

 Wave V Lipids
**Title**

Wave V Lipids

**Abstract**

This file contains constructed measures designed to facilitate analysis and interpretation of lipids results based on venous blood collected via phlebotomy at the Wave V home exam. In addition to the lipid assay results, there are classifications according to both the NCEP/ATP III and AHA/ACC guidelines, a flag for antihyperlipidemic medication use, and two hyperlipidemia joint classification variables.

Variables: 26

Observations: 5,381

**Variables**
 Wave V Lipids

- [H5TC - TOTAL CHOLESTEROL \(TC, MG/DL\) -W5](#)
- [H5TCDEC - TOTAL CHOLESTEROL \(TC\) DECILE -W5](#)
- [H5HDL - HDL CHOLESTEROL \(HDL-C, MG/DL\) -W5](#)
- [H5HDLDEC - HDL CHOLESTEROL \(HDL-C\) DECILE -W5](#)
- [H5TG - TRIGLYCERIDES \(TG, MG/DL\) -W5](#)
- [H5TGDEC - TRIGLYCERIDES \(TG\) DECILE -W5](#)
- [H5LDL - LDL CHOLESTEROL \(LDL-C, MG/DL\) -W5](#)
- [H5LDLDEC - LDL CHOLESTEROL \(LDL-C\) DECILE -W5](#)
- [H5LDLMM - LDL-C METHOD OF MEASUREMENT -W5](#)
- [H5NHDL - NON-HDL CHOLESTRL \(non-HDL-C, MG/DL\) -W5](#)
- [H5NHDEC - NON-HDL CHOLESTRL \(non-HDL-C\) DECILE -W5](#)
- [H5TC\\_HDL - TC TO HDL-C RATIO \(TC:HDL-C\) -W5](#)
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- [H5FASTTM - HOURS SINCE LAST ATE -W5](#)
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- [H5CTC - CLASSIFICATION OF TC \(NCEP/ATP III\) -W5](#)
- [H5CHDL - CLASSIFCATION OF HDL-C \(NCEP/ATP III\)-W5](#)
- [H5C1TG - CLASSIFICATION OF TG \(NCEP/ATP III\) -W5](#)
- [H5C1LDL - CLASSIFCATION OF LDL-C \(NCEP/ATP III\)-W5](#)
- [H5C2TG - CLASSIFICATION OF TG \(AHA/ACC\) -W5](#)
- [H5C2LDL - CLASSIFICATION OF LDL-C \(AHA/ACC\) -W5](#)
- [H5Q045F - Q045f EVER DX HIGH CHOLESTROL/TRIG -W5](#)
- [H5C\\_MED2 - FLAG: ANTIHYPERLIPIDEMIC MED USE -W5](#)

- [H5HLIPC - HYPERLIPIDEMIA JOINT CLASSIFICATION -W5](#)
- [H5HLPJC4 - HYPERLIPIDEMIA JOINT CLASS \(WAVE IV\) -W5](#)

#### H5TC - TOTAL CHOLESTEROL (TC, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TC	Total Cholesterol (TC) assay results (mg/dl).

#### H5TCDEC - TOTAL CHOLESTEROL (TC) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TCDEC	Total Cholesterol (TC) assay results ordered and assigned decile ranks.
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

#### H5HDL - HDL CHOLESTEROL (HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HDL	High-Density Lipoprotein Cholesterol (HDL-C) assay results (mg/dl).

#### H5HDLDEC - HDL CHOLESTEROL (HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5HDLDEC	High-Density Lipoprotein Cholesterol (HDL-C) assay results ordered and assigned decile ranks.
1	First decile
2	Second decile
3	Third decile

4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

#### H5TG - TRIGLYCERIDES (TG, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TG	Triglyceride (TG) assay results (mg/dl).

#### H5TGDEC - TRIGLYCERIDES (TG) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TGDEC	Triglyceride (TG) assay results ordered and assigned decile ranks
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

#### H5LDL - LDL CHOLESTEROL (LDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5LDL	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results (mg/dl).

