

Sleep in America: 2000

Results from
The National Sleep Foundation's 2000 Omnibus Sleep Poll

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2000 OMNIBUS SLEEP IN AMERICA POLL

EXECUTIVE SUMMARY

A national survey of American adults, the National Sleep Foundation's 2000 Omnibus Sleep in America Poll (OSAP) examined the public's beliefs and habits regarding sleep, and the consequences of these beliefs and habits. The 2000 poll focused on the effect of sleep habits and attitudes in the workplace, particularly on performance. It also examined adolescents' sleep patterns and their consequences (as reported by parents/guardians), drowsy driving and the prevalence of sleep problems and disorders among American adults. The OSAP is a nationally representative telephone survey of 1,154 adults living in households in the continental U.S. With 95% confidence, estimates based on this sample size have an error range of plus or minus 3 percentage points.

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FINAL REPORT

INTRODUCTION

A national survey of adult Americans, the National Sleep Foundation's 2000 Omnibus Sleep in America Poll (OSAP), examined work and sleep, adolescent sleep habits and hygiene, the relationship of work to the public's sleep habits, and the consequences of those habits for productivity. The public's sleep habits, consequences or correlates of those habits, and the prevalence of sleep problems and disorders were also examined. The OSAP is a nationally representative telephone survey of 1,154 adults living in households in the continental U.S. With 95% confidence, estimates based on this sample size have an error range of plus or minus 3 percentage points.

The sampling procedure used in this study produces a sample representative of the civilian telephone household population living in the continental United States. Persons below the age of 18 were excluded from the study. Also, people living in institutions such as prisons or hospitals were not included in the sample. In order to interview a sufficient number of men, men were given a higher probability of being selected for the interview in households with both adult men and women in residence. To adjust for this unequal probability of selection, weights were assigned to each respondent equal to the inverse of his/her probability of selection. All presented analyses are weighted.

Sleep Habits

To assess the sleep habits of adults in the U.S., respondents were asked to recall the past two weeks and address the following questions for weekdays and weekends separately:

At what time did you typically get up?

And, at what time did you go to bed?

How many hours did you typically sleep during one day, NOT including naps?

Times Typically Go to and Get out of Bed

Weekdays:

The majority of adults in the U.S. (61%) say that they typically went to bed between 10:00 p.m. and 11:59 a.m. during the past two weeks, with 52% going to bed between 10:00 and 11:00 p.m. (see Table 1). A substantial minority of adults (24%) typically went to bed between midnight and 5:00 a.m..

Men and women do not appear to differ very much in the times that they typically go to bed (though more men seem to go to bed a little later on average). However, there are substantial differences in bedtimes by age and work shift. A much larger proportion of adults 18 – 29 years of age go to bed between 12:00 a.m. and 5:00 a.m. (41%) than adult 30 – 64 years old (19%) who are still more likely to do so than adults age 65 and older (14%). As expected many more shift workers (i.e., those working regular evenings or nights and those working rotating shifts) typically went to bed between midnight and 5:00 a.m. (49%) than did those working regular days (18%).

Table 1: Usual Time Go to Bed on Weekdays (past two weeks)

	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Midnight	11.8	10.9	12.5	18.8	10.1	7.1	10.5	14.7
5 a.m. or earlier	12.3	14.4	10.8	22.6	9.0	7.1	7.1	34.0
5:01 - 8:59 a.m.	0.6	0.8	0.4	0.7	0.7	0.0	0.0	3.0
9:00 - 11:59 a.m.	0.5	1.0	0.1	0.3	0.7	0.0	0.0	3.0
12:00 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:01 - 6:59 p.m.	0.3	0.2	0.3	0.0	0.3	0.0	0.0	0.5
7:00 - 8:59 p.m.	4.0	1.4	5.8	1.7	4.8	5.6	4.2	4.1
9:00 p.m.	5.9	6.2	5.6	5.2	6.3	4.8	6.7	4.6
9:01 - 9:59 p.m.	2.8	2.3	3.1	2.4	3.0	3.2	2.8	1.0
10:00 p.m.	19.0	18.9	19.0	10.5	21.3	25.4	22.6	8.1
10:01 - 10:59 p.m.	11.1	10.3	11.7	8.0	12.3	9.5	12.4	7.1
11:00 p.m.	22.2	23.5	21.2	18.8	23.1	23.0	23.4	13.7
11:01 - 11:59 p.m.	9.0	8.8	9.1	10.8	7.9	11.1	9.9	6.1
DK/NA	0.7	1.2	0.3	0.0	0.4	3.2	0.5	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Nearly three-fourths of adults in the U.S. report typically getting out of bed by 7:00 a.m. (75%); 43% getting up by 6:00 a.m. (see Table 2). Men and women do not appear to differ in the times that they typically get out of bed. However, differences are apparent by age and work shift. 29% of those 65 and older and 27% of adults ages 18 – 29 report typically getting out of bed at 8:00 a.m. or later, while 13% of adults ages 30 – 64 get up after 8:00 a.m.. Only 8% of regular day workers report getting up after 8:00 a.m. but 40% of shift workers do.

Table 2: Usual Time Get Out of Bed Weekdays (past two weeks)

	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Before 4 am	1.7	1.9	1.6	1.4	2.1	0.8	1.4	4.6
4:00 - 4:59 a.m.	5.5	5.3	5.6	3.2	6.8	3.2	6.2	6.1
5:00 a.m.	9.2	10.1	8.6	6.7	10.9	4.8	11.3	6.6
5:01 - 5:59 a.m.	12.7	12.3	12.9	8.8	15.6	5.6	17.6	3.0
6:00 a.m.	17.9	16.3	19.0	16.5	18.9	16.0	20.0	12.7
6:01 - 6:59 a.m.	13.5	12.8	14.0	9.5	16.3	6.4	17.0	7.6
7:00 a.m.	14.8	14.8	14.7	17.3	11.2	28.0	11.5	12.7
7:01 - 7:59 a.m.	6.5	6.8	6.2	9.5	5.2	6.4	6.8	6.6
8:00 a.m.	7.8	6.0	9.1	9.5	6.0	12.8	5.0	10.2
8:01 - 8:59 a.m.	0.5	0.4	0.6	0.7	0.3	2.4	0.2	0.5
9:00 - 11:59 a.m.	6.6	8.0	5.5	12.3	3.7	11.2	2.5	16.8
12:00 p.m. or later	3.5	5.3	2.1	4.6	3.0	2.4	0.6	12.7
DK/NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Weekends:

More adults go to bed at later times on weekends than weekdays (see Table 3). Just over two-fifths of all adults (44%) report going to bed between midnight and 5:00 a.m. on a typical weekend: men and women do not differ substantially (46% vs. 42%). Shift workers are more likely to go to bed between midnight and 5:00 a.m. on the weekend than regular day workers (61% vs. 44%). Also, more young adults than middle aged or older adults (68% vs. 38% and 22%) typically go to bed during the early a.m. of weekends.

Table 3: Usual Time Go to Bed on Weekend (past two weeks)

	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Midnight	18.6	16.5	20.2	17.5	19.7	14.4	19.5	17.7
5 a.m. or earlier	25.1	29.9	21.7	50.0	18.5	7.2	24.0	43.4
5:01 - 8:59 a.m.	0.5	0.8	0.3	0.7	0.5	0.0	0.0	2.5
9:00 - 11:59 a.m.	0.2	0.4	0.0	0.0	0.3	0.0	0.0	1.0
12:00 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:01 - 6:59 p.m.	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.5
7:00 - 8:59 p.m.	1.6	0.6	2.2	0.0	1.5	5.6	0.8	1.0
9:00 p.m.	3.5	2.9	3.9	2.1	3.3	8.0	3.1	3.0
9:01 - 9:59 p.m.	1.7	1.2	2.1	1.4	1.5	4.0	1.4	1.0
10:00 p.m.	12.9	10.9	14.2	8.0	13.8	18.4	13.9	6.1
10:01 - 10:59 p.m.	5.9	4.9	6.5	2.1	6.6	11.2	5.9	1.0
11:00 p.m.	22.4	22.7	22.3	12.6	26.7	17.6	24.6	16.2
11:01 - 11:59 p.m.	6.7	7.6	6.1	4.2	7.0	11.2	6.3	4.5
DK/NA	0.9	1.2	0.6	1.4	0.5	2.4	0.5	2.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

A majority of adults in the U.S. also get up later on the weekends than weekdays (see Table 4). 61% report that they typically got up between 6:00 a.m. and 8:00 a.m.. However, 6% of adults still report getting up before 6 a.m.. More than half of each sex reported getting up between 6:00 a.m. and 8:00 a.m. (58% of men and 62% of women). Equal percentage of men and women report getting up before 6 a.m. (7% and 8% respectively).

Approximately three fifths of adults ages 18 – 29 report getting up after 8:00 a.m. (59%). In contrast, 25% of adults age 30 – 64 and 18% of adults 65 and older report

getting up as late. Similar differences were found between regular day and shift workers (29% and 52% respectively, got up after 8:00 a.m.).

Table 4: Usual Time Get Out of Bed Weekends (past two weeks)

	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Before 4 a.m.	0.3	0.2	1.8	0.0	0.4	0.0	0.3	0.5
4:00 - 4:59 a.m.	1.6	1.2	1.8	0.7	1.8	1.6	1.9	1.0
5:00 a.m.	2.3	3.1	1.8	0.4	2.7	4.0	2.8	1.5
5:01 - 5:59 a.m.	2.3	2.1	2.5	0.7	2.7	4.8	2.3	0.5
6:00 a.m.	10.5	9.9	11.0	5.3	11.2	17.6	9.7	6.1
6:01 - 6:59 a.m.	6.7	7.0	6.4	1.8	8.1	8.0	6.8	5.1
7:00 a.m.	17.6	18.4	17.1	8.8	20.5	21.6	18.4	12.7
7:01 - 7:59 a.m.	8.5	9.1	8.0	5.6	10.0	5.6	10.4	5.1
8:00 a.m.	17.4	14.0	19.8	17.5	17.3	18.4	18.1	15.7
8:01 - 8:59 a.m.	3.8	2.1	5.1	4.6	4.2	0.8	3.7	1.5
9:00 - 11:59 a.m.	22.6	23.5	21.9	38.6	17.8	14.4	21.9	32.5
12:00 p.m. or later	6.5	9.5	4.3	16.1	3.2	3.2	3.7	17.8
DK/NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Number of Hours Slept

Adults in the U.S. average six hours and 54 minutes of sleep during the workweek (see Table 5). The average number of hours slept on the weekend is seven hours and thirty minutes (see Table 6). Only 33% of adults report sleeping the recommended eight hours or more on weekday nights; 13% slept less than six hours. 48% of the adult population compensate for sleep lost during the week by sleeping more on the weekends. The mean amount of increased sleep on the weekend was 38 minutes.

Adults between the ages of 18 – 29 slept an average of 18 minutes longer on the weekends than those between 30 and 64 years of age. Adults 65 and older slept approximately 20 minutes longer on average than younger adults during the workweek but 12 to 30 minutes less on the weekends. The differences by age category also can be seen comparing the percent in each group that slept 8 or more hours per night on average (Tables 5 and 6).

Shift workers average slightly less sleep than regular day workers during the workweek (6 hrs. and 30 min. vs. 6 hrs and 54 min.). 49% of shift workers average less than six and a half hours of sleep per night during the workweek, while 30% of regular day workers get so little sleep.

Table 5: Average Number of Hours Slept on Weekdays (past two weeks)

	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Less than 6 hours	13.2	13.8	12.8	14.0	13.4	12.2	12.3	20.0
6 – 6 hrs. 29min.	19.7	21.9	18.0	22.8	18.8	16.3	17.9	28.7
6 hrs. 30 min. – 59 min.	4.4	5.4	3.7	4.2	5.2	0.8	6.2	2.6
7 – 7 hrs. 29 min.	24.9	25.4	24.6	23.5	26.1	22.0	27.8	15.4
7 hrs. 30 min. – 59 min.	5.1	5.0	5.2	2.8	6.0	3.3	5.7	6.2
8 hours or more	32.6	28.5	35.6	32.6	30.5	45.5	30.1	27.2
DK/NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean (in hours)	6.9	6.8	7.0	6.8	6.9	7.2	6.9	6.5
sd	1.4	1.4	1.4	1.4	1.4	1.6	1.2	1.5
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Table 6: Average Number of Hours Slept on Weekends (past two weeks)

	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Less than 6 hours	9.0	8.5	9.4	9.9	8.1	11.3	7.0	11.3
6 – 6 hrs. 29min.	11.9	12.4	11.6	11.0	11.6	16.9	10.1	14.9
6 hrs. 30 min. – 59 min.	2.3	2.3	2.2	2.5	2.2	1.6	2.0	2.6
7 – 7 hrs. 29 min.	18.4	19.7	17.6	11.3	21.2	17.7	18.9	14.9
7 hrs. 30 min. – 59 min.	2.6	2.9	2.4	0.7	2.9	4.0	2.9	1.5
8 hours or more	55.8	54.2	56.8	64.7	54.0	48.4	59.1	54.9
DK/NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean (in hours)	7.5	7.5	7.6	7.8	7.5	7.3	7.6	7.5
sd	1.6	1.5	1.6	1.8	1.4	1.6	1.5	1.7
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Sleep Hygiene

An indicator of poor sleep hygiene, 45% of U.S. adults agree that they will sleep less in order to get more work done (see Table 7). Men and women do not differ in this respect, however fewer adults ages 65 and older (31%) report willingness to forgo sleep to do more work than younger adults (53% of 18 to 29 year olds and 44% of 30 to 64 year olds). A higher percent of shift workers (56%) compared to regular day workers (44%) agree that they will sleep less to get more work done.

Over half of U.S. adults (52%) agree that they need an alarm clock to get up in the morning (see Table 7). While there is no substantial difference by sex or shift in the need for an alarm clock, difference by age are apparent. 68% of adults 18 to 29 years old agree that they need an alarm clock compared to 51% of those 30 to 64 years old and 18% of those 65 years of age and older.

