National Health and Nutrition Examination Survey

2011-2012 Data Documentation, Codebook, and Frequencies

Blood Pressure (BPX_G)

Data File: BPX_G.xpt

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Last Revised: NA

Component Description

This section provides data for three consecutive blood pressure (BP) measurements and other methodological measurements to obtain an accurate blood pressure.

Eligible Sample

Heart rate is measured on all children 0-7 years of age; radial pulse is measured on examinees 8 years and older; and blood pressure (BP) is measured on all examinees 8 years and older.

Protocol and Procedure

After resting quietly in a seated position for 5 minutes and once the participants maximum inflation level (MIL) has been determined, three consecutive blood pressure readings are obtained. If a blood pressure measurement is interrupted or incomplete, a fourth attempt may be made. All BP determinations (systolic and diastolic) are taken in the mobile examination center (MEC). Participants with any of the following on both arms were excluded from the exam: rashes, gauze dressings, casts, edema, paralysis, tubes, open sores or wounds, withered arms, a-v shunts, radical mastectomy, or if BP cuff does not fit on the arm.

Quality Assurance & Quality Control

The BP examiners are certified for blood pressure measurement through a training program from *Shared Care Research and Education Consulting.* Certification is achieved when physician examiners meet all requirements of the training program. The initial training includes:

- didactic instruction about BP measurement and propensity for error;
- practicing listening to systolic and diastolic BP sounds using a standardized audio-video tape presentation;
- an audio-video tape test;
- a written exam;
- simultaneously listening to BP on a minimum of 20 volunteers, of all ages, through a Y- stethoscope to compare measures with a gold standard instructor who does the same.

Certification requires a score of 100 percent on the audio-video tape test. Correct answers on the audio-video tape test require the examiner's answers and the standardized test answers to be within +/- 2mm of mercury (Hg) on 92 percent of 24 measures (12 systolic, 12 diastolic), and within +/- 4mmHg on 100 percent of 24 measures (12 systolic, 12 diastolic).

For more details on the QA/QC process for this component, please refer to the Physician Section of the MEC Operations Manual located on the NHANES website at the following link:

Data Processing and Editing

The following are some specifications used in capturing the BP data:

Systolic blood pressure and maximum inflation level cannot be greater than 300 mmHg;

Systolic and diastolic blood pressure measurements and the maximum inflation level can be even numbers only;

Systolic blood pressure must be greater than diastolic blood pressure;

If there is no systolic blood pressure, there can be no diastolic blood pressure;

Diastolic blood pressure can be zero.

Analytic Notes

Changes Since 2009-2010:

There was no change since 2009-2010.

Exam sample weights should be used for analyses.

Please refer to the NHANES Analytic Guidelines and the on-line NHANES Tutorial for further details on the use of sample weights and other analytic issues.

Codebook and Frequencies

SEQN - Respondent sequence number

Variable Name:	SEQN
SAS Label:	Respondent sequence number
English Text:	Respondent sequence number.
Target:	Both males and females 0 YEARS - 150 YEARS

PEASCST1 - Blood Pressure Status

Variable Name:	PEASCST1
SAS Label:	Blood Pressure Status
English Text:	Blood Pressure Status
Target:	Both males and females 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Complete	9004	9004	
2	Partial	1	9005	
3	Not done	333	9338	
.	Missing	0	9338	

PEASCTM1 - Blood Pressure Time in Seconds

Variable Name:	PEASCTM1
SAS Label:	Blood Pressure Time in Seconds
English Text:	Blood Pressure Time in Seconds
Target:	Both males and females 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
2 to 2144	Range of Values	9004	9004	
.	Missing	334	9338	

