

Codebook for Physical Activity and Transit (PAT) Accelerometer Data – Weekly data

Administrative Variables	2
Weeklong Summary Variables	3
Average Day Variables	
Day One Variables	
Day Two Variables	6
Day Three Variables	7
Day Four Variables	
Day Five Variables	9
Day Six Variables	10
Day Seven Variables	1

*PAT Accelerometer Device Nesting Variable = strata_pat

*PAT Accelerometer Device Weight = wt_patw2accel



ADMINISTRATIVE VARIABLES							
Recoded Variable	Description	Frequencies (unweighted)		NOTES			
PATCID	Unique participant identifier	Continuous	679	For merging with survey data			
strata_pat	Stratification/nesting variable for analysis	Range 6 - 20	679				
Valid_Days	Number of days with at least 10 hours of weartime	4 5 6 7	59 104 173 343	This dataset is restricted to include only those with at least 10 hours of wear time on 4 or more days per NHANES protocol			
Firstday	Day of week of day 1	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	8 5 4 623 22 10 7	Default start day of week was Thursday. Approximately 10% of participants started on a different day of the week.			
Month	Month of year of day 1	3=March 4=April 5=May 6=June 7=July 8=August 9=September 10=October 11=November 12=December	10 105 86 74 72 67 90 81 65 29	Accelerometer study ran from March – December of 2011.			



WEEKLONG SUM	MARY VARIABLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
MVPA_bout	Moderate-to-Vigorous Minutes in bouts of at least10 minutes	0 10-1259 Mean = 94 min/wk Median = 44 min/wk	202 477	A bout consisted of at least 10 consecutive minutes of accelerometer activity counts of at least 2020 counts per minute. A two minute tolerance was allowed; 8 minutes of sustained activity followed by a two minute break followed by 10 minutes would be an 18 minute bout.
MVPA_nobout	All Moderate-to-Vigorous Minutes (all accumulated minutes both bout and non-bout minutes)	0 1-1364 Mean = 233 min/wk Median = 188 min/wk	3 676	
M2VPA_bout	Moderate Equivalent Minutes in bouts of at least 10 minutes	0 10-1259 Mean = 100 min/wk Median = 44 min/wk	202 477	Moderate Equivalent Minutes count a vigorous minutes as equal to two moderate minutes of exercise
M2VPA_nobout	Moderate Equivalent Minutes (all accumulated minutes both bout and non-bout minutes)	0 1-1739 Mean = 242 min/wk Median = 189 min/wk	3 676	Moderate Equivalent Minutes count a vigorous minutes as equal to two moderate minutes of exercise
PAGA08_3		1 = Inactive 2 = Insufficiently Active 3 = Met Activity Guidelines	202 314 163	Inactive = no 10 minute bout in one week; Insufficiently active = 10-149 minutes/week; Meeting guidelines = 150 minutes or more/week; PAGA 2008 Guidelines require 150 minutes of moderate equivalent activity in 10 minute bouts.
PAGA08_4		1 = Inactive 2 = Insufficiently Active 3 = Sufficiently Active 4 = Highly Active	202 314 102 61	Note: some researchers have raised concerns about using accelerometer data to assess meeting PAGA 2008 guidelines. Inactive = no 10 minute bout in one week; Insufficiently active = 10-149 minutes/week; Sufficiently Active=150-299 minutes/week; Highly Active=300+ minutes/week; See notes for PAGA08 3 for additional information.