Another indicator of poor sleep hygiene, 43% of adults agree that they stay up later than they should because they are watching TV or are on the Internet (see Table 7). There are no substantial differences in percent of respondents agreeing to this statement by sex or shift, however younger adults are more like to agree than are older adults: 55% of 18 to 29 year olds vs. approximately 40% of older adults.

Table 7: Factors in Sleep Hygiene

		Strongly Agree	Somewhat Agree	Neither	Somewhat Disagree	Strongly Agree	DK/NA
		%	%	%	%	%	%
I will sleep less to get more work done.							
Total		22.8	21.9	0.9	23.6	28.8	2.0
Sex	Male	23.0	21.5	0.7	25.9	26.5	1.4
	Female	22.6	22.2	0.3	22.0	30.5	2.4
Age	18 – 29	26.1	26.8	0.0	23.2	23.2	0.7
	30 – 64	23.9	20.3	1.0	24.0	29.8	1.1
	65 +	11.4	20.3	1.6	22.8	34.1	9.8
Work Hours	Regular Days	22.6	21.7	1.1	25.0	29.0	0.6
	Shift Work	30.8	25.1	0.5	19.0	23.1	1.5
I need an alarm clock to get up in the morning.							
Total		37.5	14.4	1.1	13.2	31.4	2.3
Sex	Male	37.6	17.8	1.4	11.4	29.5	2.3
	Female	37.5	11.9	0.9	14.6	32.7	2.4
Age	18 – 29	51.6	16.5	0.7	9.8	20.7	0.7
	30 – 64	36.3	14.9	1.0	14.9	31.8	1.1
	65 +	10.5	7.3	2.4	12.1	53.2	14.5
Work Hours	Regular Days	40.0	17.7	0.6	12.6	28.2	0.9
	Shift Work	50.5	13.3	1.0	10.2	24.5	0.5
I often stay up later than I should because I am watching TV or on the Internet.							
Total		25.5	17.6	0.7	18.7	36.5	1.0
Sex	Male	25.9	20.3	1.0	21.7	29.8	1.2
	Female	25.2	15.6	0.4	16.5	41.3	0.9
Age	18 – 29	31.7	22.9	0.7	16.9	27.5	0.4
	30 – 64	22.5	17.1	0.8	19.8	39.0	0.8
	65 +	28.0	11.2	0.0	14.4	42.4	4.0
Work Hours	Regular Days	23.2	18.4	0.5	21.5	36.2	0.3
	Shift Work	30.6	19.4	1.0	16.8	31.6	0.5

Although 45% of adult agreed that they will get less sleep in order to get more work done, only 13% of adults ranked sleep as the first thing that they usually give up

when they do not have enough time in the day to get everything done (see Table 8). A substantially higher percent of adults 18 to 29 years old (23%) ranked sleep as the first thing that they give up compare to older adults (10% of 30 to 64 year olds and 6% of those 65 years old and older). The activities most frequently given up when there is not enough time in the day to get everything done are household or personal chores and recreational activities, accounting for 75% of responses combined.

Table 8: What is Given Up When there is not Enough Time

<i>When you do not have enough hours in the day to get everything done, which would be the first thing you usually give up?</i>	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Sleep	12.6	15.1	10.7	22.9	9.7	6.5	12.1	20.4
Time with family and friends	9.3	9.4	9.1	10.9	9.2	4.8	9.9	13.3
Recreational Activities	31.2	38.3	26.1	29.2	32.8	26.6	31.7	29.6
Household or Personal Chores	43.9	33.7	51.3	36.3	46.5	46.0	45.2	35.2
Don't Give Up Anything	1.8	2.5	1.3	0.7	1.1	8.9	1.1	1.0
DK/NA	1.2	1.2	1.2	0.0	0.7	7.3	0.0	0.5
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Sleep Quality

The survey assessed a variety of issues regarding American's quality of sleep. Areas included were the frequency of sleep disorder symptoms and other factors that may influence sleep quality (e.g., stress or noise). Whether respondents had ever been told they had a sleep disorder, treatment for sleep problems and the public's use of medications and alcohol in attempts to improve sleep quality are addressed in separate sections (Healthcare and sleep page ** and Sleep Aids page ** respectively).

62% of the adult public report that, a few nights a week or more, they experience at least one sleep problem (i.e., symptoms of sleep disorders such as snoring, difficulty attaining and maintaining sleep, waking unrefreshed, pauses in breathing while asleep, or leg pain). Prevalence of symptoms of specific sleep problem follows.

Insomnia

Symptoms of insomnia were assessed by the following questions:

Please think about how often you have had each of the following problems within the past year.

You had difficulty falling asleep.

You were awake a lot during the night.

You woke up feeling unrefreshed.

You woke up too early and could not get back to sleep.

The most common symptom of insomnia experienced a few nights a week or more was “woke up feeling unrefreshed” (43%), followed by: “were awake a lot during the night” (34%), “had difficulty falling asleep” (22%), and “woke up too early and could not go back to sleep” (22%).

58% of adults report that they experience at least one symptom of insomnia a few nights a week or more (see Table 9). Over half of adult women (61%) and adult men (55%) report that they have had at least one of these insomnia problems a few nights a week or more. 69% of adults ages 18 – 29 report experiencing insomnia symptoms as often as a few nights a week; 54% of those 30 – 64 and 64% of those 65 and older report this frequency of problems. Significantly more shift workers (66%) than regular day workers (54%) report this frequency of these insomnia symptoms.

Snoring

35% of adults say that they have been told they snore at least a few nights a week; 45% of men and 28% of women report this level of snoring (see Table 9). A more serious threat to sleep quality, health and safety, 32% of men and 19% of women report that they snore every or almost every night. Those adults between the ages of 18 and 29 are least likely to report snoring, while adults 30 – 64 and 65 and older are the mostly likely to be severely affected (27% snore every or almost every night). Rates of snoring a few nights a week or more are similar for regular day and shift workers (37% and 35% respectively).

Sleep Apnea

Of men in the U.S. 16% report experiencing pauses in their breathing during sleep as frequently as a few nights a month, 12% report it a few nights a week or more (see Table 9). 11% of women also report experiencing this symptom of sleep apnea as often as a few nights a month, 8% a few nights a week or more. Older Americans are not more

likely to experience pauses in their breathing than are younger age groups nor is there a substantial difference by work hours.

Restless Leg Syndrome

26% of adult report experiencing unpleasant feelings in their legs (such as creepy, crawly or tingly sensations) a few nights a month or more: 15% a few nights a week or more (see Table 9). A higher percentage of women (18%) than men (11%) reported having these symptoms of restless leg syndrome (RLS) a few nights a week or more. 27% adults 65 years of age or older report experiencing RLS symptoms a few nights a week or more, while 15% of 30 to 64 year olds and 10% of 18 to 29 year olds reported RLS symptoms this often. Similar percentages of shift workers and regular day workers report RLS symptoms.

Table 9: Sleep Problems

<i>How often do you experience . . .</i>		<i>Every or almost every night</i>	<i>Few nights a week</i>	<i>Few nights a month</i>	<i>Rarely or never</i>	<i>DK/NA</i>
		<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Insomnia*						
Total		34.0	24.3	23.5	18.0	0.2
Sex	Male	31.2	23.6	26.4	18.8	0.0
	Female	36.0	24.9	21.4	17.4	0.3
Age	18 – 29	36.7	32.2	17.3	13.8	0.0
	30 – 64	31.0	22.5	27.2	19.3	0.0
	65 +	45.2	18.5	15.3	19.4	1.6
Work Hours	Regular Days	27.8	26.7	25.9	19.6	0.0
	Shift Work	42.1	23.6	24.1	10.3	0.0
Snoring						
Total		24.4	10.6	11.3	45.8	8.0
Sex	Male	32.1	13.0	13.0	36.2	5.6
	Female	18.8	8.8	10.0	52.8	9.7
Age	18 – 29	16.1	8.4	7.7	64.2	3.6
	30 – 64	27.4	11.8	13.0	41.1	6.8
	65 +	27.4	9.7	8.9	29.8	24.2
Work Hours	Regular Days	24.5	12.6	11.8	46.1	5.0
	Shift Work	25.0	10.2	13.3	48.0	3.6
Pauses in Breathing						
Total		6.4	3.5	3.5	71.5	15.2
Sex	Male	8.5	3.7	4.1	68.1	15.5
	Female	4.9	3.3	3.0	74.0	14.9
Age	18 – 29	7.0	1.4	2.5	75.8	13.3
	30 – 64	6.3	4.1	3.7	71.6	14.2
	65 +	6.5	4.8	4.8	59.7	24.2
Work Hours	Regular Days	5.6	3.1	3.6	74.9	12.8
	Shift Work	9.2	5.6	3.1	66.8	15.3
Creeping, Crawling, or Tingling in Legs						
Total		8.2	6.7	11.1	73.4	0.7
Sex	Male	5.8	5.2	9.5	78.9	0.6
	Female	10.0	7.7	0.2	69.3	0.7
Age	18 – 29	4.6	5.6	9.2	80.6	0.0
	30 – 64	7.9	6.7	12.5	72.3	0.5
	65 +	18.5	8.1	7.3	63.7	2.4
Work Hours	Regular Days	5.7	7.3	11.8	74.8	0.3
	Shift Work	6.2	5.6	10.3	77.9	0.0

* reporting any of these symptoms: you had difficulty falling asleep; you were awake a lot during the night; you woke up feeling unrefreshed; you woke up too early and could not get back to sleep.

Other Factors Affecting Sleep

Respondents were also asked to how often a number of factors disrupted their sleep. Table 10 shows the percent of adults reporting that their sleep was disrupted by these factors a few nights a week or more. Approximately one fifth of adults in the U.S. reported that stress or worries disrupted their sleep a few nights a week or more with in the past year. A similar percent reported that pain or physical discomfort disrupted their sleep a few nights a week or more. 8 percent to 17 percent of adults report their sleep was disrupted a few nights a week or more by other factors ranging from indigestion to children.

A higher percent of women than men reported that their sleep was disrupted by each of these factors. Particularly large differences were apparent for snoring of partner, pauses in breathing of partner, pain or physical discomfort, and stress or worries. Similarly, a higher percent of shift workers than regular day workers report that their sleep is disrupted by each of these factors.

Table 10: Factors Disrupting Sleep a Few Nights a Week or More

<i>How often is your sleep disrupted by ?</i>	Total* %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Pain or physical discomfort	20.0	13.2	24.9	17.7	20.2	25.0	15.2	19.5
Allergies or respiratory problems	10.6	8.5	12.0	12.6	10.3	8.9	13.6	19.5
Nasal Congestion	11.5	10.2	12.5	14.1	11.2	7.2	11.0	13.9
Indigestion	7.8	6.4	8.9	8.8	7.0	11.2	6.8	7.7
Stress or worries	21.9	15.9	26.3	25.7	22.6	11.2	19.3	33.5
Noise, light or temperature	15.5	13.5	16.9	22.2	14.3	8.0	14.0	26.1
Snoring of Partner	15.5	7.2	21.7	12.9	18.8	5.9	13.6	19.5
Pauses in breathing of Partner	7.5	2.3	11.4	5.3	9.2	2.0	6.5	9.3
Children	17.2	12.4	20.7	23.3	17.0	5.6	16.6	24.5
Feeling uncomfortable due to your mattress, pillow or bedding	13.6	11.4	15.3	18.9	12.0	9.6	12.0	22.6

* Percent whose sleep is disrupted a few nights a week or more.

Daytime Sleepiness

Prevalence of Daytime Sleepiness

Of the U.S. adult household population, 43% reported that they experience daytime sleepiness so badly that it interferes with their daily activities a few days a month or more often (see Table 11). 20% of adults say that they are affected by daytime sleepiness at least a few days a week. 23% of women and 15% of men report being affected by daytime sleepiness a few days a week or more. 33% of adults 18 – 29 report that they experience significant daytime sleepiness a few days a week or more. Approximately 16% adults 30 years of age and older experience daytime sleepiness as often. 17% of regular day workers report daytime sleepiness affects them a few days a week or more compared to 29% of shift workers.

Table 11: Daytime Sleepiness

<i>How often do you have sleepiness during the day so bad that it interferes with your daily activities?</i>	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Every or almost every day	7.5	5.4	8.9	9.5	6.9	6.5	5.4	13.3
A few days a week	12.5	9.7	14.5	23.6	8.9	8.9	11.3	15.9
A few days a month	22.6	24.2	21.5	25.0	23.3	13.0	22.2	30.8
Rarely or never	57.1	60.7	54.5	41.9	60.6	69.9	60.9	40.0
DK/NA	0.3	0.0	0.6	0.0	0.3	1.6	0.2	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Symptoms of Daytime Sleepiness

The Epworth Daytime Sleepiness scale was administered to all respondents. Each respondent was asked to rate the chances that they would have dozed off or fallen asleep in the situations listed in Table 12.