PEASCCT1 - Blood Pressure Comment

Variable Name:	PEASCCT1
SAS Label:	Blood Pressure Comment
English Text:	Blood Pressure Comment
Target:	Both males and females 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
2	SP refusal	9	9	
3	No time	15	24	
4	Physical limitation	1	25	
5	Communication problem	2	27	
6	Equipment failure	0	27	
7	SP ill/emergency	9	36	
56	Came late/left early	239	275	
84	SP with child	21	296	
99	Other, specify	25	321	
122	Language barrier	13	334	
.	Missing	9004	9338	

BPXCHR - 60 sec HR (30 sec HR * 2)

Variable Name:	BPXCHR
SAS Label:	60 sec HR (30 sec HR * 2)
English Text:	60 sec HR (30 sec HR * 2)
Target:	Both males and females 0 YEARS - 7 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
52 to 188	Range of Values	1945	1945	
.	Missing	7393	9338	

BPQ150A - Had food in the past 30 minutes?

Variable Name:	BPQ150A
SAS Label:	Had food in the past 30 minutes?
English Text:	Have you had any of the following in the past 30 minutes?: Food
English Instructions:	Check each that applies
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	1617	1617	
2	No	5443	7060	
.	Missing	2278	9338	

BPQ150B - Had alcohol in the past 30 minutes?

Variable Name:	BPQ150B
SAS Label:	Had alcohol in the past 30 minutes?
English Text:	Have you had any of the following in the past 30 minutes?: Alcohol
English Instructions:	Check each that applies
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	5	5	
2	No	7055	7060	
.	Missing	2278	9338	

BPQ150C - Had coffee in the past 30 minutes?

Variable Name:　　　　BPQ150C

SAS Label:　　　　　　Had coffee in the past 30 minutes?

English Text:　　　　　Have you had any of the following in the past 30 minutes?: Coffee

English Instructions:　Check each that applies

Target:　　　　　　　Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	50	50	
2	No	7010	7060	
.	Missing	2278	9338	

BPQ150D - Had cigarettes in the past 30 minutes?

Variable Name:	BPQ150D
SAS Label:	Had cigarettes in the past 30 minutes?
English Text:	Have you had any of the following in the past 30 minutes?: Cigarettes
English Instructions:	Check each that applies
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	118	118	
2	No	6942	7060	
.	Missing	2278	9338	

BPAARM - Arm selected

Variable Name:	BPAARM
SAS Label:	Arm selected
English Text:	Arm selected:
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Right	7036	7036	
2	Left	24	7060	
8	Could not obtain	0	7060	
.	Missing	2278	9338	

BPACSZ - Coded cuff size

Variable Name: BPACSZ

SAS Label: Coded cuff size

English Text: Cuff size (cm) (width X length)

Target: Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Infant (6X12)	1	1	
2	Child (9X17)	443	444	
3	Adult (12X22)	2377	2821	
4	Large (15X32)	3308	6129	
5	Thigh (18X35)	931	7060	
.	Missing	2278	9338	

BPXPLS - 60 sec. pulse (30 sec. pulse * 2)

Variable Name:	BPXPLS
SAS Label:	60 sec. pulse (30 sec. pulse * 2)
English Text:	60 sec. pulse (30 sec. pulse * 2)
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 172	Range of Values	7060	7060	
.	Missing	2278	9338	

BPXPULS - Pulse regular or irregular?

Variable Name:	BPXPULS
SAS Label:	Pulse regular or irregular?
English Text:	Pulse regular or irregular?
Target:	Both males and females 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Regular	8906	8906	
2	Irregular	121	9027	
.	Missing	311	9338	

BPXPTY - Pulse type

Variable Name: BPXPTY

SAS Label: Pulse type

English Text: Pulse type

Target: Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Radial	7072	7072	
2	Brachial	7	7079	
8	Could not obtain	0	7079	
.	Missing	2259	9338	

BPXML1 - MIL: maximum inflation levels (mm Hg)

Variable Name:	BPXML1
SAS Label:	MIL: maximum inflation levels (mm Hg)
English Text:	MIL: maximum inflation levels (mm Hg)
Target:	Both males and females 8 YEARS - 150 YEARS
Hard Edits:	70.0000 to 300.0000