#### H5LDLDEC - LDL CHOLESTEROL (LDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5LDLDEC	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results ordered and assigned decile ranks.
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

#### H5LDLMM - LDL-C METHOD OF MEASUREMENT -W5

Type	Code
Measurement Unit	Numeric
H5LDLMM	LDL-C method of measurement. When TG < 400 mg/dl, LDL-C was indirectly calculated from the respondent-specific concentrations (mg/dl) of total cholesterol, high-density lipoprotein cholesterol, and triglycerides using the Friedewald equation ( $LDL-C = TC - HDL-C - [TG/5]$ ). When TG $\geq$ 400 mg/dl, LDL-C was directly measured.
1	indirect calculation
2	directly measured

#### H5NHDL - NON-HDL CHOLESTRL (non-HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5NHDL	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) calculated from Total Cholesterol and High-Density Lipoprotein Cholesterol.

#### H5NHDEC - NON-HDL CHOLESTRL (non-HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric

H5NHDEC	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) ordered and assigned ranks.	
1	First decile	
2	Second decile	
3	Third decile	
4	Fourth decile	
5	Fifth decile	
6	Sixth decile	
7	Seventh decile	
8	Eighth decile	
9	Ninth decile	
10	Tenth decile	

#### H5TC\_HDL - TC TO HDL-C RATIO (TC:HDL-C) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TC_HDL	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C).

#### H5TCHDEC - TC TO HDL-C RATIO (TC:HDL-C) DECILE-W5

Type	Code	
Measurement Unit	Numeric	
H5TCHDEC	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C) ordered and assigned ranks.	
1	First decile	
2	Second decile	
3	Third decile	
4	Fourth decile	
5	Fifth decile	
6	Sixth decile	
7	Seventh decile	
8	Eighth decile	
9	Ninth decile	
10	Tenth decile	

 H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

 H5FASTLP - FLAG: FASTED FOR 9+ HOURS -W5

Type	Code
Measurement Unit	Numeric
H5FASTLP	FLAG indicating respondent fasted for nine or more hours
0	no
1	yes

 H5CTC - CLASSIFICATION OF TC (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5CTC	The classification of fasting Total Cholesterol according to NCEP/ATP III guidelines.
1	Desirable: TC is < 200 mg/dl
2	Borderline high: TC is 200-239 mg/dl
3	High: TC is >= 240 mg/dl
4	Non-fasting
5	Fasting status unknown

 H5CHDL - CLASSIFICATION OF HDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5CHDL	The classification of fasting High-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.
1	Low: HDL-C is < 40 mg/dl
2	Optimal: HDL-C is 40-59 mg/dl
3	High: HDL-C is >= 60 mg/dl
4	Non-fasting
5	Fasting status unknown

 H5C1TG - CLASSIFICATION OF TG (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5C1TG	The classification of fasting Triglycerides according to NCEP/ATP III guidelines.
1	Normal: TG is < 150 mg/dl
2	Borderline high: TG is 150-199 mg/dl
3	High: TG is 200-499 mg/dl
4	Very high: TG is $\geq$ 500 mg/dl
5	Non-fasting
6	Fasting status unknown

#### H5C1LDL - CLASSIFICATION OF LDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5C1LDL	The classification of fasting Low-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.
1	Optimal: LDL-C is < 100 mg/dl
2	Near optimal: LDL-C is 100-129 mg/dl
3	Borderline high: LDL-C is 130-159 mg/dl
4	High: LDL-C is 160-189 mg/dl
5	Very high: LDL-C is $\geq$ 190 mg/dl
6	Non-fasting
7	Fasting status unknown

#### H5C2TG - CLASSIFICATION OF TG (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2TG	The classification of Triglycerides according to AHA/ACC guidelines.
1	Normal: TG is < 175 mg/dl
2	Moderate hypertriglyceridemia: TG is 175-499 mg/dl
3	Severe hypertriglyceridemia: TG is $\geq$ 500 mg/dl
4	Non-fasting: TG is $\geq$ 500 mg/dl
5	Fasting status unknown: TG is $\geq$ 500 mg/dl

 H5C2LDL - CLASSIFICATION OF LDL-C (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2LDL	The classification of Low-Density Lipoprotein Cholesterol according to AHA/ACC guidelines.
1	Normal: LDL-C is < 160 mg/dl
2	Moderate hypercholesterolemia: LDL-C is 160-189 mg/dl
3	Severe hypercholesterolemia: LDL-C is >= 190 mg/dl