63% of adults in the U.S. reported that they have a medium or high chance of falling asleep if they lie down to rest in the afternoon. 48% of adults report a medium or high chance of falling asleep while watching TV and 46% while sitting and reading. 33% of adults report high or medium chances of falling asleep as a passenger in a car for one hour. Other Epworth Daytime Sleepiness items were less frequently endorsed as high or

Table 12: Epworth Symptoms of Daytime Sleepiness

How likely would you doze off when:		High Chance	Medium Chance	Slight Chance	No Chance	DK/NA
		%	%	%	%	%
Sitting and reading						
Total		18.3	27.3	25.0	28.6	0.8
Sex	Male	14.9	30.4	26.7	27.5	0.4
	Female	20.7	25.0	23.8	29.4	1.0
Age	18 – 29	25.4	29.9	17.3	27.5	0.0
	30 – 64	15.9	26.5	28.9	28.1	0.5
	65 +	17.7	25.0	20.2	33.9	3.2
Work Hours	Regular Days	16.6	27.8	27.8	27.5	0.3
	Shift Work	23.1	33.3	19.5	23.6	0.5
Watching T.V.						
Total		19.2	29.2	29.1	22.2	0.3
Sex	Male	14.9	32.5	31.7	20.1	0.8
	Female	22.2	26.8	27.3	23.7	0.0
Age	18 – 29	21.8	26.8	31.7	19.7	0.0
	30 – 64	18.7	30.6	29.5	21.0	0.1
	65 +	17.7	27.4	23.4	29.0	2.4
Work Hours	Regular Days	18.0	29.7	32.1	19.9	0.3
	Shift Work	26.2	29.7	24.1	20.0	0.0
Sitting inactively in a public place such as a theater or meeting						
Total		5.5	12.0	21.1	60.8	0.5
Sex	Male	4.8	14.7	23.0	57.3	0.2
	Female	6.0	10.1	19.8	63.3	0.7
Age	18 – 29	8.4	12.3	23.9	55.1	0.4
	30 – 64	4.8	12.3	20.7	61.7	0.4
	65 +	3.2	10.5	17.7	66.9	1.6
Work Hours	Regular Days	5.1	12.4	23.1	58.9	0.5
	Shift Work	9.2	16.9	17.9	55.4	0.5
As a passenger in a car for an hour without a break						
Total		13.9	18.8	22.3	44.5	0.4
Sex	Male	12.0	17.2	24.8	45.5	0.4
	Female	15.3	19.9	20.5	43.8	0.4
Age	18 – 29	19.4	27.6	23.7	29.3	0.0
	30 – 64	13.3	16.9	23.1	46.4	0.3
	65 +	4.8	12.8	14.4	65.6	2.4
Work Hours	Regular Days	13.5	19.7	25.2	41.1	0.5
	Shift Work	19.5	21.5	20.0	39.0	0.0

Table 12: Continued - Epworth Symptoms of Daytime Sleepiness

How likely would you doze off when:		High Chance	Medium Chance	Slight Chance	No Chance	DK/NA
		%	%	%	%	%
Lying down to rest in the afternoon						
Total		35.8	27.0	20.0	16.1	1.1
Sex	Male	31.2	31.0	21.7	14.7	1.4
	Female	39.0	24.1	18.8	17.1	0.9
Age	18 – 29	42.3	28.2	21.1	8.5	0.0
	30 – 64	35.1	27.9	19.3	16.8	0.8
	65 +	27.4	18.5	21.0	27.4	5.6
Work Hours	Regular Days	34.2	28.1	21.4	15.8	0.5
	Shift Work	45.4	27.0	16.3	10.2	1.0
Sitting and talking to someone						
Total		1.1	3.2	11.5	84.1	0.1
Sex	Male	1.9	3.7	12.4	82.0	0.0
	Female	0.6	2.8	10.9	85.6	0.1
Age	18 – 29	1.8	4.2	14.4	79.6	0.0
	30 – 64	0.8	3.2	11.1	84.8	0.1
	65 +	1.6	1.6	8.9	87.1	0.8
Work Hours	Regular Days	0.8	2.3	13.6	83.1	0.2
	Shift Work	2.6	6.7	8.7	82.1	0.0
Sitting quietly after a lunch without alcohol						
Total		9.0	14.4	23.6	52.5	0.5
Sex	Male	7.4	15.7	27.9	48.8	0.2
	Female	10.1	13.4	20.6	55.1	0.7
Age	18 – 29	9.8	15.8	23.2	51.2	0.0
	30 – 64	9.2	13.3	26.2	51.2	0.1
	65 +	8.0	18.4	12.0	58.4	3.2
Work Hours	Regular Days	8.7	11.8	28.7	50.8	0.0
	Shift Work	10.2	8.4	1.9	52.0	0.5
In a car, while stopped for a few minutes in traffic						
Total		1.6	3.0	8.3	86.9	0.2
Sex	Male	1.4	4.6	10.1	83.6	0.2
	Female	1.6	1.9	7.0	89.3	0.1
Age	18 – 29	3.2	4.9	11.3	80.6	0.0
	30 – 64	1.2	2.2	7.7	88.8	0.1
	65 +	0.0	3.3	5.7	90.2	0.8
Work Hours	Regular Days	1.2	2.9	10.1	85.7	0.0
	Shift Work	3.6	4.1	6.6	85.2	0.5

medium chances of falling asleep. There were no substantial differences by sex, age or shift at the level of individual items although there were trends for more women than men, for more young adults than older adults, and more shift workers than regular day workers to report high chances of falling asleep.

A score of 10 on the Epworth Daytime Sleepiness scale is taken to indicate clinical levels of daytime sleepiness. 32% of adults in the U.S. meet this criterion for a significant level of daytime sleepiness. While there is no difference by sex, a higher percent of adults 18 to 29 years old (42%) than adults 30 to 64 years old (30%) and those 65 years of age and older (21%) report this level of daytime sleepiness. 42% of shift workers compared to 31% of regular day workers are so affected.

Table 13: Epworth Daytime Sleepiness

<i>Epworth Score Greater than or Equal to 10</i>	Sex		Age			Work Hours		
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
	31.7	30.0	32.9	41.7	30.0	21.1	31.1	41.8
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Consequences of Daytime Sleepiness

Prevalence of Driving Drowsy

In the past year 51% of adults in the U.S. have driven when feeling drowsy. Approximately 17% of adults actually dozed off at the wheel during the past year and 1.0% had an accident they attribute to falling asleep (see Table 14).

Substantially more men than women report driving when drowsy and dozing off at the wheel, and having had an accident in the past year due to falling asleep at the wheel (see Table 14). A linear trend across age groups is evident for drowsy driving, falling

asleep at the wheel and having a sleepiness related accident. Larger percentages of adults ages 18 to 29 report drowsy driving, falling asleep at the wheel and having accidents than either older age group. 66% of shift workers have driven drowsy in the past year, and 25% have dozed off at the wheel; greater percentages than regular day worker in each instance.

Table 14: Driving Drowsy

<i>In the past year have you . . .</i>	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Ever driven a car or other vehicle while feeling drowsy?	51.4	62.9	43.2	60.2	53.5	21.0	57.1	65.5
Ever dozed off, even if just for a brief moment, while at the wheel of a car or other vehicle?	16.6	21.8	12.7	24.4	15.2	5.7	19.0	25.3
Ever had an accident because you dozed off or were too tired while driving?	0.9	1.9	0.2	3.0	0.3	0.0	0.6	3.2
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Strategies when Driving Drowsy

Respondents were asked what they usually did when they were driving drowsy in the past year (see Table 15). 63% of those having driven drowsy in the past year reported usually using caffeinated products. Equal percentage of men and women, those ages 18 to 64, and both regular day and shift workers report using caffeine when driving drowsy. However, a lower percent of those 65 years of age and older (42%) report use of caffeine in this circumstance.

Substantially few adults report pulling over to take a nap when they have been driving drowsy (22%) or drive faster when driving drowsy (12%). The proportion of those driving drowsy that pulls over to take a nap increases with age. The proportion of adults that driver faster when driving drowsy decreases with age (see Table 15).

Table 15: Do When Driving Drowsy (among those who've driven drowsy)

<i>In the past year do you usually . . .</i>	Sex			Age			Work Hours	
	Total %	Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Drive faster?	11.8	11.2	12.4	22.4	7.4	3.8	11.1	18.0
Pull over to take a nap?	21.5	24.9	17.9	15.2	22.8	53.8	20.7	17.2
Use caffeinated products?	63.3	61.8	64.8	64.1	64.9	42.3	63.9	67.2
Find yourself feeling stressed?	41.8	35.5	48.3	48.5	39.7	23.1	38.9	57.8
Find yourself becoming impatient?	32.5	29.6	35.6	50.0	25.9	7.7	31.7	44.5
Number of Respondents	(594)	(304)	(290)	(171)	(390)	(26)	(368)	(128)

Effects of Driving Drowsy

One-third of adults report that they become impatient when they are driving drowsy, while 42% report becoming stressed. A higher percent of women who have driven drowsy in the past year report becoming impatient (36%) and stressed (48%) than men (30% and 36%, respectively). There was a linear trend by age, with the youngest adults having the highest percent affected (see Table 15). Shift workers were more likely to report becoming impatient and stressed than regular day workers (see Table 15).

Opinions on Transportation Industry and Sleep

Over 90 percent of adults said that they believed that companies that hire transportation workers should limit the number of hours they allow their drivers to work per shift (see Table 16). Approximately 50% of adults reported that they were very concerned that they would be at risk if no limits were placed on hours worked by drivers per shift: an additional 40% report being somewhat concerned.

Table 16: Opinions on Hours Worked by Transportation Workers

		<i>Do you believe that companies that hire transportation workers, such as airline pilots, truck drivers, train conductors, and cab drivers, should limit the number of hours they allow their drivers to work per shift?</i>			
		<i>Yes</i>	<i>No</i>	<i>DK/NA</i>	
		<i>%</i>	<i>%</i>	<i>%</i>	
Total		94.9	4.0	1.1	
Sex	Male	92.4	6.0	1.6	
	Female	96.7	2.5	0.7	
Age	18 – 29	94.7	5.3	0.0	
	30 – 64	95.3	3.3	1.3	
	65 +	93.5	4.0	2.4	
Work Hours	Regular Days	94.6	4.0	1.4	
	Shift Work	93.8	5.1	1.0	
		<i>Very</i>	<i>Some-what</i>	<i>Not at All</i>	<i>DK/NA</i>
		<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Total		52.7	39.1	7.4	0.8
Sex	Male	49.1	40.2	9.9	0.8
	Female	55.4	38.2	5.7	0.7
Age	18 – 29	42.6	50.4	7.0	0.0
	30 – 64	56.5	35.7	7.1	0.7
	65 +	52.4	33.9	10.5	3.2
Work Hours	Regular Days	52.5	39.3	7.8	0.5
	Shift Work	50.0	45.9	4.1	0.0

Substances to stay awake

6% of adults report using medications to help them stay awake during the past year (see Table 17). Equal percentages of men and women report the use of medications to stay awake. However, substantially more adults 18 to 29 report using medications to aid alertness (13%) than older adults (4% of those 30 – 64 and 2% of those 65 or more years old). 85% of those using a substance to aid alertness used over-the-counter medications. Of those using substances, more women (20%) than men (0%) report use of prescription medications to help them stay awake.

Table 17 : Use of Substances to Aid Alertness

In the past year, have you ever taken a substance to help you stay awake?	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Yes	6.2	5.8	6.6	12.7	4.5	2.4	4.8	15.4
Medication								
Prescription*	12.3	0.0	20.0	11.1	14.3	33.3	9.4	13.3
Over-the-counter*	84.9	96.4	77.8	88.9	80.0	66.7	84.4	86.7
Both*	1.4	0.0	2.2	0.0	2.9	0.0	3.1	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

* of those taking medications for alertness;

Work and Sleep

One of the main foci of the NSF 2000 Omnibus Sleep Polls was to examine the relationship between sleep and work. A variety of aspects of sleep were covered in the survey, including satisfaction with sleep allowed, amount of sleep needed, and the prevalence and effects of daytime sleepiness at work. Each area of sleep and work was examined across demographic, occupational, and industry categories. Excluded from this section are the responses of those adults who were unemployed during the past 3 months. Sample size for this section is 1008.

Amount of Sleep

71% of U.S. adults report that they are completely or very satisfied with the amount of sleep that their work schedule allows (see Table 18). Only 10% of adults were not satisfied with the amount of sleep their jobs allow them.

More younger adults were dissatisfied with the amount of sleep their work schedule allows than older adults; 14% of 18 to 29 year olds, 10% of 30 to 64 years and 2% of those 65 or more years old are dissatisfied with the amount of sleep their jobs allow. 22% of service workers and 19% of shift workers were dissatisfied with the amount of sleep their jobs allow which is 6% to 10% higher than regular day workers and workers in other occupational types. There were no substantial differences by industrial type.

One reason why so many U.S. adults may be satisfied with the amount of sleep that their work schedule allows, may be because on average adults report getting about as much sleep as they say they need to do quality work. On average, adults say they need 7 hours and 6 minutes of sleep not to be sleepy at work, but actually get 6 hours and 53 minutes of sleep during the workweek (see Table 19). Although seemingly satisfied with this amount of sleep it is one hour less than experts recommend.