AVERAGE DAY V	ARIABLES		
Recoded Variable	Description	Frequencies (unweighted)	NOTES
Counts_Avg	Average daily accelerometer activity counts on a valid day	19,292-1,109,214 counts Mean = 288,937; Median = 257,598 67	The accelerometer was set to record activity in 10 second increments – this number represents an average of all counts on all valid days
Sed_avg	Average number of Sedentary minutes on all valid days, measured by accelerometer	215-747 minutes 67 Mean = 494; Median = 497 minutes	Sedentary Minutes are minutes with a total of 0-99 counts.
Light_avg	Average number of Light minutes on all valid days, measured by accelerometer	43-524 minutes 67 Mean = 278 ; Median = 271 minutes	9 Light Minutes are minutes with a total of 100-2019 counts.
Moderate_avg	Average number of Moderate minutes on all valid days, measured by accelerometer	32-195 minutes 67 Mean = 32 ; Median = 26 minutes	9 Moderate Minutes are minutes with a total of 2020-5999 counts.
Vigorous_avg	Average number of Vigorous minutes on all valid days, measured by accelerometer	0 - 87.1 minutes Mean = 1.3; Median = 0 minutes	Vigorous Minutes are minutes with a total of 6000 or more activity counts.
Mod_BT_avg	Average number of Moderate minutes of activity in 10 minute bouts on all valid days	0 - 179.9 minutes Mean = 13.9; Median = 6.8 minutes	The Physical Activity Guidelines for Americans (PAGA 2008) require 150 or more minutes of exercise in bouts of 10 minutes or more
Vig_BT_avg	Average number of Vigorous minutes of activity in 10 minute bouts on all valid days	0-78.1 minutes 67 Mean = 0.8; Median = 0	9
ModVig_BT_avg	Average number of Moderate and vigorous activity in 10 minute bouts on all valid days	0-179.9 minutes 67 Mean = 14.7; Median = 6.9	9
Worn_Mins_avg	Average number of Minutes of accelerometer wear time on all valid days	633-1255 minutes 67 Mean = 863 ; Median = 856	A valid day was defined to consist of at least 600 minutes of wear time; the average day variables only include days where the wear time exceeded 600 minutes



DAY ONE VARIAL	BLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day1	Computed variable: Accelerometer worn 10	0 = Not valid	56	A valid day consisted of at least 600 minutes (or
	or more hours on travel day 1	1 = Valid day	623	10 hours) of wear time
Counts_Day1	Total counts recorded by accelerometer on	31,066-1,076,988 counts	623	The accelerometer was set to record activity in
	day 1 of participation	Invalid day	56	10 second increments – this number represents
		Mean = $291,776$; Median = $254,960$		all counts on day 1
Sed_Day1	Sedentary minutes recorded on day 1 of	223-979 minutes	623	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	56	99 counts.
		Mean = 507 min ; Median = 506 min		
Light_Day1	Light minutes recorded on day 1 of	77-621	623	Light Minutes are minutes with a total of 100-
	participation, as measured by accelerometer	Invalid day	56	2019 counts.
		Mean = 284 min ; Median = 272 min		
Moderate_Day1	Moderate minutes recorded on day 1 of	0	15	Moderate Minutes are minutes with a total of
	participation, as measured by accelerometer	1-239	608	2020-5999 counts.
		Invalid day	56	
		Mean = 36 min; Median = 29 min		
Vigorous_Day1	Vigorous minutes recorded on day 1 of	0	542	Vigorous Minutes are minutes with a total of
	participation, as measured by accelerometer	1-87	81	6000 or more activity counts.
		Invalid day	56	
		Mean = 1.5 min ; Median = 0 min		
Mod_BT_Day1	Computed variable: Moderate minutes of	0	353	Statistics exclude those with invalid day on day 1
	activity in 10 minute bouts on travel day 1	2-223	270	
		Invalid day	56	
		Mean = 15.1 ; Median = 0		
Vig_BT_Day1	Vigorous minutes of activity in 10 minute	0	601	Statistics exclude those with invalid day on day 1
	bouts on travel day 1	10-67	22	
		Invalid day	56	
		Mean = .84 ; Median = 0		
ModVig_BT_Day1	Moderate and vigorous activity in 10	0	398	Statistics exclude those with invalid day on day 1
	minute bouts on travel day 1	10-223	281	
		Invalid day	56	
		Mean = 16.0 ; Median = 0		
Worn_Mins_Day1	Minutes of accelerometer wear time on day	601-1235	623	A valid day was defined to consist of at least
	1 of participation.	Invalid day	56	600 minutes of wear time; wear time is also
		Mean = 830 ; Median = 825		available for invalid days