 H5Q045F - Q045f EVER DX HIGH CHOLESTROL/TRIG -W5

Type	Code
Measurement Unit	Numeric
H5Q045F	Has a doctor, nurse or health care provider ever told you that you have high cholesterol or triglycerides?
0	no
1	yes

 H5C\_MED2 - FLAG: ANTIHYPERLIPIDEMIC MED USE -W5

Type	Code
Measurement Unit	Numeric
H5C_MED2	FLAG indicating respondent took an antihyperlipidemic medication in the past 4 weeks
0	no
1	yes

 H5HLIPJC - HYPERLIPIDEMIA JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5HLIPJC	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1) OR has a fasting TG concentration >= 500 mg/dl (H5C2TG = 3) OR an LDL-C concentration >= 190 mg/dl (H5C2LDL = 3).
0	no evidence of hyperlipidemia



1	evidence of hyperlipidemia
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#### H5HLPJC4 - HYPERLIPIDEMIA JOINT CLASS (WAVE IV) -W5

Type	Code
Measurement Unit	Numeric
H5HLPJC4	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR has taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1). This joint classification variable parallels the Wave IV joint classification variable.
0	no evidence of hyperlipidemia
1	evidence of hyperlipidemia

## Logical Products

### Data Layouts

#### Wave V Lipids

### Wave V Lipids

#### H5TC - TOTAL CHOLESTEROL (TC, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TC	Total Cholesterol (TC) assay results (mg/dl).

#### H5TCDEC - TOTAL CHOLESTEROL (TC) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TCDEC	Total Cholesterol (TC) assay results ordered and assigned decile ranks.
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile

10	Tenth decile
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 H5HDL - HDL CHOLESTEROL (HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HDL	High-Density Lipoprotein Cholesterol (HDL-C) assay results (mg/dl).

 H5HDLDEC - HDL CHOLESTEROL (HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5HDLDEC	High-Density Lipoprotein Cholesterol (HDL-C) assay results ordered and assigned decile ranks.

1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

 H5TG - TRIGLYCERIDES (TG, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TG	Triglyceride (TG) assay results (mg/dl).

 H5TGDEC - TRIGLYCERIDES (TG) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TGDEC	Triglyceride (TG) assay results ordered and assigned decile ranks
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4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

 H5LDL - LDL CHOLESTEROL (LDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5LDL	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results (mg/dl).

 H5LDLDEC - LDL CHOLESTEROL (LDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5LDLDEC	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results ordered and assigned decile ranks.

1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

 H5LDLMM - LDL-C METHOD OF MEASUREMENT -W5

Type	Code
Measurement Unit	Numeric

H5LDLMM	LDL-C method of measurement. When TG < 400 mg/dl, LDL-C was indirectly calculated from the respondent-specific concentrations (mg/dl) of total cholesterol, high-density lipoprotein cholesterol, and triglycerides using the Friedewald equation ( $LDL-C = TC - HDL-C - [TG/5]$ ). When TG $\geq$ 400 mg/dl, LDL-C was directly measured.
1	indirect calculation
2	directly measured

#### H5NHDL - NON-HDL CHOLESTRL (non-HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5NHDL	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) calculated from Total Cholesterol and High-Density Lipoprotein Cholesterol.

#### H5NHDEC - NON-HDL CHOLESTRL (non-HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5NHDEC	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) ordered and assigned ranks.
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

#### H5TC\_HDL - TC TO HDL-C RATIO (TC:HDL-C) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TC_HDL	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C).