Table 18: Satisfaction with Number of Hours of Sleep Work Schedule Allows

Hour:		N	Comp Sat	Very Sat	Somewhat Sat	Neither	Somewhat Dis	Very Dis	Comp Dis	DK/NA
			%	%	%	%	%	%	%	%
Total		1008	51.4	19.3	17.3	0.6	5.8	2.6	2.1	0.9
Sex	Male	428	52.6	18.7	.9	0.9	5.4	2.6	2.8	1.2
	Female	581	50.5	19.8	18.4	0.3	6.2	2.6	1.5	0.7
Age	18 – 29	277	37.6	20.4	26.2	0.4	6.1	5.0	3.2	1.1
	30 – 64	675	55.8	19.7	13.8	0.6	6.2	1.8	1.5	0.6
Work Hours	65 +	44	74.4	9.3	9.3	0.0	0.0	0.0	2.3	4.7
	Regular Days	643	58.8	20.3	12.5	0.5	3.9	2.3	1.2	0.5
	Shift Work	196	35.7	17.3	26.0	1.0	10.7	4.6	3.6	1.0
Occupation										
	Professional	294	58.6	19.0	12.5	0.0	4.7	2.0	1.4	1.7
	Managerial	98	49.5	17.2	16.2	1.0	9.1	4.0	3.0	0.0
	Clerical	81	56.8	12.3	21.0	0.0	2.5	6.2	1.2	0.0
	Sales	65	34.8	36.4	19.7	1.5	6.1	1.5	1.2	0.0
	Service	90	39.6	14.3	22.0	1.1	16.5	2.2	4.4	0.0
	Skilled	86	61.6	22.1	10.5	1.2	2.3	1.2	0.0	0.0
	Unskilled	70	53.5	11.3	18.3	0.0	8.5	1.4	7.0	0.0
	Other	89	50.0	25.6	15.6	0.0	2.2	5.6	5.6	1.1
Industry Type										
	Construction	43	63.6	15.9	6.8	2.3	2.3	0.0	9.1	0.0
	Manufacturing	102	53.8	18.3	1.5	0.0	7.7	2.9	3.8	1.9
	Transportation /Public Utility	60	56.7	16.7	18.3	0.0	5.0	1.7	1.7	0.0
	Wholesale/ Retail Trade	90	44.4	26.7	16.7	1.1	4.4	3.3	2.2	1.1
	Finance/ Insurance/ Real Estate	58	47.5	18.6	15.3	0.0	5.1	11.9	0.0	1.7
	Service	324	52.6	17.5	19.4	0.3	5.5	2.8	1.2	0.6
	Government	63	53.8	18.5	10.8	1.5	10.8	1.5	3.1	0.0
	Other	119	50.0	25.0	15.0	0.8	6.7	1.7	0.8	0.0

Women say that they need approximately a half an hour more sleep than men in order to not be sleepy at work. However, women report that they get about 20 minutes less sleep, than the say they need, while there was no difference for men. Clerical and

unskilled worker report the biggest disparity between amount of sleep needed and amount gotten (approximately 42 minutes less sleep than needed).

Table 19: Average Hours of Sleep Needed to do Quality Work and Average Hours of Sleep Gotten

		Hours Needed	Standard Deviation Minutes	Hours Gotten	Standard Deviation Minutes
Total		7.1	82	6.9	86
Sex	Male	6.8	79	6.8	83
	Female	7.3	82	7.0	88
Age	18 – 29	7.1	94	6.8	86
	30 – 64	7.1	76	6.9	84
	65 +	7.2	90	7.2	95
Work Hours	Regular Days	7.1	75	6.9	75
	Shift Work	6.8	93	6.5	89
Occupation					
	Professional	7.0	73	6.9	72
	Managerial	7.0	80	6.6	71
	Clerical	7.6	79	6.9	65
	Sales	7.1	72	7.0	82
	Service	7.2	86	6.7	87
	Skilled	6.8	65	6.7	70
	Unskilled	7.1	87	6.4	94
	Other	6.6	93	6.9	101
Industry Type					
	Construction	6.6	78	6.9	70
	Manufacturing	6.9	76	6.5	79
	Transportation /Public Utility	6.9	65	6.6	80
	Wholesale/ Retail Trade	7.2	78	6.8	81
	Finance/ Insurance/ Real Estate	7.1	80	6.6	65
	Service	7.1	85	6.9	80
	Government	7.3	59	6.7	70
	Other	7.0	86	6.9	83

Prevalence of Sleepiness on Workdays

In spite of getting approximately the amount of sleep adults feel they need, daytime sleepiness is prevalent on workdays. 24% of adults say that they have difficulty getting up 2 or more workdays per week. A higher percent of adults 18 to 29 years old (36%) than adults 30 to 64 years old (20%) and those 65 years of age and older (9%) report difficulty getting up on workdays. Of the occupational categories, clerical workers

have the highest prevalence of difficulty getting up in the morning (38%). Workers in the financial/insurance/real estate industry and the government have the highest prevalence of difficulty getting up in the morning (approximately 31%).

Table 20: Frequency of Difficulty Getting Up on Work Days

		About every Day	2 – 3 times per week	Once a week	2 – 3 times per month	Once or less per month	Never	DK/NA
		%	%	%	%	%	%	%
Total		13.7	10.5	11.2	16.6	17.1	29.9	1.0
Sex	Male	11.0	9.8	10.3	18.0	21.0	28.7	1.2
	Female	15.7	11.0	11.9	15.5	4.3	30.8	0.9
Age	18 – 29	19.0	16.5	15.1	14.3	16.5	18.6	0.0
	30 – 64	11.9	8.5	9.8	18.7	18.1	32.2	0.7
	65 +	4.5	4.5	9.1	2.3	13.6	59.1	6.8
Work Hours	Regular Days	15.1	9.3	11.8	18.	17.2	27.0	0.8
	Shift Work	8.6	12.2	9.6	11.2	20.3	38.1	0.0
Occupation								
	Professional	12.2	5.1	11.9	18.4	21.8	29.9	0.7
	Managerial	9.0	10.0	14.0	21.0	14.0	31.0	1.0
	Clerical	24.7	13.6	12.3	14.8	17.3	17.3	0.0
	Sales	6.1	15.2	16.7	15.2	15.2	28.8	3.0
	Service	10.0	17.8	9.9	10.0	24.4	28.9	0.0
	Skilled	11.6	8.1	11.6	18.6	12.8	37.2	0.0
	Unskilled	18.3	15.5	9.9	18.3	7.0	31.0	0.0
	Other	21.3	9.0	4.5	11.2	19.1	34.8	0.0
Industry Type								
	Construction	18.6	4.7	7.0	25.6	7.0	37.2	0.0
	Manufacturing	14.7	.7	10.8	8.8	21.6	31.4	0.0
	Transportation /Public Utility	10.0	5.0	10.0	20.0	18.3	36.7	0.0
	Wholesale/ Retail Trade	11.0	12.1	12.1	15.4	18.7	28.6	2.2
	Finance/ Insurance/ Real Estate	18.6	13.6	11.9	15.3	5.3	25.4	0.0
	Service	12.3	7.7	11.3	8.7	18.1	31.6	0.3
	Government	12.3	18.5	13.8	16.9	16.9	21.5	0.0
	Other	17.5	9.2	13.3	15.8	22.5	20.0	1.7

Over one-quarter of adults in the U.S. report that they are sleepy at work 2 days a week or more (see Table 21). 40% of adults 18 to 29 years of age report this frequency of sleepiness at work, compared to 23% of 30 to 64 year olds and 19% of those 65 years of age and older.

Table 21: Frequency of Feeling Sleepy at Work

		About every Day	2 – 3 times per week	Once a week	2 – 3 times per month	Once or less per month	Never	DK/NA
		%	%	%	%	%	%	%
Total		11.0	16.1	11.9	26.6	21.6	12.2	0.6
Sex	Male	10.1	11.9	10.1	30.0	24.1	13.1	0.7
	Female	11.7	19.1	13.3	24.1	19.8	11.5	0.5
Age	18 – 29	19.8	19.8	12.9	24.8	14.7	7.9	0.0
	30 – 64	7.9	14.7	11.3	29.1	24.2	12.2	0.6
	65 +	7.0	11.6	16.3	2.3	27.9	34.9	0.0
Work Hours	Regular Days	9.0	14.4	11.6	27.2	23.9	13.7	0.2
	Shift Work	14.9	18.6	10.8	29.9	17.5	8.2	0.0
Occupation								
	Professional	6.5	13.3	11.2	26.5	27.9	14.6	0.0
	Managerial	7.1	20.4	10.2	30.6	21.4	10.2	0.0
	Clerical	16.0	16.0	14.8	27.2	21.0	4.9	0.0
	Sales	4.6	12.3	18.5	30.8	23.1	10.8	0.0
	Service	12.1	18.7	11.0	25.3	23.1	9.9	0.0
	Skilled	11.8	9.4	10.6	32.9	22.4	12.9	0.0
	Unskilled	18.3	9.9	14.1	25.4	15.5	15.5	1.4
	Other	15.7	23.6	13.5	15.7	21.3	10.1	0.0
Industry Type								
	Construction	0.0	4.7	11.6	37.2	20.9	25.6	0.0
	Manufacturing	14.7	9.8	13.7	23.5	29.4	8.8	0.0
	Transportation /Public Utility	13.3	16.7	5.0	26.7	20.0	18.3	0.0
	Wholesale/ Retail Trade	6.5	19.6	15.2	35.9	14.1	8.7	0.0
	Finance/ Insurance/ Real Estate	5.1	16.9	15.3	32.2	16.9	13.6	0.0
	Service	11.7	14.1	11.7	27.0	23.9	11.7	0.0
	Government	3.1	17.2	14.1	31.3	25.0	9.4	0.8
	Other	15.0	20.0	8.3	20.8	23.3	11.7	0.0

Although not included in Table 21 two additional analyses of the prevalence of sleepiness at work should be mentioned. First, 14% of adults with postgraduate education report being sleepy at work 2 or more days a week compared to 25% to 35% of those with less education. Second, 36% of adults that work more than 60 hours per week, 31% of adults working 51 to 60 hours per week, 25% of those working 31 to 50 hours per week, and 29% of those working 30 or fewer hours per week report being sleepy at work 2 or more days per week.

Effects of Sleepiness on Work

The majority of workers say that being sleepy makes work tasks more difficult including: making decisions, listening, concentrating, solving problems, handling stressful situations, and relating to coworkers (see Table 22). In rank order:

68% say concentrating is more difficult

65% say handling stress is more difficult

57% say listening to coworkers is more difficult

57% say solving problems is more difficult

56% say decision making is more difficult

38% say relating to coworkers is more difficult

There are no substantial differences by sex, however fewer adults 65 years old and older who reported these work tasks being more difficult when sleepy than younger adults. A lower percent of sales and unskilled workers report these work tasks being more difficult when sleepy, compare to other occupational groups. A higher percent of workers in the Finance/ Insurance/ Real Estate industry report more difficulty with these tasks when sleepy compared to workers in the other industry types.

Table 22: Percent of Adults Saying Aspects of Work More Difficult When Sleepy

		Making Decisions	Listening	Concentrating	Solving Problems	Handling Stressful Situations	Relating to Coworkers
		%	%	%	%	%	%
Total		58.5	57.1	68.4	57.7	65.7	38.8
Sex	Male	54.2	53.9	68.0	56.7	62.3	37.9
	Female	61.6	59.6	68.7	58.4	68.2	39.4
Age	18 – 29	55.8	50.5	69.5	54.7	70.0	35.0
	30 – 64	61.3	62.6	71.2	60.7	65.5	41.0
	65 +	38.6	22.7	25.6	34.1	40.9	20.9
Work Hours	Regular Days	57.8	60.2	70.5	59.0	65.1	39.0
	Shift Work	52.8	50.0	65.1	51.8	65.6	37.4
Occupation							
	Professional	60.7	61.6	69.4	62.2	67.7	40.8
	Managerial	55.1	62.2	67.7	54.1	66.3	34.3
	Clerical	62.2	67.9	70.4	61.3	65.4	48.1
	Sales	47.0	53.0	64.6	60.0	66.7	33.3
	Service	62.9	50.6	72.2	53.3	67.8	53.3
	Skilled	64.0	52.9	72.9	57.0	68.2	36.5
	Unskilled	39.4	40.8	54.9	38.0	50.7	23.9
	Other	47.2	56.2	69.7	55.7	60.7	29.2
Industry Type							
	Construction	58.1	46.5	65.1	48.8	60.5	39.5
	Manufacturing	63.1	56.3	75.7	63.4	61.8	30.4
	Transportation /Public Utility	41.7	46.7	64.4	55.0	52.5	35.6
	Wholesale/ Retail Trade	54.4	53.8	66.7	60.0	60.4	31.9
	Finance/ Insurance/ Real Estate	73.3	62.1	77.6	63.8	70.7	44.8
	Service	54.8	60.6	66.8	57.1	70.6	41.8
	Government	63.5	65.6	73.4	56.3	59.4	44.4
	Other	54.6	58.8	69.7	54.6	67.2	38.7

61% of U.S. adults reported that sleepiness at work interferes with concentration, 51% reported that it interferes with amount of work done, and 40% report that it interferes with the quality of work done (see Table 23). While there were no substantial differences by sex, age, or work hours, substantially fewer unskilled labors reported that sleepiness interferes with concentration, amount of work done, and quality of work done compare to other occupational types. The industry type with the highest percent of workers saying that sleepiness interferes with these aspects of work was Finance/ Insurance/ Real Estate.

Table 23: Percent of Adults Saying Sleepiness Interferes

		Concentration	Amount of work done	Quality of work done
		%	%	%
Total		60.6	50.7	39.7
Sex	Male	57.8	49.6	38.9
	Female	62.7	51.5	40.3
Age	18 – 29	64.6	52.3	44.6
	30 – 64	62.0	51.5	40.3
	65 +	21.4	30.2	4.8
Work Hours	Regular Days	59.2	50.5	37.3
	Shift Work	63.6	41.8	39.0
Occupation				
	Professional	59.9	51.9	40.6
	Managerial	57.1	39.8	31.6
	Clerical	61.3	46.9	36.3
	Sales	66.2	48.5	41.5
	Service	65.2	47.8	48.9
	Skilled	65.9	57.6	32.9
	Unskilled	42.9	37.1	18.6
	Other	61.4	46.6	42.0
Industry Type				
	Construction	46.5	55.8	30.2
	Manufacturing	61.4	45.1	28.7
	Transportation /Public Utility	55.9	37.3	35.6
	Wholesale/ Retail Trade	64.4	47.3	37.4
	Finance/ Insurance/ Real Estate	67.2	63.8	53.4
	Service	60.8	46.3	38.6
	Government	60.3	53.1	36.5
	Other	58.0	50.8	38.7

According to those who reported that sleepiness interferes with concentration at work, the amount of work done, and the quality of work done, their functioning was approximately 70 to 75% of their usual ability (see Table 24). There were no substantial differences by demographic characteristics, occupational type or industrial type.

