



Key to Column headings of Codebook

1. Group: The type of question (e.g., Demographic, Eligibility category, Exposure, and Health)
2. Source/Page: The source of the question.
 - a. Source: (e.g., Wave 1 survey or Wave 2 survey)
 - b. Page: Either the page of the Wave 1 or Wave 2 Data File User's Manual (DFUM) OR noted as "Derived".
 - c. Examples:
 - i. "Wave 1/Derived" means that this question was asked on the Wave 1 survey but we are reporting derived responses instead of the actual response (e.g., reporting the age category instead of the specific age in years)
 - ii. "Wave 2/pg 44" means that this question was asked on the Wave 2 survey and it may be found on page 44 of the Appendix3: Codebook in the Wave 2 DFUM
 - iii. "Wave 1/B-62" means that this question was asked on the Wave 1 survey and it may be found on page B-62 of the Wave 1 DFUM
3. Eligibility Category: The enrollee group targeted by the question (e.g., All, Residents, Rescue/Recovery workers, etc.)
4. Variable Name: SAS variable name
5. Long Question: Description of question
6. Answers: Definitions for survey responses to each particular question (e.g., 1=Male, 2=Female)
7. Note: Any question-specific additional information

Additional Notes

1. Note: (-9) represents valid missing data from the wave 2 dataset
2. Note: (-3) represents invalid missing data from wave 2 dataset
3. Note: (-2) represents data the enrollees refused to answer
4. Note: (DK) represents "don't know" data from wave 2
5. Note: (Valid Missing) represents data that enrollees should have not answered
6. Note: (Invalid Missing) represents data that enrollees should have answered

Group	Source/Page	Eligibility Category	Variable Name	Long Question	Answers	Note
Demographic Variables	Wave 1/Derived (also see Wave 2/Derived variable, education, pg 43)	All Enrollees	new_education	What was the highest grade or year of school completed by the enrollee at 9/11/01?	1= Never attended school, 2= Grades 1 through 8, 3= Grades 9 through 11, 4= Grade 12 or GED, 5=Some College, 6=College Graduate, 7=Postgraduate degree,	
Demographic Variables	Wave 1/ Derived (from question D8, pg-B-53)	All Enrollees	new_employed_911	Was the enrollee employed on 9/11/01?	1=Yes, 2=No	Includes all enrollees older than 12 years on 9/11/01.
Demographic Variables	Wave 1/B-62 (also see Wave 2/Derived variable census_race, pg 43)	All Enrollees	census_new	What is the enrollee's combined race/ethnicity?	1= White (non-Hispanic), 2=Black or African American (non-Hispanic), 3= Hispanic or Latino (any Race), 4=Asian (includes :Native Hawaiian/Pacific Islander), 5=Other	Race/ethnicity is categorized according to methods used in the 2000 U.S. Census.
Demographic Variables	Wave 1/Derived (also see Wave 2/Derived variable income, pg 43)	All Enrollees	income_new	What was the enrollee's total household income in 2002 before taxes?	1= Under \$25,000, 2=\$25,000 to <\$50,000, 3= \$50,000 to <\$75,000, 4= \$75,000 to <\$150,000, 5= \$150,000 or more,	
Demographic Variables	Wave 1/Derived	All Enrollees	boroughcode	Was the enrollee a New York City resident on 9/11/01?	Yes/No	
Demographic Variables	Wave 2/ Derived (also see pg 43)	All Enrollees	age_911grp	What was the enrollee's age group on 9/11/01?	<18 years, 18-24 years, 25-44 years, 45-64 years, 65+ years	
Demographic Variables	Wave 2/Derived (also see pg 44)	All Enrollees	gender	What is the enrollee's gender?	1= Male, 2= Female	

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Demographic Variables	Wave 2/ Derived	All Enrollees	curr_employment	Is the enrollee currently employed?	Yes/No	Currently employed is defined as currently employed full time, part time and self-employed.
Demographic Variables	Wave 2/Derived (from question 38, pg 31)	All Enrollees	mar_911_new	What was the enrollee's marital status on 9/11/01?	1= Married, 2=Not Married, but living with a partner, 3= Widowed, 4= Divorced/Separated (not living together), 5=Never married	Includes all enrollees aged 15 or older at the time of interview in 2003-2004.
Demographic Variables	Wave 2/Derived (from question 37, pg 30)	All Enrollees	mar_new	What is the enrollee's current marital status?	1= Married, 2=Not Married, but living with a partner, 3= Widowed 4= Divorced/Separated, 5=Never married	Includes all enrollees aged 18 or older at the time of interview in 2006-2007.
Eligibility Category	Wave 1/ Derived (also see Wave 2/Derived resident variable, pg 42)	Resident of Lower Manhattan	resident_e	Did the enrollee report living south of Canal Street on 9/11/01?	Yes/No	Residents may not have been present in Lower Manhattan on 9/11/01.
Eligibility Category	Wave 1/ Derived (also see Wave 2/Derived worker variable, pg 42)	Rescue/Recovery Workers and Volunteers Only	worker_e	Did the enrollee report working at least one shift or volunteering at a World Trade Center site between 9/11/01 and 6/30/02?	Yes/No	These enrollees worked at one or more of the 3 WTC sites: Ground Zero, the Staten Island recovery operation facilities, or the barges. Workers and volunteers may not have been present in Lower Manhattan on 9/11/01.

