. The NEISS-AIP is executed through an interagency agreement between CPSC and the CDC. Prior to 2021, data collection for NEISS-AIP was done for only 2/3 of NEISS hospitals. Beginning in July 2021, the sample will be expanded to the full set of hospitals within NEISS assuming OMB's consent.

As CPSC seeks to revise the overall sample for NEISS to account for change since the last sample of hospitals was selected in 1996, CPSC and CDC anticipate that the expansion will be permanent going forward.

Background

CPSC contracted with Westat to evaluate the NEISS sample¹ (a sample of 96 hospitals nationwide that provide information on injuries treated in their emergency departments). Recommendations were prepared for the NEISS-AIP sample. Westat determined that more accurate estimates of injuries would be obtainable for the All Injury Program portion of NEISS if the AIP sample were expanded to the full sample of NEISS hospitals. Both CPSC and CDC concurred with this finding and CDC determined that sufficient funds were available to support the expansion.

In order to have sufficient time to facilitate this expansion, CPSC seeks to move quickly to execute the expansion.

Modified NEISS-AIP Sample

Unlike cross-sectional surveys that involve contacting respondents with whom no prior relationship exists, NEISS involves developing contracting relationships between sample hospitals and CPSC. There is regular and consistent communication between the hospital staff assigned to coding the injuries and CPSC staff to assure quality control and consistency in coding and to handle invoicing for payment to the hospitals for the coded injuries. Through these relationships and the annual process of renewing contracts, CPSC would seek to negotiate to expand the coding in hospitals that do not yet participate in the All Injury Program.

Revised NEISS and NEISS-AIP Burden

The NEISS system collects information on consumer product related incidents and other injuries from a statistical sample of 96 hospitals in the United States. Respondents to NEISS include hospitals that directly report information to NEISS, and hospitals that allow access to a CPSC contractor, who collects the data. Collecting emergency department records for review, correcting error messages, among other tasks, takes about 36 minutes per day. Each record takes about 30 seconds to review. Coding and reporting records that involve consumer products or other injuries takes about 2 minutes per record. Coding and reporting additional special study information (Adverse Drug Effects) takes about 2 minutes

¹ Statistical Assessment of the NEISS and NEISS-AIP Samples, Final Technical Report, Prepared by Westat, Sept. 24, 2020

and 90 seconds per record for other special studies. Respondents also spend about 36 hours per year in related activities (training, evaluations, and communicating with other hospital staff). In 2019, there were 128 NEISS respondents (total hospitals and CPSC contractors). These NEISS respondents reviewed an estimated 4.61 million emergency department records and reported 696,963 total cases (343,179 consumer product-related injuries for CPSC, and 353,784 other injuries for the NEISS-AIP). The table below lists the number of reported cases and the number of reported cases with additional special study information along with the estimated additional cases and special study cases with the expansion of the NEISS-AIP to the full NEISS sample.

	2019	NEISS-AIP Expansion
Total Emergency Department Visits	4,611,737	
Total Injury Records	696,963	183,830
Consumer Product-Related Injuries	343,179	
CDC NEISS-AIP	353,784	183,830
Child Poisoning (CPSC)	5,072	
Adverse Drug Effects (CDC)	39,187	12,735
Assaults (CDC)	34,525	12,642
Firearm-Related Injuries (CDC)	7,076	
Self-Inflicted Violence (CDC)	9,640	2,801
Work-Related Injuries	41,763	15,570
Motor Vehicle Non-Crash Injuries (NHTSA)	11,918	3,789

The total burden hours for all NEISS respondents are estimated to be 88,285 for 2019. The average burden hour per respondent is 690 hours. With the expansion of the NEISS-AIP to the full NEISS sample, the total burden hours will increase to 95,708 with the average burden hours increasing to 748 hours. The total burden hours on each respondent varies due to differences in size of the hospital (e.g., small rural hospitals versus large metropolitan hospitals). The smallest hospital reported 118 cases with a burden of about 260 hours, while the largest hospital reported 61,037 cases with a burden of about 5,267 hours. The total cost to NEISS respondents for 2019 was approximately \$4,448,000. Expanding the NEISS-AIP to the full NEISS sample will add an estimated \$650,000 to the costs to the respondents. The \$1.98 million in professional staff time gives a total cost to the government of approximately 7.1 million (\$4.448 million + \$ 0.65 million + \$1.98 million). NEISS respondents enter into contracts with CPSC and are compensated for these costs. The average cost per respondent is estimated to be about \$34,750. The average cost per burden hour is estimated to be \$50.38 per hour (including wages and overhead). However, the actual cost to each respondent varies, due to the type of respondent (hospital versus CPSC contractor), size of hospital, and regional differences in wages and overhead. Therefore, the actual annual cost for any given respondent may vary between \$800 at a small rural hospital, and \$448,000 at the largest metropolitan hospital.

Tentative Timeline

	Est. Date	Draft materials to OMB (date)	Notes
60-day FR notice for NEISS-AIP Expansion			Not needed, Change memo only - Change memo date (prepare/clear by Feb 28) with supporting documentation
30-day FR notice for NEISS-AIP Expansion and ICR package submitted to OMB			Not needed, Change memo only - Change memo date (prepare/clear by Feb 28)
Recruitment begins for NEISS-AIP Expansion	March 2021		
Collection of NEISS-AIP Expansion begins	July 2021		
60-day FR notice for NEISS resampling	May 2021		
30-day FR notice for NEISS resampling and ICR package submitted to OMB	August 2021		Allows time to respond to comments, if any.
NEISS collection switches over to new sample	January 2023	NA	(Some hospitals may be onboarded sooner for training purposes, but we hope to have majority of contracts in place by January 2023). Both old and new samples will be run in 2023 to create overlap bridge estimates to compare old versus new for trend analysis across time.