#### H5TCHDEC - TC TO HDL-C RATIO (TC:HDL-C) DECILE-W5

Type	Code
Measurement Unit	Numeric
H5TCHDEC	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C) ordered and assigned ranks.
1	First decile
2	Second decile
3	Third decile
4	Fourth decile
5	Fifth decile
6	Sixth decile
7	Seventh decile
8	Eighth decile
9	Ninth decile
10	Tenth decile

 H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

 H5FASTLP - FLAG: FASTED FOR 9+ HOURS -W5

Type	Code
Measurement Unit	Numeric
H5FASTLP	FLAG indicating respondent fasted for nine or more hours
0	no
1	yes

 H5CTC - CLASSIFICATION OF TC (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5CTC	The classification of fasting Total Cholesterol according to NCEP/ATP III guidelines.
1	Desirable: TC is < 200 mg/dl
2	Borderline high: TC is 200-239 mg/dl
3	High: TC is >= 240 mg/dl

4	Non-fasting
5	Fasting status unknown

#### H5CHDL - CLASSIFICATION OF HDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5CHDL	The classification of fasting High-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.
1	Low: HDL-C is < 40 mg/dl
2	Optimal: HDL-C is 40-59 mg/dl
3	High: HDL-C is $\geq$ 60 mg/dl
4	Non-fasting
5	Fasting status unknown

#### H5C1TG - CLASSIFICATION OF TG (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5C1TG	The classification of fasting Triglycerides according to NCEP/ATP III guidelines.
1	Normal: TG is < 150 mg/dl
2	Borderline high: TG is 150-199 mg/dl
3	High: TG is 200-499 mg/dl
4	Very high: TG is $\geq$ 500 mg/dl
5	Non-fasting
6	Fasting status unknown

#### H5C1LDL - CLASSIFICATION OF LDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5C1LDL	The classification of fasting Low-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.
1	Optimal: LDL-C is < 100 mg/dl
2	Near optimal: LDL-C is 100-129 mg/dl
3	Borderline high: LDL-C is 130-159 mg/dl
4	High: LDL-C is 160-189 mg/dl

5	Very high: LDL-C is $\geq$ 190 mg/dl
6	Non-fasting
7	Fasting status unknown

 H5C2TG - CLASSIFICATION OF TG (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2TG	The classification of Triglycerides according to AHA/ACC guidelines.
1	Normal: TG is $<$ 175 mg/dl
2	Moderate hypertriglyceridemia: TG is 175-499 mg/dl
3	Severe hypertriglyceridemia: TG is $\geq$ 500 mg/dl
4	Non-fasting: TG is $\geq$ 500 mg/dl
5	Fasting status unknown: TG is $\geq$ 500 mg/dl

 H5C2LDL - CLASSIFICATION OF LDL-C (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2LDL	The classification of Low-Density Lipoprotein Cholesterol according to AHA/ACC guidelines.
1	Normal: LDL-C is $<$ 160 mg/dl
2	Moderate hypercholesterolemia: LDL-C is 160-189 mg/dl
3	Severe hypercholesterolemia: LDL-C is $\geq$ 190 mg/dl

 H5Q045F - Q045f EVER DX HIGH CHOLESTROL/TRIG -W5

Type	Code
Measurement Unit	Numeric
H5Q045F	Has a doctor, nurse or health care provider ever told you that you have high cholesterol or triglycerides?
0	no
1	yes

 H5C\_MED2 - FLAG: ANTIHYPERLIPIDEMIC MED USE -W5

Type	Code
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Measurement Unit	Numeric
H5C_MED2	FLAG indicating respondent took an antihyperlipidemic medication in the past 4 weeks
0	no
1	yes


 H5HLPJC - HYPERLIPIDEMIA JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5HLPJC	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1) OR has a fasting TG concentration $\geq$ 500 mg/dl (H5C2TG = 3) OR an LDL-C concentration $\geq$ 190 mg/dl (H5C2LDL = 3).
0	no evidence of hyperlipidemia
1	evidence of hyperlipidemia

 H5HLPJC4 - HYPERLIPIDEMIA JOINT CLASS (WAVE IV) -W5

Type	Code
Measurement Unit	Numeric
H5HLPJC4	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR has taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1). This joint classification variable parallels the Wave IV joint classification variable.
0	no evidence of hyperlipidemia
1	evidence of hyperlipidemia

## Physical Instances

 Wave V Lipids

Title	Wave V Lipids
File Name	blipids5.sas7bdat
Case Quantity	5381
Variable Count	25

 H5TC - TOTAL CHOLESTEROL (TC, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric



H5TC	Total Cholesterol (TC) assay results (mg/dl).
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			Frequency	% of total	% of valid
Missing	.	missing	589	10.95%	
		Total	589	10.95%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4792	589	62	424	180.64378...	35.808935...