DAY TWO VARIA	BLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day2	Computed variable: Acceleromter worn 10	0 = Not valid	54	Valid day was defined to consist of at least 600
	or more hours on travel day 2	1 = Valid day	625	minutes of wear time
Counts_Day2	Total counts recorded by accelerometer on	27,160 -1,139,649 counts	625	Statistics exclude those with invalid day on day 2
	day 2 of participation	Invalid day	54	
		Mean = $284,195$; Median = $243,720$		
Sed_Day2	Sedentary minutes recorded on day 2 of	140-837 minutes	625	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	54	99 counts.
		Mean = 501 min ; Median = 501 min		
Light Day2	Light minutes recorded on day 2 of	292-713 minutes	625	Light Minutes are minutes with a total of 100-
C = 7	participation, as measured by accelerometer	Invalid day	54	2019 counts.
		Mean = 292 min ; Median = 279 min		
Moderate Day2	Moderate minutes recorded on day 2 of	0 minutes	21	Moderate Minutes are minutes with a total of
_ ,	participation, as measured by accelerometer	1-268 minutes	604	2020-5999 counts.
		Invalid day	54	
		Mean = 34 min; Median = 25 min		
Vigorous_Day2	Vigorous minutes recorded on day 2 of	0	540	Vigorous Minutes are minutes with a total of
C _ ,	participation, as measured by accelerometer	1-85	85	6000 or more activity counts.
		Invalid day	54	
		Mean = 1.4 min ; Median = 0 min		
Mod BT Day2	Computed variable: Moderate minutes of	0	392	Statistics exclude those with invalid day on day 2
,	activity in 10 minute bouts on travel day 2	1-274	233	
		Invalid day	54	
		Mean = 13.3 ; Median = 0 min		
Vig BT Day2	Vigorous minutes of activity in 10 minute	0	611	Statistics exclude those with invalid day on day 2
C ,	bouts on travel day 2	10-96 minutes	14	
	·	Invalid day	54	
		Mean = $.62 \text{ min}$; Median = 0 min		
ModVig BT Day2	Moderate and vigorous activity in 10	0	392	Statistics exclude those with invalid day on day 2
C 7	minute bouts on travel day 2	10-274	233	
		Invalid day	54	
		Mean = 13.9 min ; Median = 0 min		
Worn Mins Day2	Minutes accelerometer device worn on day	600-1348 minutes	625	Statistics exclude those with invalid day on day 2
,	2 of participation.	Invalid day	54	.,,
		Mean = 828 min; Median = 817 min		
		,		