Table 24: Average Percent Functioning When Sleepiness Interferes

		Concentration	Amount of work done	Quality of work done
		%	%	%
Total		72	72	73
Sex	Male	75	76	75
	Female	69	69	71
Age	18 – 29	71	72	73
	30 – 64	72	72	73
	65 +	82	69	70
Work Hours	Regular Days	73	74	74
	Shift Work	72	76	74
Occupation				
	Professional	74	75	76
	Managerial	71	75	74
	Clerical	70	67	68
	Sales	70	71	74
	Service	72	72	75
	Skilled	75	78	72
	Unskilled	68	72	75
	Other	75	77	75
Industry Type				
	Construction	64	74	65
	Manufacturing	74	76	74
	Transportation /Public Utility	77	79	74
	Wholesale/ Retail Trade	76	78	79
	Finance/ Insurance/ Real Estate	69	70	71
	Service	72	72	73
	Government	71	74	78
	Other	75	76	78

In addition to functioning at work, sleepiness creates a number of other work-related problems (see Table 25). 14% of adults say that they are occasionally or frequently late to work due to sleepiness. 22% of 18 to 29 year olds, 11% of 30 to 64 year olds and 5% of workers 65 years old or older report occasionally/frequently being late to work due to sleepiness. A substantially higher percent than other occupational types, 26% of clerical workers report occasionally/frequently being late to work due to sleepiness. 4% of adults say that they have not gone to work due to sleepiness occasionally/frequently.

7% of adults say that they occasionally or frequently fall asleep at work. Substantially fewer 30 to 64 year olds report falling asleep at work (5%) than both younger and older adults (13% and 19% respectively). Substantially more unskilled labors (17%) say they occasionally/frequently fall asleep at work compared to other occupational types. Not shown in Table 25, 18% of adults who did not graduate high school report that they occasionally/frequently fall asleep at work, compared to 3% to 9% of those with more education.

19% of adults report that they occasionally or frequently make errors at work due to sleepiness. 35% of sales workers and 21% of clerical workers say that they occasionally/frequently make errors at work due to sleepiness, a substantially higher percent than other occupational types. 33% of retail workers, 26% of government worker, and 28% financial/insurance/real estate workers say that they occasionally/frequently make errors at work due to sleepiness. Not shown in Table 25, 28% of adults that work more than 60 hours per week occasionally/frequently make errors due to sleepiness compared to approximately 20% of adults working fewer hours.

2% of adults report that they occasionally or frequently are injured due to sleepiness. However, 7% of unskilled workers report occasional or frequent injuries due to sleepiness and those without a high school diploma report occasional or frequent injuries due to sleepiness.

Table 25: Percent of Adults with Work Problems Due to Sleepiness

		Percent Frequently or Occasionally having Problem:	Late to Work	Did not go to Work	Fell asleep at Work	Leave Work early	Made errors at Work	Have an injury at Work
			%	%	%	%	%	%
Total			13.7	4.0	8.0	7.2	18.8	2.1
Sex	Male		11.4	4.2	7.7	6.3	17.2	1.4
	Female		15.3	3.8	8.2	7.9	20.0	2.6
Age	18 – 29		21.6	7.9	13.0	10.4	21.6	3.2
	30 – 64		11.0	2.6	5.2	6.1	18.4	1.7
	65 +		4.7	0.0	18.6	4.8	7.0	0.0
Work Hours	Regular Days		13.6	2.9	7.0	5.8	18.0	1.5
	Shift Work		17.3	5.7	6.7	8.2	18.0	2.5
Occupation								
	Professional		13.6	1.3	4.4	4.5	13.5	0.6
	Managerial		16.2	2.0	2.0	6.1	16.3	1.0
	Clerical		25.9	3.7	7.4	14.8	28.4	0.0
	Sales		13.6	7.7	6.1	9.2	34.8	3.1
	Service		17.8	6.6	8.9	6.7	21.1	4.4
	Skilled		5.9	4.8	9.3	0.0	18.9	1.2
	Unskilled		8.6	1.4	17.2	4.3	9.9	7.0
	Other		15.7	6.8	7.9	12.5	21.3	1.1
Industry Type								
	Construction		9.1	7.0	2.3	4.6	16.3	2.3
	Manufacturing		9.8	1.0	12.7	3.9	12.7	1.0
	Transportation /Public Utility		6.7	0.0	5.1	3.4	11.9	0.0
	Wholesale/ Retail Trade		15.6	3.3	5.5	12.2	33.0	2.2
	Finance/ Insurance/ Real Estate		25.5	8.6	1.7	8.5	28.8	0.0
	Service		14.8	4.3	6.5	5.5	16.3	2.4
	Government		20.3	6.4	7.7	11.1	26.2	0.0
	Other		12.6	0.8	9.3	6.8	14.1	4.2

Naps and Working

Adults report that 16% of employers allow them to take naps at work (see Table 26). 12% of 18 to 29 year olds, 17% of 30 to 64 year olds and 30% of adults 65 year old and older say that their employer allows them to nap at work. Not shown in Table 26, 5% of those with yearly incomes less than \$15,000 compared to 13% to 23% of those with higher incomes report that they are allowed to nap at work.

46% of those who are allowed to nap at work do so. 52% of women and 41% of men nap when allowed to at work. 57% of shift workers and 43% of regular day workers nap when allowed to at work. Not shown in Table 26, 64% of adults living in urban areas, 44% of those in rural areas, and 35% of those in suburban areas nap when allowed to at work.

One-third of adults report that they would nap at work if it was allowed. 40% of 18 to 29 year olds, 30% of 30 to 64 year olds and 24% of adults 65 years old and older would nap at work if it was allowed. 40% of adults in urban areas, 34% in suburban areas, and 30% in rural areas would nap if it was allowed at work.

10% of adults nap before going to work (see Table 26). Substantial fewer 30 to 64 year olds (7%) than younger and older adults take naps before work. 20% of those with incomes less than \$25,000 per year nap before going to work, compared to 7% to 12% of those with higher incomes.

35% of adults nap after work. A higher percent of 18 to 29 year olds (43%) nap after work compared to older adults. 45% of shift workers and 33% of regular day workers nap after work. The occupational and industrial types with the highest percent napping after work were retail workers (49%), construction workers (44%) and service

workers (44%). 47% of adults in urban areas, 33% in rural areas, and 31% in suburban areas report napping after work.

Table 26: Naps and Working

		Naps Allowed at Work	Nap at Work (among those allowed to)	Would Nap if Allowed to	Nap Before Work	Nap After Work
		%	%	%	%	%
Total		16.0	45.8	32.9	10.5	34.9
Sex	Male	19.4	41.3	34.9	13.5	34.4
	Female	13.1	51.6	31.3	7.9	35.3
Age	18 – 29	11.8	62.1	39.8	19.9	43.3
	30 – 64	17.3	42.7	30.4	6.6	31.6
	65 +	30.4	37.5	23.5	17.4	33.3
Work Hours	Regular Days	16.3	43.4	32.5	3.4	32.8
	Shift Work	13.8	57.1	33.5	33.3	44.6
Occupation						
	Professional	14.6	37.2	31.1	6.8	32.0
	Managerial	10.2	30.0	23.6	4.1	23.5
	Clerical	18.5	73.3	28.8	3.7	30.0
	Sales	10.8	42.9	39.7	12.3	49.2
	Service	14.4	38.5	42.9	22.5	44.4
	Skilled	17.6	46.7	34.3	16.5	40.0
	Unskilled	12.9	77.8	42.6	10.0	37.1
	Other	33.0	41.4	25.0	17.0	34.1
Industry Type						
	Construction	16.3	0.0	30.6	7.0	44.2
	Manufacturing	15.7	62.5	37.2	11.8	28.4
	Transportation /Public Utility	20.3	38.5	38.3	13.6	30.5
	Wholesale/ Retail Trade	11.1	40.0	46.3	15.6	48.9
	Finance/ Insurance/ Real Estate	19.0	41.7	36.2	8.6	32.8
	Service	16.0	51.9	26.4	11.7	34.6
	Government	10.9	57.1	43.9	4.7	38.1
	Other	19.3	43.5	28.1	6.7	28.0

Affect of Work on Sleep

Not only do sleep issues affect work, but work issues affect sleep. 8% of adults report that work problems disturb their sleep 2 or more days per week or more (see Table 27). 15% of shift workers and 6% of regular day workers report that work problems disturb their sleep 2 or more days per week. 19% of adults without a high school diploma, compared to 3% to 9% of adults with more education report that work problems disturb their sleep 2 or more days per week.

Table 27: Frequency of Problems at Work Disturb Sleep

		About every Day	2 – 3 times per week	Once a week	2 – 3 times per month	Once or less per month	Never	DK/NA
		%	%	%	%	%	%	%
Total		2.9	5.4	3.7	16.5	23.8	47.0	0.9
Sex	Male	2.8	6.8	3.0	5.7	25.3	45.9	0.5
	Female	2.9	4.3	4.1	17.0	22.7	47.8	1.2
Age	18 – 29	5.0	6.8	4.0	4.4	18.7	51.1	0.0
	30 – 64	2.2	4.7	3.7	17.6	26.5	44.1	1.0
	65 +	2.3	4.7	4.7	7.0	16.3	65.1	0.0
Work Hours	Regular Days	1.7	4.7	2.9	17.8	26.5	46.0	0.3
	Shift Work	6.1	8.7	4.6	112.8	19.4	48.5	0.0
Occupation								
	Professional	1.4	6.8	3.7	21.4	25.5	40.8	0.3
	Managerial	2.0	9.2	7.1	16.3	29.6	35.7	0.0
	Clerical	0.0	1.2	1.2	12.3	30.9	54.3	0.0
	Sales	0.0	3.0	4.5	12.1	27.3	53.0	0.0
	Service	5.6	6.7	3.3	7.8	28.9	47.8	0.0
	Skilled	1.2	1.2	1.2	19.8	19.8	57.0	0.0
	Unskilled	8.5	2.8	0.0	15.5	16.9	56.3	0.0
	Other	6.7	6.7	3.4	19.1	18.0	44.9	1.1
Industry Type								
	Construction	9.3	2.3	0.0	20.9	11.6	55.8	0.0
	Manufacturing	2.0	5.9	3.9	14.7	26.5	47.1	0.0
	Transportation /Public Utility	1.7	8.3	5.0	15.0	18.3	50.0	1.7
	Wholesale/ Retail Trade	2.2	5.6	1.1	18.9	24.4	47.8	0.0
	Finance/ Insurance/ Real Estate	1.7	11.9	1.7	16.9	23.7	44.1	0.0
	Service	3.4	3.7	5.8	15.3	27.6	44.2	0.0
	Government	0.0	10.9	0.0	15.6	26.6	46.9	0.0
	Other	0.8	4.2	1.7	23.3	26.7	42.5	0.8

25% of adults report that working even less than 8 hours makes them too sleepy to do quality work (see Table 28). Another 24% of adults report that working 8 to 10 hours makes them too sleepy to do quality work. These percentages do not substantially differ by demographic characteristics (except for those 65 years of age and older working 10 or more hours) or occupational type. A higher percent of workers in the Financial/ Insurance/ Real Estate industry report working fewer hours makes them too sleepy to do quality work compare to workers in other industry types.

Table 28: Number Hours Worked Before Feeling Too Sleepy to do Quality Work

Hours:		Less than 6	6 – 8	8 – 10	10 - 12	12 – 14	14 +	DK/NA
		%	%	%	%	%	%	%
Total		10.0	15.0	23.6	24.0	11.3	10.9	5.2
Sex	Male	7.0	9.1	20.8	26.9	14.5	17.1	4.4
	Female	12.2	19.3	25.6	21.9	9.0	6.4	5.7
Age	18 – 29	11.8	15.8	21.1	25.8	12.9	9.7	2.9
	30 – 64	9.1	15.3	24.2	24.5	11.3	11.0	4.7
	65 +	16.3	9.3	30.2	7.0	4.7	11.6	20.9
Work Hours	Regular Days	8.2	16.1	23.9	25.8	11.8	10.6	3.6
	Shift Work	10.2	11.2	20.9	24.0	15.3	12.2	6.1
Occupation								
	Professional	8.8	14.3	23.8	25.9	12.2	11.2	3.7
	Managerial	11.1	12.1	16.2	23.2	12.1	23.2	2.0
	Clerical	13.4	19.5	26.8	24.4	9.8	2.4	3.7
	Sales	7.6	13.6	25.8	31.8	6.1	9.1	6.1
	Service	11.0	18.7	25.3	16.5	15.4	6.6	6.6
	Skilled	8.1	7.0	22.1	24.4	16.3	18.6	3.5
	Unskilled	2.8	21.1	26.8	28.2	7.0	7.0	7.0
	Other	3.4	17.0	19.3	22.7	17.0	14.8	5.7
Industry Type								
	Construction	4.5	15.9	15.9	22.7	20.5	13.6	6.8
	Manufacturing	5.8	10.7	21.4	30.1	15.5	12.6	3.9
	Transportation /Public Utility	11.7	10.0	18.3	13.3	16.7	28.3	1.7
	Wholesale/ Retail Trade	8.8	14.3	26.4	24.2	9.9	11.0	5.5
	Finance/ Insurance/ Real Estate	20.7	20.7	19.0	25.9	8.6	5.2	0.0
	Service	7.1	15.3	23.9	27.6	10.4	10.1	5.5
	Government	7.7	23.1	30.8	13.8	9.2	12.3	3.1
	Other	7.5	14.2	21.7	24.2	15.0	11.7	5.8

Table 29 shows the number of reported hours worked on average. Although the average number of hours worked during a week does not alter the time adults go to bed, it does affect what time they get up. 31% of adults that work more than 60 hours per week get up by 5:00 a.m. compare to 18% of adult that work 31 – 60 hours per week and 9% of those who work 30 hours or less per week.

Even though the amount of work done effects sleepiness and work issues disturb adults sleep only 7% of adults report having changed jobs in order to get more sleep. 13% of 18 to 29 year olds, 5% of 30 to 64 year olds, and 0% of adults 65 years of age and older changed jobs in order to get more sleep. 14% of sales workers and 12% of service workers report having changed jobs in order to get more sleep. The percentage of adults changing jobs in order to get more sleep was also associated with education: 13% of adults without a high school diploma changed jobs, decreasing to 1% of adults with postgraduate education.