### H5TCDEC - TOTAL CHOLESTEROL (TC) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TCDEC	Total Cholesterol (TC) assay results ordered and assigned decile ranks.

			Frequency	% of total	% of valid
Valid	1	First decile	499	9.27%	10.41%
	2	Second decile	479	8.9%	10%
	3	Third decile	466	8.66%	9.72%
	4	Fourth decile	488	9.07%	10.18%
	5	Fifth decile	474	8.81%	9.89%
	6	Sixth decile	487	9.05%	10.16%
	7	Seventh decile	488	9.07%	10.18%
	8	Eighth decile	480	8.92%	10.02%
	9	Ninth decile	463	8.6%	9.66%
	10	Tenth decile	468	8.7%	9.77%
		Total	4,792	89.05%	100%
Missing	.	not applicable (no TC result)	589	10.95%	
		Total	589	10.95%	

Valid	Invalid	Minimum	Maximum
4792	589	1	10

### H5HDL - HDL CHOLESTEROL (HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HDL	High-Density Lipoprotein Cholesterol (HDL-C) assay results (mg/dl).

			Frequency	% of total	% of valid
Missing	.	missing	589	10.95%	
	9999	implausible value < 15 or > 175	1	0.02%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
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4791	590	17	156	49.630557...	15.210314...
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### H5HDLDEC - HDL CHOLESTEROL (HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5HDLDEC	High-Density Lipoprotein Cholesterol (HDL-C) assay results ordered and assigned decile ranks.

			Frequency	% of total	% of valid
Valid	1	First decile	551	10.24%	11.5%
	2	Second decile	468	8.7%	9.77%
	3	Third decile	544	10.11%	11.35%
	4	Fourth decile	438	8.14%	9.14%
	5	Fifth decile	441	8.2%	9.2%
	6	Sixth decile	499	9.27%	10.42%
	7	Seventh decile	433	8.05%	9.04%
	8	Eighth decile	525	9.76%	10.96%
	9	Ninth decile	428	7.95%	8.93%
	10	Tenth decile	464	8.62%	9.68%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no HDL-C result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	10

### H5TG - TRIGLYCERIDES (TG, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TG	Triglyceride (TG) assay results (mg/dl).

			Frequency	% of total	% of valid
Missing	.	missing	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4791	590	22	1604	129.42183...	95.304864...

### H5TGDEC - TRIGLYCERIDES (TG) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5TGDEC	Triglyceride (TG) assay results ordered and assigned decile ranks

			Frequency	% of total	% of valid
Valid	1	First decile	495	9.2%	10.33%
	2	Second decile	510	9.48%	10.64%
	3	Third decile	465	8.64%	9.71%
	4	Fourth decile	489	9.09%	10.21%
	5	Fifth decile	444	8.25%	9.27%
	6	Sixth decile	494	9.18%	10.31%
	7	Seventh decile	457	8.49%	9.54%
	8	Eighth decile	480	8.92%	10.02%
	9	Ninth decile	482	8.96%	10.06%
	10	Tenth decile	475	8.83%	9.91%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no TG result)	590	10.96%	
			Total	590	10.96%

Valid	Invalid	Minimum	Maximum
4791	590	1	10

#### H5LDL - LDL CHOLESTEROL (LDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5LDL	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results (mg/dl).

			Frequency	% of total	% of valid
Missing	.	missing	601	11.17%	
			Total	601	11.17%

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4780	601	9	332	105.77991...	31.869674...

#### H5LDLDEC - LDL CHOLESTEROL (LDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5LDLDEC	Low-Density Lipoprotein Cholesterol (LDL-C) indirect/direct results ordered and assigned decile ranks.