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Eligibility Category	Wave 1/ Derived (also see Wave 2/ Derived occ_trans variable, pg 42)	Present in Lower Manhattan Only	occ_trans_e	Did the enrollee report being present south of Chambers Street on 9/11/01 between the time of first plane impact and noon?	Yes/No	This includes any enrollee- residents, rescue/recovery workers and volunteers, students, school staff, office workers, commuters, visitors or others - who were present south of Chambers Street on 9/11/01.
Eligibility Category	Wave 1/Derived (also see Wave 2/Derived student and staff variables, pg 42)	Students and School Staff Only	s_s	Did the enrollee report being a student or staff member in a school south of Canal Street on 9/11/01?	1=Yes, 2=No	Students who were enrolled and school staff who were employed in day care or schools pre-K through 12th grade. Students and staff may not have been present in Lower Manhattan on 9/11/01.
Eligibility Category	Wave 1/ Derived	All Enrollees	all_enrl	People who enrolled in the World Trade Center Health Registry.	1=Yes, 2=No	
Exposure Variables	Wave 1/ Derived	All Enrollees	any_injury	Did the enrollee sustain at least one injury as a result of the World Trade Center attack?	Yes/No	Injuries included cuts, sprains, burns, broken bones and concussions.
Exposure Variables	Wave 1/Derived	All Enrollees	count_events	How many horrific events did the enrollee report witnessing in person on 9/11/01?	0= 0 horrific events, 1= 1 horrific event, 2= 2 horrific events, 3= 3 horrific events, 4= 4 horrific events, 5= 5 horrific events	Horrific events were: plane(s) hitting the WTC; collapse of building(s); people running away from

Group	Source/Page	Eligibility Category	Variable Name	Long Question	Answers	Note
						a cloud of smoke; people injured or killed; and people falling or jumping from the towers.
Exposure Variables	Wave 1/ Derived (also see B-63)	Enrollees Present in Lower Manhattan on 9/11/01	femarating	If the enrollee evacuated a building south of Chambers Street on 9/11/01, how extensive was the damage to the building?	N & S Towers, Other full collapse, Partial collapse, Major damage, Moderate damage, Not in damage or destroyed building	This includes only those who evacuated from a building. N & S Towers represent North and South Towers which are the World Trade Center 1 & 2
Exposure Variables	Wave 1/Derived (from question W7, pg B-18)	Rescue/Recovery Workers and Volunteers	new_work_pile	Did the enrollee ever work on the 'Pile' at the World Trade Center site ("Ground Zero")?	1=Yes, 2=No	The 'Pile' refers to the debris left behind by the collapse of the WTC.
Exposure Variables	Wave 1/Derived (from question E17, pg B-26)	Rescue/Recovery Workers and Volunteers	new_work_siland_barge	Did the enrollee EVER work on Staten Island, a barge or both?	1= World Trade Center Recovery Operations on Staten Island, 2=Barge, 3= Both	This includes only those who reported working at either the World Trade Center Recovery Operation on Staten Island or on a barge.
Exposure Variables	Wave 2/Derived	All Enrollees	smkstatus	What is the enrollees current smoking status?	1= Never smoked, 2=Former smoker, 3=Current smoker	
Exposure Variables	Wave 2/Derived	All Enrollees	dust_cat	What was the enrollee's dust cloud exposure?	1 = None, 2 = Some, 3 = Intense	"Intense" dust cloud exposure was reporting being in the dust or debris cloud on September 11 in W1 and answering "Yes" to any of the 5 additional W2 questions (could not see a couple of

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						feet in front of me; had trouble walking or finding my way because the dust was thick; had to find shelter such as under a car or in a doorway; was covered from head to toe with dust or debris; could not hear anything). "Some" was reporting being in the dust or debris cloud on September 11 and reporting a dust cloud location.
Exposure Variables	Wave 2/ pg 33	Residents of Lower Manhattan	m1_leave_f1	Did the enrollee report evacuating his/her home?	1=Yes, 2=No	Only asked of residents living in lower Manhattan on 9/11.
Exposure Variables	Wave 2/pg 33	Residents of Lower Manhattan	m1_notnec_f1	Did the enrollee remain at home because he/she thought evacuation was unnecessary?	1=Yes, 2=No	This is the most frequently reported reason for residents living in lower Manhattan who did not evacuate their home for at least 24 hours between 09/11-09/18/01. Residents could report more than one reason for evacuating their home.