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 260	Range of Values	7072	7072	
888	Could not obtain	7	7079	
.	Missing	2259	9338	

BPXSY1 - Systolic: Blood pres (1st rdg) mm Hg

Variable Name:	BPXSY1
SAS Label:	Systolic: Blood pres (1st rdg) mm Hg
English Text:	Systolic: Blood pressure (first reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
74 to 238	Range of Values	6756	6756	
.	Missing	2582	9338	

BPXDI1 - Diastolic: Blood pres (1st rdg) mm Hg

Variable Name:	BPXDI1
SAS Label:	Diastolic: Blood pres (1st rdg) mm Hg
English Text:	Diastolic: Blood pressure (first reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 120	Range of Values	6756	6756	
.	Missing	2582	9338	

BPAEN1 - Enhancement used first reading

Variable Name: BPAEN1

SAS Label: Enhancement used first reading

English Text: Enhancement used first reading

Target: Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	7	7	
2	No	7054	7061	
8	Could not obtain	0	7061	
.	Missing	2277	9338	

BPXSY2 - Systolic: Blood pres (2nd rdg) mm Hg

Variable Name:	BPXSY2
SAS Label:	Systolic: Blood pres (2nd rdg) mm Hg
English Text:	Systolic: Blood pressure (second reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
74 to 234	Range of Values	6908	6908	
.	Missing	2430	9338	

BPXDI2 - Diastolic: Blood pres (2nd rdg) mm Hg

Variable Name:	BPXDI2
SAS Label:	Diastolic: Blood pres (2nd rdg) mm Hg
English Text:	Diastolic: Blood pressure (second reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 134	Range of Values	6908	6908	
.	Missing	2430	9338	

BPAEN2 - Enhancement used second reading

Variable Name:	BPAEN2
SAS Label:	Enhancement used second reading
English Text:	Enhancement used second reading
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	221	221	
2	No	6839	7060	
8	Could not obtain	0	7060	
.	Missing	2278	9338	

BPXSY3 - Systolic: Blood pres (3rd rdg) mm Hg

Variable Name:	BPXSY3
SAS Label:	Systolic: Blood pres (3rd rdg) mm Hg
English Text:	Systolic: Blood pressure (third reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
74 to 232	Range of Values	6917	6917	
.	Missing	2421	9338	

BPXDI3 - Diastolic: Blood pres (3rd rdg) mm Hg

Variable Name:	BPXDI3
SAS Label:	Diastolic: Blood pres (3rd rdg) mm Hg
English Text:	Diastolic: Blood pressure (third reading) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 128	Range of Values	6917	6917	
.	Missing	2421	9338	

BPAEN3 - Enhancement used third reading

Variable Name:	BPAEN3
SAS Label:	Enhancement used third reading
English Text:	Enhancement used third reading
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	205	205	
2	No	6854	7059	
8	Could not obtain	0	7059	
.	Missing	2279	9338	

BPXSY4 - Systolic: Blood pres (4th rdg) mm Hg

Variable Name:	BPXSY4
SAS Label:	Systolic: Blood pres (4th rdg) mm Hg
English Text:	Systolic: Blood pressure (fourth reading if necessary) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
78 to 226	Range of Values	447	447	
.	Missing	8891	9338	

BPXDI4 - Diastolic: Blood pres (4th rdg) mm Hg

Variable Name:	BPXDI4
SAS Label:	Diastolic: Blood pres (4th rdg) mm Hg
English Text:	Diastolic: Blood pressure (fourth reading if necessary) mm Hg
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 130	Range of Values	447	447	
.	Missing	8891	9338	

BPAEN4 - Enhancement used fourth reading

Variable Name:	BPAEN4
SAS Label:	Enhancement used fourth reading
English Text:	Enhancement used fourth reading
Target:	Both males and females 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	104	104	
2	No	410	514	
8	Could not obtain	0	514	
.	Missing	8824	9338	