			Frequency	% of total	% of valid
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Valid	1	First decile	488	9.07%	10.21%
	2	Second decile	472	8.77%	9.87%
	3	Third decile	485	9.01%	10.15%
	4	Fourth decile	520	9.66%	10.88%
	5	Fifth decile	436	8.1%	9.12%
	6	Sixth decile	483	8.98%	10.1%
	7	Seventh decile	489	9.09%	10.23%
	8	Eighth decile	483	8.98%	10.1%
	9	Ninth decile	459	8.53%	9.6%
	10	Tenth decile	465	8.64%	9.73%
		Total	4,780	88.83%	100%
Missing	.	not applicable (no LDL-C result)	601	11.17%	
		Total	601	11.17%	

Valid	Invalid	Minimum	Maximum
4780	601	1	10

#### H5LDLMM - LDL-C METHOD OF MEASUREMENT -W5

Type	Code
Measurement Unit	Numeric
H5LDLMM	LDL-C method of measurement. When TG < 400 mg/dl, LDL-C was indirectly calculated from the respondent-specific concentrations (mg/dl) of total cholesterol, high-density lipoprotein cholesterol, and triglycerides using the Friedewald equation ( $LDL-C = TC - HDL-C - [TG/5]$ ). When TG $\geq$ 400 mg/dl, LDL-C was directly measured.

			Frequency	% of total	% of valid
Valid	1	indirect calculation	4,690	87.16%	98.12%
	2	directly measured	90	1.67%	1.88%
		Total	4,780	88.83%	100%
Missing	.	not applicable (no LDL-C result)	601	11.17%	
		Total	601	11.17%	

Valid	Invalid	Minimum	Maximum
4780	601	1	2

#### H5NHDL - NON-HDL CHOLESTRL (non-HDL-C, MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5NHDL	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) calculated from Total Cholesterol and High-Density Lipoprotein Cholesterol.

			Frequency	% of total	% of valid
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Missing	.	missing	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4791	590	18	372	131.02233...	37.477053...

### H5NHDEC - NON-HDL CHOLESTRL (non-HDL-C) DECILE -W5

Type	Code
Measurement Unit	Numeric
H5NHDEC	Non-High-Density Lipoprotein Cholesterol (non-HDL-C) ordered and assigned ranks.

			Frequency	% of total	% of valid
Valid	1	First decile	479	8.9%	10%
	2	Second decile	494	9.18%	10.31%
	3	Third decile	494	9.18%	10.31%
	4	Fourth decile	483	8.98%	10.08%
	5	Fifth decile	488	9.07%	10.19%
	6	Sixth decile	467	8.68%	9.75%
	7	Seventh decile	449	8.34%	9.37%
	8	Eighth decile	503	9.35%	10.5%
	9	Ninth decile	467	8.68%	9.75%
	10	Tenth decile	467	8.68%	9.75%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no non-HDL-C result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	10

### H5TC\_HDL - TC TO HDL-C RATIO (TC:HDL-C) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5TC_HDL	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C).

			Frequency	% of total	% of valid
Missing	.	not applicable (no TC and/or HDL-C result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4791	590	1.2222222...	13.275862...	3.9543991...	1.3941855...

 H5TCHDEC - TC TO HDL-C RATIO (TC:HDL-C) DECILE-W5

Type	Code
Measurement Unit	Numeric
H5TCHDEC	Total Cholesterol to High-Density Lipoprotein Cholesterol ratio (TC:HDL-C) ordered and assigned ranks.

			Frequency	% of total	% of valid
Valid	1	First decile	479	8.9%	10%
	2	Second decile	479	8.9%	10%
	3	Third decile	479	8.9%	10%
	4	Fourth decile	481	8.94%	10.04%
	5	Fifth decile	477	8.86%	9.96%
	6	Sixth decile	484	8.99%	10.1%
	7	Seventh decile	477	8.86%	9.96%
	8	Eighth decile	491	9.12%	10.25%
	9	Ninth decile	466	8.66%	9.73%
	10	Tenth decile	478	8.88%	9.98%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no TC and/or HDL-C result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	10

 H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

			Frequency	% of total	% of valid
Missing	.	not applicable (no blood draw)	370	6.88%	
	-999	implausible value < 0 hours	11	0.2%	
	999	implausible value >= 24 hours	49	0.91%	
		Total	430	7.99%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4951	430	0	23.9	9.3817511...	5.5283044...