DAY THREE VAR	IABLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day3	Computed variable: Accelerometer worn 10	0 = Not valid	100	Weekend days have fewer valid days. In
	or more hours on travel day 3	1 = Valid day	579	91% of cases, day3 was a Saturday
Counts_Day3	Total counts recorded by accelerometer on	12,793 -1,513,949 counts	579	Statistics exclude those with invalid day on day 3
	day 3 of participation	Invalid day	100	
		Mean = $260,567$; Median = $212,902$		
Sed_Day3	Sedentary minutes recorded on day 3 of	184-791 minutes	579	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	100	99 counts.
		Mean = 481 min ;Median = 479 min		
Light_Day3	Light minutes recorded on day 3 of	35-721	579	Light Minutes are minutes with a total of 100-
	participation, as measured by accelerometer	Invalid day	100	2019 counts.
		Mean = 280 min ; Median = 270 min		
Moderate_Day3	Moderate minutes recorded on day 3 of	0	22	Moderate Minutes are minutes with a total of
	participation, as measured by accelerometer	1-236	557	2020-5999 counts.
		Invalid day	100	
		Mean = 29.8 min; Median = 18.0 min		
Vigorous_Day3	Vigorous minutes recorded on day 3 of	0	515	Vigorous Minutes are minutes with a total of
	participation, as measured by accelerometer	1-85	64	6000 or more activity counts.
		Invalid day	100	
		Mean = 1.2 min ; Median = 0 min		
Mod_BT_Day3	Computed variable: Moderate minutes of	0	380	Statistics exclude those with invalid day on day 3
	activity in 10 minute bouts on travel day 3	2-197	199	
		Invalid day	100	
		Mean = 13.7 ; Median = 0		
Vig_BT_Day3	Vigorous minutes of activity in 10 minute	0	564	Statistics exclude those with invalid day on day 3
	bouts on travel day 3	10-122	15	
		Invalid day	100	
		Mean = .90 ; Median = 0		
ModVig_BT_Day3	Moderate and vigorous activity in 10	0	379	Statistics exclude those with invalid day on day 3
	minute bouts on travel day 3	10-197	200	
		Invalid day	100	
		Mean = 14.6 ; Median = 0		
Worn_Mins_Day3	Minutes accelerometer device worn on day	601-1228	579	Statistics exclude those with invalid day on day 3
	3 of participation.	Invalid day	100	
		Mean = 792; Median = 777		



DAY FOUR VARIA	ABLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day4	Computed variable: Accelerometer worn 10	0 = Not valid	135	Weekend days have fewer valid days – and in
	or more hours on travel day 4	1 = Valid day	544	91% of cases, day4 was a Sunday
Counts_Day4	Total counts recorded by accelerometer on	21,6028 -1,225,720 counts	544	Statistics exclude those with invalid day on day 4
	day 4 of participation	Invalid day	135	
		Mean = 247,278; Median = 205,124		
Sed_Day4	Sedentary minutes recorded on day 4 of	162-841 minutes	544	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	135	99 counts.
		Mean = 469 min; Median = 469 min		
Light_Day4	Light minutes recorded on day 4 of	275-666	544	Light Minutes are minutes with a total of 100-
	participation, as measured by accelerometer	Invalid day	135	2019 counts.
		Mean = 274 min ; Median = 261 min		
Moderate_Day4	Moderate minutes recorded on day 4 of	0	47	Moderate Minutes are minutes with a total of
	participation, as measured by accelerometer	1-191	497	2020-5999 counts.
		Invalid day	135	
		Mean = 27 min; Median = 16 min		
Vigorous_Day4	Vigorous minutes recorded on day 4 of	0	501	Vigorous Minutes are minutes with a total of
	participation, as measured by accelerometer	1-46	43	6000 or more activity counts.
		Invalid day	135	
		Mean = 1.1 min; Median = 0 min		
Mod_BT_Day4	Computed variable: Moderate minutes of	0	371	Statistics exclude those with invalid day on day 4
	activity in 10 minute bouts on travel day 4	2-178	173	
		Invalid day	135	
		Mean = 11.8 ; Median = 0		
Vig_BT_Day4	Vigorous minutes of activity in 10 minute	0	530	Statistics exclude those with invalid day on day 4
	bouts on travel day 4	11-50	14	
		Invalid day	135	
		Mean = .82 ; Median = 0		
ModVig_BT_Day4	Moderate and vigorous activity in 10	0	371	Statistics exclude those with invalid day on day 4
	minute bouts on travel day 4	10-178	173	
		Invalid day	135	
W 16 B 4		Mean = 12.6; Median = 0		
Worn_Mins_Day4	Minutes accelerometer device worn on day	600-1133	544	Statistics exclude those with invalid day on day 4
	4 of participation.	Invalid day	135	
		Mean = 771 ; Median = 759		