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Exposure Variables	Wave 2/pg 33	Residents of Lower Manhattan	m1_stay_f1	Did the enrollee remain because he/she wanted to stay with the home?	1=Yes, 2=No	This is the second most frequently reported reason for residents living in lower Manhattan who did not evacuate their home for at least 24 hours between 09/11-09/18/01. Residents could report more than one reason for evacuating their home.
Exposure Variables	Wave 2/pg 33	Residents of Lower Manhattan	m1_nowhere_f1	Did the enrollee remain at home because he/she has nowhere else to go?	1=Yes, 2=No	This is the third most frequently reported reason for residents living in lower Manhattan who did not evacuate their home for at least 24 hours between 09/11-09/18/01. Residents could report more than one reason for evacuating their home.
Exposure Variables	Wave 2/ Derived (from question A1_a; pg 33-34)	Residents of Lower Manhattan	other_leave	Did the enrollee remain at home for one of more of the following reason: Wanted to stay and help with recovery; Couldn't afford to leave; Afraid to leave; Couldn't leave because of a pet; Couldn't leave a love one; Couldn't leave because of a disability	1=Yes, 2=No	Reason(s), other than the 3 most frequently reported reasons residents did not evacuate their home in lower Manhattan for at least 24 hours between 9/11 and 9/18/01.

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Exposure Variables	Wave 2/Derived (from question A2, pg 34)	Residents of Lower Manhattan	damage_condition	Did the enrollee report damage inside the home after the World Trade Center disaster?	1=Yes, 2=No	Damage is defined as one or more of the following: Broken window(s); Damage to home or furnishings; Debris from the disaster was present. Only asked of residents living in lower Manhattan on 9/11.
Exposure Variables	Wave 2/Derived (from question A2, pg 34)	Residents of Lower Manhattan	dust_condition	How much dust was found in enrollees' homes after the WTC disaster?	1= Heavy coating of dust, 2=Fine coating of dust, 3=No dust	Only asked of residents living in lower Manhattan on 9/11.
Exposure Variables	Wave 2/ Derived	Residents of Lower Manhattan	new_clean	Who cleaned the enrollee's home following 09/11/01?	1= Self-only, 2=Someone else-only, 3= Self and someone else, 4= Neither	Only asked of residents living in lower Manhattan on 9/11.
Exposure Variables	Wave 2/ pg 37	Residents of Lower Manhattan	m1_epa_f1	Was your home part of the EPA's cleanup program?	1= Yes, 2=No, 3= I don't know	The EPA offered to test and clean homes in lower Manhattan during 2002-2003. Only asked of residents living in lower Manhattan on 9/11.
Exposure Variables	Wave 2/ Derived (from question C3a pg 41)	Rescue/Recovery Workers and Volunteers	type_911	Which type of mask or respirator did the enrollee report wearing the most on 9/11/01?	1= Type1 or Type 2, 2=Type 3 or Type 4, 3= Other, 4= None	This includes only those who reported working as a rescue/recovery worker.
Exposure Variables	Wave 2/ Derived (from question C3b pg 41)	Rescue/Recovery Workers and Volunteers	type_912	Which type of mask or respirator did the enrollee report wearing the most during 9/12-01-12/31/01?	1= Type1 or Type 2, 2=Type 3 or Type 4 3= Other 4= None	This includes only those who reported working as a rescue/recovery worker.

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Exposure Variables	Wave 2/ Derived (from question C3c pg 41)	Rescue/Recovery Workers and Volunteers	type_0101	Which type of mask or respirator did the enrollee report wearing the most after 01/01/02?	1= Type1 or Type 2, 2=Type 3 or Type 4, 3= Other, 4= None	This includes only those who reported working as a rescue/recovery worker.
Exposure Variables	Wave 2/ Derived	Rescue/Recovery Workers and Volunteers	training	Did the enrollee report receiving training in the use of mask/respirator before or during WTC related work?	1=Yes, 2=No	This includes only those who reported working as a rescue/recovery worker.
Exposure Variables	Wave 2/ pg 42	Rescue/Recovery Workers and Volunteers	m3_fittest_f1	Did the enrollee report having a fit-test for at least one respirator used on or after 9/11/01?	1= Yes, 2=No, 3= I did not wear a Type1 or Type 2 respirator	This includes only those who reported working as a rescue/recovery worker.
Health Variables	Wave 2/ pg 10	All Enrollees	cough_30d_f1	Did the enrollee report a persistent cough in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 10	All Enrollees	cough_freq_f1	Did the enrollee report coughing frequently (4 to 6 times a day) 4 or more days out of the week?	1=Yes, 2=No	Includes only enrollees who reported persistent cough in the last 30 days.
Health Variables	Wave 2/ pg 11	All Enrollees	cough_cons_f1	Did the enrollee report coughing frequently on most days for 3 consecutive months or more during the year.	1=Yes, 2=No	Includes only enrollees who reported persistent cough in the last 30 days.
Health Variables	Wave 2/ pg 13	All Enrollees	depression_f1	Did the enrollee report having EVER been diagnosed with depression?	1=Yes, 2=No	