 H5FASTLP - FLAG: FASTED FOR 9+ HOURS -W5

Type	Code
Measurement Unit	Numeric

H5FASTLP	FLAG indicating respondent fasted for nine or more hours
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			Frequency	% of total	% of valid
Valid	0	no	1,879	34.92%	37.95%
	1	yes	3,072	57.09%	62.05%
		Total	4,951	92.01%	100%
Missing	.	not applicable (no fasting hours)	430	7.99%	
			Total	430	7.99%

Valid	Invalid	Minimum	Maximum
4951	430	0	1

### H5CTC - CLASSIFICATION OF TC (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5CTC	The classification of fasting Total Cholesterol according to NCEP/ATP III guidelines.

			Frequency	% of total	% of valid
Valid	1	Desirable: TC is < 200 mg/dl	2,151	39.97%	44.89%
	2	Borderline high: TC is 200-239 mg/dl	608	11.3%	12.69%
	3	High: TC is >= 240 mg/dl	179	3.33%	3.74%
	4	Non-fasting	1,799	33.43%	37.54%
	5	Fasting status unknown	55	1.02%	1.15%
		Total	4,792	89.05%	100%
Missing	.	not applicable (no TC result)	589	10.95%	
			Total	589	10.95%

Valid	Invalid	Minimum	Maximum
4792	589	1	5

### H5CHDL - CLASSIFICATION OF HDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5CHDL	The classification of fasting High-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.

			Frequency	% of total	% of valid
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Valid	1	Low: HDL-C is < 40 mg/dl	809	15.03%	16.89%
	2	Optimal: HDL-C is 40-59 mg/dl	1,514	28.14%	31.6%
	3	High: HDL-C is $\geq$ 60 mg/dl	615	11.43%	12.84%
	4	Non-fasting	1,798	33.41%	37.53%
	5	Fasting status unknown	55	1.02%	1.15%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no HDL-C result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	5

#### H5C1TG - CLASSIFICATION OF TG (NCEP/ATP III) -W5

Type	Code
Measurement Unit	Numeric
H5C1TG	The classification of fasting Triglycerides according to NCEP/ATP III guidelines.

			Frequency	% of total	% of valid
Valid	1	Normal: TG is < 150 mg/dl	2,228	41.4%	46.5%
	2	Borderline high: TG is 150-199 mg/dl	361	6.71%	7.53%
	3	High: TG is 200-499 mg/dl	318	5.91%	6.64%
	4	Very high: TG is $\geq$ 500 mg/dl	30	0.56%	0.63%
	5	Non-fasting	1,799	33.43%	37.55%
	6	Fasting status unknown	55	1.02%	1.15%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no TG result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	6

#### H5C1LDL - CLASSIFICATION OF LDL-C (NCEP/ATP III)-W5

Type	Code
Measurement Unit	Numeric
H5C1LDL	The classification of fasting Low-Density Lipoprotein Cholesterol according to NCEP/ATP III guidelines.

	Frequency	% of total	% of valid
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Valid	1	Optimal: LDL-C is < 100 mg/dl	1,252	23.27%	26.19%
	2	Near optimal: LDL-C is 100-129 mg/dl	1,028	19.1%	21.51%
	3	Borderline high: LDL-C is 130-159 mg/dl	483	8.98%	10.1%
	4	High: LDL-C is 160-189 mg/dl	130	2.42%	2.72%
	5	Very high: LDL-C is >= 190 mg/dl	40	0.74%	0.84%
	6	Non-fasting	1,793	33.32%	37.51%
	7	Fasting status unknown	54	1%	1.13%
		Total	4,780	88.83%	100%
Missing	.	not applicable (no LDL-C result)	601	11.17%	
		Total	601	11.17%	

Valid	Invalid	Minimum	Maximum
4780	601	1	7

#### H5C2TG - CLASSIFICATION OF TG (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2TG	The classification of Triglycerides according to AHA/ACC guidelines.