DAY FIVE VARIA	BLES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day5	Computed variable: Accelerometer worn 10	0 = Not valid	67	
	or more hours on travel day 5	1 = Valid day	612	
Counts_Day5	Total counts recorded by accelerometer on	11,181 -1,212,007 counts	612	Statistics exclude those with invalid day on day 5
	day 5 of participation	Invalid day	67	
		Mean = 276,566; Median = 242,883		
Sed_Day5	Sedentary minutes recorded on day 5 of	140-994 minutes	612	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	67	99 counts.
		Mean = 496 min; Median = 494 min		
Light_Day5	Light minutes recorded on day 5 of	280-706	612	Light Minutes are minutes with a total of 100-
	participation, as measured by accelerometer	Invalid day	67	2019 counts.
		Mean = 280 min; Median = 270 min		
Madagata De-5	Madagata minutas nagaralalar dan 5 . C		27	Madamata Minutas and minutas with a total C
Moderate_Day5	Moderate minutes recorded on day 5 of	0 1-189	37	Moderate Minutes are minutes with a total of
	participation, as measured by accelerometer	Invalid day	575 67	2020-5999 counts.
		3	67	
W. D. f.	X' 11 1 5 C	Mean = 33 min; Median = 26 min	5.4.4	X' X' 'd d l C
Vigorous_Day5	Vigorous minutes recorded on day 5 of	0 1-76	544	Vigorous Minutes are minutes with a total of
	participation, as measured by accelerometer	Invalid day	68 67	6000 or more activity counts.
		Mean = 1.4 min; Median = 0 min	07	
Mad DT David	Commuted mariebles Medenate minutes of	0	271	Chatistics and add these with invalid day on day 5
Mod_BT_Day5	Computed variable: Moderate minutes of activity in 10 minute bouts on travel day 5	1-157	371 241	Statistics exclude those with invalid day on day 5
	activity in 10 minute bouts on travel day 5	Invalid day	67	
		Mean = 13.1; Median = 0	07	
W. DT D. 6	Vice and a significant of the in 10 minutes	0	507	Charleting and the discounties for the first state of the first state
Vig_BT_Day5	Vigorous minutes of activity in 10 minute	10-96	597	Statistics exclude those with invalid day on day 5
	bouts on travel day 5	Invalid day	15 67	
			07	
M. W. DT D. 5	Madagata and air annua articles in 10	Mean = .70; Median = 0	271	Charleting and the discounties the form of the form of the first terms
ModVig_BT_Day5	Moderate and vigorous activity in 10	0 10-157	371	Statistics exclude those with invalid day on day 5
	minute bouts on travel day 5		241 67	
		Invalid day	0/	
W W D 7	N	Mean = 13.8; Median = 0	(12	
Worn_Mins_Day5	Minutes accelerometer device worn on day	600-1313	612	Statistics exclude those with invalid day on day 5
	5 of participation.	Invalid day	67	
		Mean = 811; Median = 802		