Table 29: Hours Worked

		30 hours or less	31 – 40 hours	41 – 60 hours	61+ hours	DK/NA
		%	%	%	%	%
Total		21.7	29.0	38.2	10.0	1.2
Sex	Male	14.0	23.4	50.0	11.7	0.9
	Female	27.4	33.0	29.4	8.8	1.4
Age	18 – 29	25.6	29.6	35.0	9.7	0.0
	30 – 64	17.5	29.8	40.7	10.8	1.1
	65 +	63.6	13.6	13.6	4.5	4.5
Work Hours	Regular Days	14.8	34.7	42.0	8.4	0.2
	Shift Work	24.5	22.4	39.8	13.3	0.0
Occupation						
	Professional	14.6	39.8	36.4	9.2	0.0
	Managerial	4.1	19.4	66.3	10.2	0.0
	Clerical	19.8	44.4	28.4	7.4	0.0
	Sales	23.1	35.4	40.0	1.5	0.0
	Service	33.3	20.0	32.2	13.3	1.1
	Skilled	11.6	32.6	48.8	7.0	0.0
	Unskilled	20.0	27.1	38.6	12.9	1.4
	Other	20.2	16.9	40.4	22.5	0.0
Industry Type						
	Construction	9.3	30.2	46.5	14.0	0.0
	Manufacturing	9.8	24.5	55.9	8.8	1.0
	Transportation /Public Utility	6.7	26.7	53.3	11.7	1.7
	Wholesale/ Retail Trade	25.6	28.9	38.9	6.7	0.0
	Finance/ Insurance/ Real Estate	10.3	27.6	51.7	10.3	0.0
	Service	22.8	34.9	31.8	10.5	0.0
	Government	12.7	42.9	39.7	4.8	0.0
	Other	12.6	27.7	43.7	16.0	0.0

Adolescents and Sleep

To assess the sleep habits of adolescents, adults participating in the survey who were currently the parent or guardian of a child between 10 and 18 years of were asked about the times their children went to bed and got up on schooldays and weekends. Parents or guardians were also asked how difficult it is to get children to bed at night and up in the morning, how often they were late to school due to sleepiness, and what their children do the hour before bed time. There were 408 children about whom these questions were asked.

School Days

26% of children 10 to 18 years of age usually go to bed at 11:00 p.m. or later on school nights in the past two weeks; 56% go to bed by 10:00 p.m. or later. While there is no substantial difference between boys and girls, there is a linear trend of higher percentages of adolescents going to bed at 11:00 p.m. or later as age increases (see Table 30).

On school days 28% of 10 to 18 years old get up by 6:00 am; 65% by 7:00 a.m. (see Table 31). There were no substantial difference in the time adolescents got up on school days by sex or age.

Table 30: Usual Time Adolescents Go to Bed on School Nights (past two weeks)

	Sex			Age			
	Total %	Boys %	Girls %	10 – 12 %	13 – 14 %	15 – 16 %	17 – 18 %
Midnight	1.5	2.2	0.8	0.6	1.5	1.3	3.8
5 a.m. or earlier	3.1	4.1	2.1	2.0	1.0	2.6	10.3
5:01 - 8:59 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 - 11:59 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:01 - 6:59 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 - 8:59 p.m.	10.3	9.7	10.0	16.1	8.8	4.7	3.0
9:00 p.m.	23.9	23.9	23.9	34.8	23.2	20.7	9.0
9:01 - 9:59 p.m.	15.2	15.5	14.9	14.5	18.3	17.1	11.1
10:00 p.m.	25.0	24.1	26.0	18.1	26.3	28.2	31.2
10:01 - 10:59 p.m.	4.8	4.3	5.4	2.0	5.4	7.0	7.7
11:00 - 11:59 p.m.	16.3	16.3	16.2	11.9	15.4	18.4	24.0
Number of Responses	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Table 31: Usual Time Adolescents Get Out of Bed School Days (past two weeks)

	Sex			Age			
	Total %	Boys %	Girls %	10 – 12 %	13 – 14 %	15 - 16 %	17 - 18 %
Before 4 am	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 - 4:59 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 a.m.	1.0	1.0	1.0	0.8	1.0	1.0	1.7
5:01 - 5:59 a.m.	4.6	6.3	3.0	2.8	3.3	5.5	5.5
6:00 a.m.	22.1	20.3	23.9	21.0	25.3	21.4	18.7
6:01 - 6:59 a.m.	37.2	37.5	36.9	36.3	39.2	39.3	30.6
7:00 a.m.	19.4	19.3	19.5	23.9	16.7	17.2	18.3
7:01 - 7:59 a.m.	11.4	11.5	11.3	11.2	11.9	9.0	17.0
8:00 a.m.	2.3	2.0	2.6	2.4	2.1	2.0	3.4
8:01 - 8:59 a.m.	0.6	0.6	0.5	0.4	0.5	0.0	2.1
9:00 - 11:59 a.m.	0.6	0.6	0.5	0.0	0.0	0.7	2.6
12:00 p.m. or later	0.8	0.8	0.8	1.2	0.0	4.0	0.0
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Weekends

According to their parent or guardian, 62% of 10 to 18 year olds go to bed at 11:00 p.m. or later on weekend nights; 90% go to bed at 10:00 p.m. or later. While there was no difference in weekend bed times by sex, there was a linear trend by age – increasing percentages staying up later as age increased (see Table 32).

Table 32: Usual Time Adolescents Go to Bed on Weekend Nights (past two weeks)

	Sex			Age			
	Total %	Boys %	Girls %	10 – 12 %	13 – 14 %	15 – 16 %	17 – 18 %
Midnight	15.3	13.5	17.0	10.1	17.1	16.2	21.4
5 a.m. or earlier	16.4	18.6	14.2	11.3	11.7	21.9	29.3
5:01 - 8:59 a.m.	0.6	0.8	0.5	1.2	1.0	0.0	0.0
9:00 - 11:59 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:01 - 6:59 p.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 - 8:59 p.m.	2.5	1.8	3.1	2.8	2.6	2.6	1.7
9:00 p.m.	4.0	2.9	5.1	8.9	2.3	1.8	0.4
9:01 - 9:59 p.m.	2.8	2.1	3.5	4.0	2.1	1.8	0.9
10:00 p.m.	19.9	18.8	20.9	24.5	17.6	16.2	14.8
10:01 - 10:59 p.m.	7.8	9.4	6.2	10.5	8.8	6.3	4.4
11:00 - 11:59 p.m.	30.8	32.2	29.4	26.7	36.8	33.2	27.0
Number of Responses	(408)	(201)	(207)	(133)	(100)	(106)	(64)

60% of 10 to 18 year olds get up at 9:00 a.m. or later on weekends; 11% get up after 12:00 p.m. (see Table 33). There was no substantial difference in the times gotten up on the weekend between boys and girls. However, approximately 70% of 15 to 18 year olds, 64% of 13 and 14 year olds, and 50% of 10 to 12 year olds get up at 9:00 a.m. or later on weekends.

Table 33: Usual Time Adolescents Get Out of Bed Weekend Days (past two weeks)

	Sex			Age			
	Total %	Boys %	Girls %	10 – 12 %	13 – 14 %	15 - 16 %	17 - 18 %
Before 4 am	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 - 4:59 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 a.m.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:01 - 5:59 a.m.	0.2	0.1	0.3	0.0	0.8	0.2	0.0
6:00 a.m.	0.6	0.8	0.5	1.2	1.0	0.0	0.0
6:01 - 6:59 a.m.	0.5	2.3	0.8	1.0	0.8	0.5	0.9
7:00 a.m.	11.2	11.4	10.9	16.2	7.5	7.0	10.2
7:01 - 7:59 a.m.	3.7	3.8	3.6	6.0	2.1	3.0	2.6
8:00 a.m.	19.9	20.2	19.5	24.1	20.9	16.2	18.7
8:01 - 8:59 a.m.	2.6	2.7	2.4	2.0	3.1	2.5	0.9
9:00 - 11:59 a.m.	48.9	44.4	53.5	41.1	53.6	52.5	52.8
12:00 p.m. or later	11.4	14.3	8.5	8.4	10.3	18.2	14.0
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Difficulty Getting To and Out of Bed

Each parent or guardian was asked to rate how difficult it generally is to get their child to bed at night and up in the morning. 36% of children ages 10 to 18 were rated as somewhat or very difficult to get to go to bed (see Table 34). 38% of these children were rated as somewhat or very difficult to get up on school mornings. There were no substantial differences by sex or age in difficulty of getting children to go to bed. However, a higher percent of child 17 and 18 years of age were difficulty to get up on school mornings than younger children (see Table 34).

Table 34: Difficulty Getting Adolescents to Go to Bed and Get Up from Bed

		Sex		Age			
	Total %	Boys %	Girls %	10 – 12 %	13 – 14 %	15 - 16 %	17 - 18 %
How difficult is it to get this child to go to bed at night on a school day?							
Very Difficult	11.5	13.6	9.4	11.3	13.1	7.8	15.1
Somewhat Difficult	24.7	21.3	28.1	25.8	22.9	25.4	24.1
Not Difficult	63.8	65.1	62.5	63.0	63.9	66.8	60.8
How difficult is it to get this child up in the morning on a school day?							
Very Difficult	10.8	12.3	9.4	10.7	9.3	8.8	19.1
Somewhat Difficult	26.9	27.2	26.6	25.5	26.9	25.4	28.7
Not Difficult	62.3	60.5	64.1	63.8	63.7	65.8	52.2
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Although over one-third of children 10 to 18 years of age were rated as very or somewhat difficult to get up from bed on school days, approximately 3% of children were reported to be late for school a few days a week or more due to sleepiness or over sleeping (see Table 35). An additional 7% of children were reported to be late to school a few days a month. While approximately 2% of children ages 10 to 16 were reported to be late to school a few times a week or more, 8% of children 17 and 18 years old were late to school due to tiredness or over sleeping.

Table 35: Child Late to School

	Total %	Sex		Age			
		Boys %	Girls %	10 – 12 %	13 – 14 %	15 - 16 %	17 - 18 %
How often has this child been late to school due to over sleeping or being too tired?							
Every or almost every day	0.4	0.0	0.8	0.0	0.0	0.5	1.7
A few days a week	2.8	4.3	1.3	2.6	1.8	2.1	6.4
A few days a month	7.1	8.0	6.2	7.1	4.9	6.7	12.8
Rarely or never	89.7	87.8	91.7	90.3	93.3	90.7	79.1
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Activities Before Bed

Of the identified activities children do one hour before going to bed, watching TV is the most popular; 44% of children (see Table 36). The next most frequently done activity before bed was homework (10%) and then use of a computer (7%). There were no substantial differences between boys and girls or by age.

Table 36: Child’s Activity One Hour Before Bed

	Total %	Sex		Age			
		Boys %	Girls %	10 – 12 %	13 – 14 %	15 – 16 %	17 - 18 %
What activity is this child most likely to do one hour before bedtime?							
Watch TV	44.2	48.2	40.2	45.2	42.9	45.6	44.6
Use the computer	7.0	6.1	7.8	6.3	9.7	6.0	6.9
Talk on the phone	5.4	6.1	4.7	3.7	3.7	7.8	9.4
Do homework	9.8	7.3	12.2	8.6	12.0	10.2	9.9
Work at a job	0.1	0.3	0.0	0.0	0.0	0.3	.4
Other	33.5	32.0	35.0	36.3	31.7	30.2	28.8
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

School Start Time

Asked what would be the best school start time for each child, parents or guardians of over fifty percent of children think school should begin by 8:00 a.m. for their 10 to 18 year olds (see Table 37). There were no differences by sex or age, except that a higher percent of parents or guardians reported that the best time start time for their 17 to 18 year olds would be between 8:31 and 9:00 am (26%) compare to parents/guardians of younger children.

Table 37: Time School Should Start

What would be the best school start time for this child?	Total %	Sex		Age			
		Boys %	Girls %	10 – 12 %	13 – 14 %	15 - 16 %	17 - 18 %
7:00 am or earlier	2.6	2.6	2.6	2.0	1.8	2.6	6.0
7:01 – 7:30 am	14.7	17.9	11.4	15.7	16.9	14.9	11.6
7:31 – 8:00 am	38.6	36.4	40.9	34.4	31.9	34.9	35.8
8:01 – 8:30 am	20.9	22.3	19.4	28.7	23.2	19.6	6.5
8:31 – 9:00 am	15.8	13.4	18.3	14.1	17.1	12.5	25.9
9:01 – 9:30 am	1.0	1.2	0.8	1.4	1.6	0.0	0.9
9:31 – 10:00 am	2.7	2.6	2.9	1.2	4.7	2.1	4.3
10:01 – 11:00 am	0.3	0.3	0.3	0.0	0.0	0.0	1.7
11:01 – 12:00 pm	2.6	2.3	2.9	2.4	2.1	2.3	4.7
12:01 pm or later	0.8	1.0	0.5	0.0	0.5	1.0	2.6
Number of Respondents	(408)	(201)	(207)	(133)	(100)	(106)	(64)

Healthcare and Sleep

To assess the intersection of the healthcare system with the sleep problems of U.S. adults survey respondents were asked about: 1) discussions with doctors about their sleep, 2) whether a doctor had ever told them they had a sleep disorder, and 3) whether or not those who were told they had a sleep disorder had received treatment.

Discussion with a Doctor

Only 38% of adults in the U.S. report that their doctor has ever asked them about how they were sleeping (see Table 38). More women than men report being asked by their doctor about their sleep (44% vs. 30%). A higher percentage of adults 65 year of age and older have been asked about their sleep by a doctor (56%) than younger adults (40% of 30 to 64 year olds and 25% of 18 to 29 year olds).