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Health Variables	Wave 2/ pg 13	All Enrollees	anxiety_f1	Did the enrollee report having EVER been diagnosed with anxiety disorder, other than PTSD?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 5	All Enrollees	headache_30d_f1	Did the enrollee report frequent severe headaches in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 6	All Enrollees	hear_30d_f1	Did the enrollee report hearing problems or loss in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 6	All Enrollees	htburn_30d_f1	Did the enrollee report heartburn, indigestion or reflux in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 8	All Enrollees	brthless_30d_f1	Did the enrollee report shortness of breath in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 7	All Enrollees	skinrash_30d_f1	Did the enrollee report a skin rash or irritation in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 8	All Enrollees	throat_30d_f1	Did the enrollee report throat irritation in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 9	All Enrollees	wheeze_30d_f1	Did the enrollee report wheezing in the last 30 days?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 8	All Enrollees	hoarse_30d_f1	Did the enrollee report hoarseness or loss of voice in the last 30 days?	1=Yes, 2=No	

Group	Source/Page	Eligibility Category	Variable Name	Long Question	Answers	Note
Health Variables	Wave 2/ pg 15	All Enrollees	asthma_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had asthma?	1=Yes, 2=No	The 2003-2004 survey reports asthma only since 9/11, while this survey includes both asthma diagnoses pre and post 9/11.
Health Variables	Wave 2/ pg 15	All Enrollees	asthma_12m_f1	Did the enrollee report having a episode of asthma or an asthma attack in the last 12 months?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 16	All Enrollees	inhaler_asth_f1	Did the enrollee report using a inhaler prescribed by a doctor for asthma in the last 12 months?	1=Yes, 2=No	
Health Variables	Wave 2/pg 11	All Enrollees	hypertension_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had hypertension or high blood pressure?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 12	All Enrollees	heart_attack_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had a heart attack or myocardial infraction?	1=Yes, 2=No	A heart attack may be called myocardial infraction.

Group	Source/Page	Eligibility Category	Variable Name	Long Question	Answers	Note
Health Variables	Wave 2/ pg 12	All Enrollees	other_heart_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had other heart diseases?	1=Yes, 2=No	Any heart problem other than angina, hypertension, heart attack or myocardial infarction.
Health Variables	Wave 2/ pg 12	All Enrollees	stroke_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had a stroke?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 14	All Enrollees	rads_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had reactive airway disease, also called RADS?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 14	All Enrollees	sarcoidosis_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had Sarcoidosis?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 12	All Enrollees	diabetes_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had diabetes or sugar diabetes?	1=Yes, 2=No	

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Health Variables	Wave 2/ pg 13	All Enrollees	cancer_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had cancer?	1=Yes, 2=No	
Health Variables	Wave 2/ pg 14	All Enrollees	emphysema_f1	Did the enrollee report EVER being told by a doctor or other health professional that he/she had Emphysema?	1=Yes, 2=No	
Health Variables	Wave 2/ Derived	All Enrollees	prob_distress13_f1	Did the enrollee report having had symptoms of probable psychological distress during the 30 days prior to being interviewed?	1=Yes, 2=No	Enrollees who answered questions about their emotional state in the last 30 days and scored at least 13 out of a possible 24 points on the Kessler 6 scale, a standard mental health assessment tool.
Health Variables	Wave 2/ Derived	All Enrollees	ptsddx_n44_f1	Did the enrollee report having had symptoms indicative of probable post-traumatic stress disorder during the 30 days prior to being interviewed?	Yes/No	Enrollees who answered questions about their emotional state in the last 30 days and scored at least 44 out of a possible 85 points on the PTSD screening scale (PCL-CV), a standard mental health assessment tool.

Group	Source/Page	Eligibility Category	Variable Name	Long Question	Answers	Note
Health Variables	Wave2/ pg 7	All Enrollees	sinus_30d_f1	Did the enrollee report sinus problems, nose irritation, or postnasal irritation in the last 30 days?	1=Yes, 2=No	Excludes cold or flu related symptoms.