			Frequency	% of total	% of valid
Valid	1	Normal: TG is < 175 mg/dl	3,821	71.01%	79.75%
	2	Moderate hypertriglyceridemia: TG is 175-499 mg/dl	917	17.04%	19.14%
	3	Severe hypertriglyceridemia: TG is >= 500 mg/dl	30	0.56%	0.63%
	4	Non-fasting: TG is >= 500 mg/dl	22	0.41%	0.46%
	5	Fasting status unknown: TG is >= 500 mg/dl	1	0.02%	0.02%
		Total	4,791	89.04%	100%
Missing	.	not applicable (no TG result)	590	10.96%	
		Total	590	10.96%	

Valid	Invalid	Minimum	Maximum
4791	590	1	5

#### H5C2LDL - CLASSIFICATION OF LDL-C (AHA/ACC) -W5

Type	Code
Measurement Unit	Numeric
H5C2LDL	The classification of Low-Density Lipoprotein Cholesterol according to AHA/ACC guidelines.

			Frequency	% of total	% of valid
Valid	1	Normal: LDL-C is < 160 mg/dl	4,538	84.33%	94.94%
	2	Moderate hypercholesterolemia: LDL-C is 160-189 mg/dl	187	3.48%	3.91%
	3	Severe hypercholesterolemia: LDL-C is >= 190 mg/dl	55	1.02%	1.15%
Total			4,780	88.83%	100%
Missing	.	not applicable (no LDL-C result)	601	11.17%	
	Total		601	11.17%	

Valid	Invalid	Minimum	Maximum
4780	601	1	3

#### H5Q045F - Q045f EVER DX HIGH CHOLESTROL/TRIG -W5

Type	Code
Measurement Unit	Numeric
H5Q045F	Has a doctor, nurse or health care provider ever told you that you have high cholesterol or triglycerides?

			Frequency	% of total	% of valid
Valid	0	no	4,626	85.97%	86.03%
	1	yes	751	13.96%	13.97%
	Total		5,377	99.93%	100%
Missing	94	exam stopped prior to question Q045	1	0.02%	
	95	not asked of everyone	1	0.02%	
	96	refused	2	0.04%	
	Total		4	0.07%	

Valid	Invalid	Minimum	Maximum
5377	4	0	1

#### H5C\_MED2 - FLAG: ANTIHYPERLIPIDEMIC MED USE -W5

Type	Code
Measurement Unit	Numeric
H5C_MED2	FLAG indicating respondent took an antihyperlipidemic medication in the past 4 weeks

			Frequency	% of total	% of valid
Valid	0	no	5,068	94.18%	96.24%
	1	yes	198	3.68%	3.76%

		Total	5,266	97.86%	100%
Missing	94	exam stopped prior to the medication questions	23	0.43%	
	96	refused	3	0.06%	
	98	medication could not be classified	1	0.02%	
	99	respondent reported taking prescription medication(s), but specific medication(s) not reported	88	1.64%	
		Total	115	2.14%	

Valid	Invalid	Minimum	Maximum
5266	115	0	1

#### H5HLIPJC - HYPERLIPIDEMIA JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5HLIPJC	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1) OR has a fasting TG concentration $\geq$ 500 mg/dl (H5C2TG = 3) OR an LDL-C concentration $\geq$ 190 mg/dl (H5C2LDL = 3).

			Frequency	% of total	% of valid
Valid	0	no evidence of hyperlipidemia	4,541	84.39%	84.44%
	1	evidence of hyperlipidemia	837	15.55%	15.56%
		Total	5,378	99.94%	100%
Missing	.	missing on all components of joint classification	3	0.06%	
		Total	3	0.06%	

Valid	Invalid	Minimum	Maximum
5378	3	0	1

#### H5HLPJC4 - HYPERLIPIDEMIA JOINT CLASS (WAVE IV) -W5

Type	Code
Measurement Unit	Numeric
H5HLPJC4	FLAG indicating respondent has EITHER a self-reported history of high cholesterol or triglycerides (H5Q045F = 1) OR has taken an antihyperlipidemic medication in the past 4 weeks (H5C_MED2 = 1). This joint classification variable parallels the Wave IV joint classification variable.

			Frequency	% of total	% of valid
Valid	0	no evidence of hyperlipidemia	4,597	85.43%	85.48%
	1	evidence of hyperlipidemia	781	14.51%	14.52%
		Total	5,378	99.94%	100%
Missing	.	missing on all components of joint classification	3	0.06%	
		Total	3	0.06%	

Valid	Invalid	Minimum	Maximum
5378	3	0	1