Even smaller percentages of adults have initiated a discussion with their doctor about a sleep problem (20%, see Table 38). A higher percent of women (25%) than men (13%) report initiating a discuss about sleep with their doctor. While one-fifth of adults 30 years of age and older have initiated a discussion with their doctor about a sleep problem only 12% of adult 18 to 29 years of age have done so.

Table 38: Discussion with Doctor about Sleep

	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Has your doctor ever asked you about how you are sleeping?	37.9	29.2	44.1	25.0	39.9	55.6	34.8	34.4
Have you ever initiated a discussion with a doctor about a sleep problem?	19.9	13.2	24.7	12.3	22.6	21.0	17.5	23.6
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Diagnosed Sleep Disorders and Treatment

Adults were asked if a doctor had ever told them that they had insomnia, sleep apnea, restless legs syndrome, or narcolepsy. Those who had been told by a doctor that they had one of these sleep disorders were further queried as to whether or not they had received treatment for their condition.

5% of adults in the U.S. have been told by a doctor that they have insomnia, 2% have been told that they have sleep apnea, 2% have also been told that they have restless leg syndrome and 5 people (0.4%) reported that they have been told they have narcolepsy (see Table 39).

Only half of those diagnosed with insomnia report having received treatment for their condition (53%). 46% of those told they have sleep apnea and 33% of those who have been told they have restless leg syndrome have received treatment for the disorder.

Table 39: Sleep Disorders

<i>Have you ever been told by a doctor that you had . . .</i>	
	% yes
Insomnia	4.9
Sleep Apnea	2.3
Restless Legs Syndrome	2.1
Narcolepsy	0.4
Ever had Treatment for . . . (among those who were told)	
Insomnia	53.4
Sleep Apnea	46.4
Restless Legs Syndrome	33.3
Narcolepsy	40.0

Sleep Aids

Respondents were asked what they were most likely to do when they experienced difficulty sleeping. 53% of adults in the U.S. reported that they are most likely to do nothing when they have difficulty sleeping (see Table 40). 18% of adults report using herbal or nutritional supplements and 17% report using over-the-counter medications when they have difficulty sleeping. Only 7% of adults reported that they usually take of prescription medication when they have trouble sleeping. A higher percent of women than men report usually using prescription medication. A substantially higher percent of adults 18 to 29 years old are most likely to use an herbal or nutritional supplement when they have difficulty sleeping (27%) compared to adults 30 to 64 years of age (16%) and those 65 years of age and older (7.2).

Table 40: Most Likely To Do When Having Difficulty Sleeping

In the past year, when experiencing difficulty sleeping, which of the following were you Most Likely to do?	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Take Prescription Medication	6.9	3.9	9.1	4.6	7.5	9.6	5.4	5.6
Take Over-the-counter Sleep Aid	16.7	14.0	18.6	18.6	16.2	16.8	16.6	20.9
Take an Herbal or Nutritional Supplement	17.9	19.4	16.8	27.4	16.0	7.2	19.8	23.5
Do Nothing	52.8	57.9	49.2	47.0	55.2	50.4	53.6	45.4
DK/NA	5.6	4.7	6.2	2.5	5.1	16.0	4.5	4.6
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Approximately one quarter of U.S. adults agreed that they would take a sleeping pill if they had difficulty sleeping for a month (see Table 40b). Fewer men (17%) than women (30%) agreed that they would take a sleeping pill. There was no significant difference by shift or age, though there was a trend toward more older adults agreeing that they would take a sleeping pill compared to younger adults.

Table 40b: Attitudes Toward Taking Sleep Medication

		Strongly Agree	Somewhat Agree	Neither	Somewhat Disagree	Strongly Agree	DK/NA
		%	%	%	%	%	%
If I had difficulty sleeping for a month, I would take a sleeping pill							
Total		13.4	11.0	0.6	9.4	63.9	1.6
Sex	Male	8.5	8.9	0.6	11.0	69.0	2.1
	Female	17.0	12.5	0.6	8.3	60.3	1.3
Age	18 – 29	9.2	12.7	0.0	9.5	67.6	1.1
	30 – 64	13.4	11.5	0.7	10.0	62.7	1.6
	65 +	23.2	5.6	1.6	6.4	60.8	2.4
Work Hours	Regular Days	11.2	12.6	0.6	8.2	66.0	1.4
	Shift Work	13.3	9.7	0.5	12.8	62.2	1.5
If I start to use sleeping pills, I may always need them to sleep.							
Total		23.9	15.7	2.5	14.7	38.6	4.6
Sex	Male	20.5	17.6	2.9	13.8	39.5	5.8
	Female	26.4	14.3	2.2	15.4	38.0	3.7
Age	18 – 29	21.7	20.3	1.0	13.3	42.7	1.0
	30 – 64	24.1	15.1	2.9	15.6	36.8	5.5
	65 +	29.0	8.9	4.8	12.9	36.3	8.1
Work Hours	Regular Days	22.3	16.0	2.2	16.7	38.8	4.0
	Shift Work	20.4	22.4	2.0	12.8	39.3	3.1

40% of U.S. adults agreed that if they started using sleeping pills they might always need them. There are no substantial differences in this opinion by sex, age or shift.

Approximately 22% of American adults report use of some medication to help them sleep in the past year (see Table 41). More women than men report the use of medications for sleep (27% vs. 15%). Nine to fourteen percent more adults 30 and older

have used a medication to help them sleep as adults 18 to 29 years old. A higher percent regular day than shift workers have used sleep medications in the past year.

Of those who have used a medication in the past year, just over half (55%) have used over-the-counter (OTC) medications only while approximately 35% have used prescription drugs only and 10% have used both in the past year (see Table 41). While similar percentages of men and women who've used a medication to help them sleep in past year have used prescription, OTC or both medications, significantly more adults ages 18 to 29 years old have used only OTCs (74%) compared to adults 30 to 64 years old (56%) and those 65 years of age and older (28%).

19% of adults report using alcohol to help them sleep in the past year (see Table 41). More men than women, more younger than older, and more shift workers than regular day workers report using alcohol to help them sleep in the past year.

Table 41: Use of Medications and Alcohol as Sleep Aids

In the past year, have you ever taken medication to help you sleep?	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Medication	22.1	14.9	27.3	14.8	24.3	28.5	21.9	16.0
Prescription*	34.8	35.6	34.4	23.8	33.1	55.6	26.2	27.7
Over-the-counter*	55.5	54.8	55.7	73.8	56.2	27.8	65.2	64.7
Both*	9.8	9.6	9.8	2.4	10.7	16.7	8.5	7.5
In the past year, have you used alcohol to help you sleep?								
Alcohol	18.7	22.9	15.6	26.0	18.3	6.4	20.6	31.3
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

* of those taking any medication for sleep.

Importance of Sleep to Health

Respondents were asked to which of the following they consider most important to their health:

Good Nutrition

Regular Exercise

Getting Enough Sleep

Managing Stress

Of the adults in the U.S., 20% reported that they considered getting enough sleep to be most important to maintaining health. Good nutrition and managing stress were the two factors most frequently reported as being most important to health (34% and 28% respectively). A higher percent of women (22%) than men (16%) ranked getting enough sleep as the most important to maintaining health: there were no substantial differences by age or work hours.

Table 42: Ranked Most Important to Health

Of the following, what is the MOST important to you in maintaining your health?	Total %	Sex		Age			Work Hours	
		Men %	Women %	18 – 29 %	30 – 64 %	65 + %	Regular Days %	Shift Work %
Good Nutrition	33.9	31.1	35.9	27.1	35.9	37.9	34.1	29.1
Regular Exercise	16.7	23.2	12.1	20.1	13.6	25.8	16.3	22.4
Getting enough Sleep	19.6	16.4	21.9	18.0	20.5	16.9	19.6	17.3
Managing Stress	28.1	27.7	28.3	34.2	28.7	12.1	29.1	31.1
DK/NA	1.7	1.7	1.8	0.7	1.4	7.3	0.9	0.0
Number of Respondents	(1154)	(483)	(671)	(287)	(731)	(126)	(646)	(197)

Technical Appendix

Study Parameters

Completed Interviews

Total	1154
Men	468
Women	686

Sampling Frame

Random Digit Dial (RDD) within the coterminous U.S. as generated from our Genesys, Inc. sampling system.

Respondent Selection

One adult (18 years or older) from each household was randomly selected as the designated respondent. Respondent selection was based on a modified last birthday technique.

Due to lower rate of cooperation rates among men compared to women, the probability of selecting a man was raised to between 0.60 and 0.65.

Field Period

October 11, 1999 – January 16, 2000

Average Instrument Length

24 minutes 34 seconds

Sample Disposition

Completed Interviews	1154
Ineligible	
Language Problem	217
Circumstantial	121
No Adults or QL2 or QL3 = don't know	11
Appointment Not Completed	
Prior to selection of Resp.	138
After Resp. selected	44
Refusal	
Prior to selection of Resp.	2455
After Resp. selected	361
Maximum Calls – No contact	
Ring-no-answer only	1080
Answering machine/Ring-no-answer	444
Facsimile machine	598
Busy signal	153
Non-household	1342
Non-working number	3082
Total Numbers	11200

Sample Disposition – Definition of Categories

Completed Interview	All appropriate questions were asked of respondent.
Ineligible – Language Problem	Informant/Respondent could not be screened/interviewed in English.
Ineligible – Circumstantial	This code was used when the informant/respondent was hard of hearing, hospitalized, or otherwise incapacitated (mentally or physically) in a way that prohibited participation in the study.
Appointment Not Completed	If the household could not be screened or the respondent was not available at the time of first contact, an appointment was made by the interviewer. The computer automatically released those appointments at the appropriate time. If, on callback, the respondent was still not available another appointment was made. Attempts to reach the respondent continued throughout the study period.
Refusal	The phone answerer refused to participate in the selection procedure OR the selected respondent would not begin the interview OR after beginning the interview the respondent would not continue. All initial refusals received at least one refusal conversion attempt.
Maximum Calls	This code was assigned if, after 6 attempts, no contact was ever made with a household. Attempts to contact a household were spread across parts of the day and days of the week, with all numbers receiving at least one daytime call. All attempts resulted in ring/no answers or pick-ups by answering machines.
Non-Household	A business, fax machine, modem, car phone, boat, dorm, telephone booth, etc., or household with no residents 18 years of age or older. Numbers reaching fax machines and modems were attempted several times before being classified as non-households.
Non-Working Number	This code was used when we encountered complete silence, a strange noise, or an operator message stating that the number had been changed, was unassigned or was disconnected. All numbers without recorded messages were recontacted several times before being classified as non-working.

Representativeness of the Sample

In order to interview a sufficient number of men, men were given a higher probability of being selected for the interview in households with both adult men and women in residence. To adjust for this unequal probability of selection, weights were assigned to each respondent equal to the inverse of his/her probability of selection. All presented analyses are weighted.

The cooperation rate for this study was 33% (number of completed interviews divided by the number of completed interviews, plus the number of contacted households who refused participation or did not complete appointments among those estimated to be eligible for the study – 23% of respondent unselected refusals, see sample disposition). A response rate of 60% is considered minimally adequate in scientific research. The degree to which a low response rate adversely affects the generalizability of the results from a sample depends on how different responders and non-responders are. The table below presents a comparison of the study sample to the 1990 U.S. Census in terms of age, sex and racial/ethnic distribution. As can be seen the study sample demographic makeup and that of the U.S. Census appear to differ in two ways; the study sample appears to be more middle aged than the population and less Caucasian. The degree to which survey responders and nonresponders differ in ways that relate to sleep is unknown, however, the poor response rate and the apparent demographic differences between the sample and the population require that caution be taken in generalizing the poll results to the U.S. population.

	<i>U.S. Census 1990 %</i>	<i>Unweighted Sample %</i>	<i>Weighted Sample %</i>
Age			
18 – 19	4.2	2.9	4.2
20 – 24	10.3	7.6	9.4
25 – 29	11.5	10.0	10.0
30 – 34	11.8	11.5	11.8
35 – 39	10.8	12.6	9.7
40 – 44	9.5	12.4	13.7
45 – 49	7.5	11.4	13.8
50 – 54	6.1	7.3	8.8
55 – 59	5.7	5.8	6.1
60 – 64	5.7	5.2	3.3
65 – 69	5.5	4.1	2.9
70 – 74	4.3	3.6	3.0
75 – 79	3.3		1.9
80 – 84	2.1		0.9
85 +	1.7		0.5
Sex			
Male	47.9	40.6	44.1
Female	52.1	59.4	55.9
Race/Ethnicity			
Caucasian	82.4	83.2	76.4
African American	11.1	10.4	11.8
Native American	0.6	1.7	1.9
Asian American	2.5	1.5	2.0
Other	3.3	3.1	7.7

The Interview

DIAL.SCREEN

(MAKE SURE YOU ARE SPEAKING WITH AN ADULT 18 YEARS OR OLDER)

(VERIFY IF NEEDED: Is this (###) ### - #### ?)

Hello, my name is _____. I am calling for the National Sleep Foundation.

We are conducting a national survey to learn more about the sleep habits of Americans and their attitudes about sleep. It will just take a few minutes to see if anyone in your house might be eligible to participate.

- 1. CONTINUE
- 2. REFUSAL (IWER: MAKE SURE ITS A REFUSAL B4 SELECTING)
- 3. APPOINTMENT
- 4. RETURN TO COVERSHEET (RNA, ANSWERING MACHINE, ETC.)

RETURN TO COVERSHEET

BUS.SCREEN

Have I reached a residence?

- 1. RESIDENCE (OR COMBINED BUSINESS AND RESIDENCE) --> GRID
- 2. BUSINESS -----> TERMINATE
- DK -----> TERMINATE

AGE.GRID

My computer randomly picks one person and I need to know
L2. How many men living in your household are age 18 or older?

- 0. NONE
- _ EXACT NUMBER UP TO 7
- 9. REFUSED ----- > TERMINATE
- DK ----- > TERMINATE

L3. How many women living in your household are age 18 or older?