DAY SIX VARIAB	LES			
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day6	Computed variable: Accelerometer worn 10	0 = Not valid	73	
	or more hours on travel day 6	1 = Valid day	606	
Counts_Day6	Total counts recorded by accelerometer on	15,860 -1,069,358 counts	606	Statistics exclude those with invalid day on day 6
	day 6 of participation	Invalid day	73	
		Mean = 271,589; Median = 232,387		
Sed_Day6	Sedentary minutes recorded on day 6 of	140-837 minutes	606	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	73	99 counts.
		Mean = 504 min ; Median = 504 min		
Light Day6	Light minutes recorded on day 6 of	275-643	606	Light Minutes are minutes with a total of 100-
· - ·	participation, as measured by accelerometer	Invalid day	73	2019 counts.
		Mean = 275 min; Median = 266 min		
Moderate Day6	Moderate minutes recorded on day 6 of	0	29	Moderate Minutes are minutes with a total of
_ ,	participation, as measured by accelerometer	1-260	606	2020-5999 counts.
		Invalid day	73	
		Mean = 33 min; Median = 23 min		
Vigorous Day6	Vigorous minutes recorded on day 6 of	0	538	Vigorous Minutes are minutes with a total of
o = o	participation, as measured by accelerometer	1-97	68	6000 or more activity counts.
		Invalid day	73	
		Mean = 1.2 min ; Median = 0 min		
Mod BT Day6	Computed variable: Moderate minutes of	0	392	Statistics exclude those with invalid day on day 6
	activity in 10 minute bouts on travel day 6	1-274	233	
		Invalid day	73	
		Mean = 13.3 ; Median = 0		
Vig BT Day6	Vigorous minutes of activity in 10 minute	0	591	Statistics exclude those with invalid day on day 6
C ;	bouts on travel day 6	10-100	15	
	•	Invalid day	73	
		Mean = $.74$; Median = 0		
ModVig BT Day6	Moderate and vigorous activity in 10	0	378	Statistics exclude those with invalid day on day 6
C 7	minute bouts on travel day 6	10-264	228	
		Invalid day	73	
		Mean = 13.0 ; Median = 0		
Worn Mins Day6	Minutes accelerometer device worn on day	600-1378	606	Statistics exclude those with invalid day on day 6
,	6 of participation.	Invalid day	73	.,, .
		Mean = 814; Median = 815		
		Í		



DAY SEVEN VAR				
Recoded Variable	Description	Frequencies (unweighted)		NOTES
Valid_Day7	Computed variable: Accelerometer worn 10	0 = Not valid	73	
	or more hours on travel day 7	1 = Valid day	606	
Counts_Day7	Total counts recorded by accelerometer on	16,133 -1,112,405 counts	606	Statistics exclude those with invalid day on day 7
	day 7 of participation	Invalid day	73	
		Mean = $268,774$; Median = $232,773$		
Sed_Day7	Sedentary minutes recorded on day 7 of	157-861 minutes	606	Sedentary Minutes are minutes with a total of 0-
	participation, as measured by accelerometer	Invalid day	73	99 counts.
		Mean = 508 min; Median = 511 min		
Light_Day7	Light minutes recorded on day 7 of	274-593	606	Light Minutes are minutes with a total of 100-
	participation, as measured by accelerometer	Invalid day	73	2019 counts.
		Mean = 274 min ; Median = 260 min		
Moderate_Day7	Moderate minutes recorded on day 7 of	0	18	Moderate Minutes are minutes with a total of
	participation, as measured by accelerometer	1-255	588	2020-5999 counts.
		Invalid day	73	
		Mean = 32 min ; Median = 25 min		
Vigorous_Day7	Vigorous minutes recorded on day 7 of	0	522	Vigorous Minutes are minutes with a total of
	participation, as measured by accelerometer	1-74	84	6000 or more activity counts.
		Invalid day	73	
		Mean = 1.4 min ; Median = 0 min		
Mod_BT_Day7	Computed variable: Moderate minutes of	0	385	Statistics exclude those with invalid day on day 7
	activity in 10 minute bouts on travel day 7	1-252	221	
		Invalid day	73	
		Mean = 11.9 ; Median = 0		
Vig_BT_Day7	Vigorous minutes of activity in 10 minute	0	592	Statistics exclude those with invalid day on day 7
	bouts on travel day 7	10-78	14	
		Invalid day	73	
		Mean = .76 ; Median = 0		
ModVig_BT_Day7	Moderate and vigorous activity in 10	0	385	Statistics exclude those with invalid day on day 7
<u> </u>	minute bouts on travel day 7	10-252	221	
		Invalid day	73	
		Mean = 12.7 ; Median = 0		
Worn_Mins_Day7	Minutes accelerometer device worn on day	602-1257	606	Statistics exclude those with invalid day on day 7
·	7 of participation.	Invalid day	73	
		Mean = 815; Median = 808		