- 0. NONE
- _ EXACT NUMBER UP TO 7
- 9. REFUSED ----- > TERMINATE
- DK ----- > TERMINATE

USE RANDOM PROBABILITY SELECTION PROCEDURE TO DETERMINE GENDER OF TARGET ADULT.

IF TWO OR THREE (MEN/WOMEN) WITHIN TARGET GENDER, USE RANDOM PROBABILITY SELECTION PROCEDURE TO DETERMINE RESPONDENT (OLDEST/SECOND OLDEST/YOUNGEST)

IF FOUR OR MORE (MEN/WOMEN) WITHIN TARGET GENDER USE LAST BIRTHDAY METHOD TO DETERMINE RESPONDENT

L4.1 (IF ONE (MAN/WOMAN) WITHIN TARGET GENDER: My computer has selected the (man/woman) living in your household who is 18 or older.

IF TWO OR THREE (MEN/WOMEN) WITHIN TARGET GENDER: My computer has selected the (oldest/second oldest/youngest) of the (men/women) living in your household who are 18 or older.

IF FOUR OR MORE (MEN/WOMEN) WITHIN TARGET GENDER: My computer has selected the (man/woman) living in your household who is 18 or older who celebrated a birthday most recently.) to participate in this study...

(IWER: ASK ONE OF THE FOLLOWING ONLY IF NEEDED)

(Would that be YOU?/Am I speaking to [him/her] ?)

(May I speak to [him/her] please?)

1. R ALREADY ON PHONE --> QSEX
2. R COMES TO PHONE
(F2) I CANNOT IDENTIFY WHO R IS, MAKE APPOINTMENT
(F2) R NOT AT HOME OR CAN'T TALK NOW, MAKE APPOINTMENT
(F2) I REFUSES TO BRING R TO PHONE/TERMINATE

L5. (IWER: IF R IS SAME AS PERSON WHO ANSWERED PREVIOUS Q, DO NOT READ THIS)

Hello, I'm _____ calling for the National Sleep Foundation.

Researchers from the National Sleep Foundation are working on a national research study to learn more about the sleep habits of Americans and their attitudes about sleep. My computer has randomly selected you from among the adult members of your household to participate in this study.

(ADDITIONAL INFORMATION ABOUT THE STUDY: We're studying many issues, including sleep habits, sleep problems and how lack of sleep affects your daily activities.)

SEX. INTERVIEWER: RECORD SEX OF RESPONDENT

(DK NOT ALLOWED)

1. MALE
2. FEMALE

- I6. Before we begin, you should know that there is no right or wrong answer to any question. Most answers require a simple one-word response.

I. Sleep Habits

INTRO.Q83

First, please think about your sleeping schedule in the past TWO WEEKS.

83A. In the past TWO WEEKS, at what time did you usually get up on days you work or weekdays?

(IWER: IF NECESSARY CLARIFY: "On WEEKDAYS or days you usually worked in the past TWO WEEKS.")

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY get up?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

84A. And, at what time did you usually go to bed on days you work?

(IWER: IF NECESSARY CLARIFY: "On WEEKDAYS or days you usually worked in the past TWO WEEKS.")

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY go to bed?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

85. On a work day, how many hours did you usually sleep during one DAY, NOT including naps?

(IWER: IF NECESSARY CLARIFY: "On WEEKDAYS or days you usually worked in the past TWO WEEKS." OR "When you are on your NORMAL or TYPICAL schedule, if the last 2 weeks were ATYPICAL.")

(IWER: IF NECESSARY PROBE: "On AVERAGE, how many hours?")

(IWER: IF NECESSARY CLARIFY: "By one day I mean one 24-hour period.")

#_____	<one-quarter, one-fourth=1/4	>
DK	<one-half=1/2	>
HR= HOURS	<three-quarters, three-fourths=3/4	>
MI= MINUTES	<one-third=1/3	>
<two-thirds=2/3		>

- 88A. In the past TWO WEEKS, at what time did you usually get up on days you usually didn't work or WEEKENDS?

(IWER: IF NECESSARY CLARIFY: "On WEEKENDS or days you usually didn't work in the past TWO WEEKS.")

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY get up?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

- 89A. And, at what time did you usually go to bed on days you didn't work?

(IWER: IF NECESSARY CLARIFY: "On WEEKENDS or days you usually didn't work in the past TWO WEEKS.")

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY go to bed?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

90. How many hours did you usually sleep during one, non-work DAY, not including naps?

(IWER: IF NECESSARY CLARIFY: "On WEEKENDS or days you usually didn't work in the past TWO WEEKS." OR "When you are on your NORMAL or TYPICAL schedule, if the last 2 weeks were ATYPICAL.")

(IWER: IF NECESSARY PROBE: "On AVERAGE, how many hours?")

(IWER: IF NECESSARY CLARIFY: "By one day I mean one 24-hour period.")

#_____	<one-quarter, one-fourth=1/4	>
DK	<one-half=1/2	>
HR= HOURS	<three-quarters, three-fourths=3/4	>
MI= MINUTES	<one-third=1/3	>
	<two-thirds=2/3	>

INTRO.Q93

Next, please tell me if you AGREE or DISAGREE with the following statements.

93.(1-5). [First...(How about...)]

1. "I will sleep less in order to get more work done."
2. "I need an alarm clock to get up in the morning."
3. "I often stay up later than I should because I am watching TV or on the Internet."
4. "If I had difficulty sleeping for a month, I would take a sleeping pill."
5. "If I start to use sleeping pills, I may always need them to sleep."

(Do you AGREE or DISAGREE with this statement?)

(Would that be STRONGLY or SOMEWHAT?)

1. STRONGLY AGREE
2. SOMEWHAT AGREE
3. NEITHER AGREE NOR DISAGREE/NEUTRAL (VOLUNTEERED)
4. SOMEWHAT DISAGREE
5. STRONGLY DISAGREE
- DK

II. Sleep Experiences: Sleep Quality/Sleep Disorders

INTRO.Q34

I'm going to read a list of sleep problems. Please think about how often you have had each of the following problems within the PAST YEAR.

(95-36). [First.../(How about...)]

- 95. "You had difficulty falling asleep."
- 34. "You were awake a lot during the night."
- 35. "You woke up feeling UN-refreshed."
- 36. "You woke up too early and could not get back to sleep."

(How often has this happened to you within the PAST YEAR?)

(EVERY NIGHT OR ALMOST EVERY NIGHT, A FEW NIGHTS A WEEK, A FEW NIGHTS A MONTH, OR RARELY OR NEVER?)

- 1. EVERY NIGHT OR ALMOST EVERY NIGHT
- 2. A FEW NIGHTS A WEEK
- 3. A FEW NIGHTS A MONTH
- 4. RARELY OR NEVER
- DK

INTRO.Q29

Now I'd like to ask you about your experiences with specific sleep-related problems or disorders IN THE PAST YEAR.

- 29. In the past year, according to your own experiences OR WHAT OTHERS TELL YOU, how often do you snore...

(READ LIST IF NECESSARY)

- 1. EVERY NIGHT OR ALMOST EVERY NIGHT,
- 2. A FEW NIGHTS A WEEK,
- 3. A FEW NIGHTS A MONTH, OR
- 4. RARELY OR NEVER?
- 5. NO PARTNER/LIVE ALONE - DONT KNOW (DO NOT READ) (VOLUNTEERED)
- DK (DO NOT READ) DO NOT PROBE

31. In the last year, according to your own experiences OR WHAT OTHERS TELL YOU, how often do you have pauses in your breathing during sleep...

(READ LIST IF NECESSARY)

1. EVERY NIGHT OR ALMOST EVERY NIGHT,
 2. A FEW NIGHTS A WEEK,
 3. A FEW NIGHTS A MONTH, OR
 4. RARELY OR NEVER?
 5. NO PARTNER/LIVE ALONE - DONT KNOW (DO NOT READ) (VOLUNTEERED)
- DK (DO NOT READ) DO NOT PROBE

32. How often do you have unpleasant feelings in your legs, like creepy, crawly, or tingly feelings when you lie down at night...

(READ LIST IF NECESSARY)

1. EVERY NIGHT OR ALMOST EVERY NIGHT,
 2. A FEW NIGHTS A WEEK,
 3. A FEW NIGHTS A MONTH, OR
 4. RARELY OR NEVER?
- DK (DO NOT READ)

INTRO.Q200

Next I'd like to ask you about how often you are disrupted during sleep due to each of the following:

DO NOT ASK Q200.8 AND Q200.9 IF R VOLUNTEERED NO PARTNER IN Q29 OR Q31

ROTATE Q200.1,Q200.2,Q200.3,Q200.4,Q200.6,Q200.7,Q200.8,Q200.9,Q200.10,Q200.13

200.(1-13). [First.../(How about...)]

1. "Pain, or physical discomfort."
2. "Allergies or respiratory problems."
3. "Nasal congestion."
4. "Indigestion, such as heartburn."
6. "Stress or worries."
7. "Noise, light, or temperature"
8. "The snoring of a partner."
9. "The pauses in breathing of a partner."
10. "Children."
13. "Feeling uncomfortable due to your mattress, pillow or bedding."

(How often has this disrupted your sleep within the PAST YEAR?)

(EVERY NIGHT OR ALMOST EVERY NIGHT, A FEW NIGHTS A WEEK, A FEW NIGHTS A MONTH, OR RARELY OR NEVER?)

1. EVERY NIGHT OR ALMOST EVERY NIGHT,
 2. A FEW NIGHTS A WEEK,
 3. A FEW NIGHTS A MONTH, OR
 4. RARELY OR NEVER?
 5. DOES NOT APPLY (VOLUNTEERED)
- DK

III. Daytime Sleepiness

INTRO.Q37

Next, I have some questions about how sleepiness affects your daily activities.

37. First...

How often do you have sleepiness during the day so bad that it interferes with your daily activities...

(READ LIST IF NECESSARY)

1. EVERY DAY OR ALMOST EVERY DAY,
 2. A FEW DAYS A WEEK,
 3. A FEW DAYS A MONTH, OR
 4. RARELY OR NEVER?
- DK (DO NOT READ)

INTRO.Q202

Next, I'm going to ask you how likely you would have been to doze off or fall asleep in certain situations, in contrast to just feeling tired. Even if you haven't done some of these things recently, please give me your best estimate of how they would have affected you.

For the following situations, please tell me whether there was a HIGH CHANCE, MODERATE, SLIGHT, or NO CHANCE you would have dozed off.

202.(1-8). [First,/(How about),]

1. "Sitting and reading."
2. "Watching T.V."
3. "Sitting inactive in a public place such as a theater or a meeting."
4. "As a passenger in a car for an hour without a break."
5. "Lying down to rest in the afternoon when circumstances permit."
6. "Sitting and talking to someone."
7. "Sitting quietly after a lunch without alcohol."
8. "In a car, while stopped for a few minutes in traffic."

(During the last two weeks,) (was there a HIGH CHANCE, MODERATE, SLIGHT, or NO CHANCE you would have fallen asleep?)

1. HIGH CHANCE
 2. MODERATE CHANCE
 3. SLIGHT CHANCE
 4. NO CHANCE
- DK

IV. Driving Drowsy

INTRO.Q46

Now I'd like to ask you a few questions about your experiences while driving a car.

47. In the last year, have you ever driven a car or other vehicle while feeling drowsy?

- 1. YES
- 2. NO -----> Q50
- 3. DON'T DRIVE/DON'T HAVE LICENSE (VOLUNTEERED) --> Q52.1
- 9. REFUSED -----> Q50
- DK -----> Q50

47.1. In the last year, when you have felt drowsy while driving, do you usually...

(READ LIST, PAUSING AFTER EACH FOR A 'YES' OR 'NO')

(SELECT ALL THAT APPLY)

- 01. DRIVE FASTER?
- 02. FIND YOURSELF BECOMING IMPATIENT?
- 03. FIND YOURSELF FEELING STRESSED?
- 04. PULL OVER TO TAKE A NAP?
- 05. USE CAFFEINATED PRODUCTS?
- 09. ANYTHING ELSE? (SPECIFY)_____
- 15. NONE OF THE ABOVE (DO NOT READ)
- DK (DO NOT READ)

(50-52). [In the last year.../(How about (in the last year)...)]

50. "Have you dozed off, even if just for a brief moment, while at the wheel of a car or other vehicle?"

52. "Have you had an accident because you dozed off or were too tired while driving?"

- 1. YES
- 2. NO
- 9. REFUSED
- DK

52.1. Do you believe that companies that hire transportation workers, such as airline pilots, truck drivers, train conductors, and cab drivers, should limit the number of hours they allow their drivers to work per shift?

1. YES
2. NO
9. REFUSED
- DK

52.2. How concerned are you that you will be at risk if there is NO limit placed on the number of hours transportation workers can work per shift? Would you say you are...

(READ LIST)

1. VERY CONCERNED,
2. SOMEWHAT CONCERNED, OR
4. NOT AT ALL CONCERNED?
- DK (DO NOT READ)

V. Substances taken to stay awake

75. In the past year, have you ever taken medication to help you STAY AWAKE?

1. YES
2. NO ---> Q70
- DK -----> Q70

76. Was this medication...

(READ LIST)

1. PRESCRIPTION, OR
2. OVER THE COUNTER?
3. BOTH (VOLUNTEERED)
- DK (DO NOT READ)

VI. Health Care: Diagnosis and Treatment of Sleep Disorders

70. Has your doctor EVER asked you about how you are sleeping?

- 1. YES
- 2. NO
- DK

72. Have you EVER initiated a discussion with a doctor about a sleep problem?

- 1. YES
- 2. NO
- DK

ROTATE Q62A,Q63A,Q64A,Q65A

(62-65)A. [Have you EVER been told by a doctor that you have.../(Have you EVER been told by a doctor that you have...)/(How about...)]

62. "Sleep apnea (AP-nee-uh)"

63. "Restless Legs Syndrome"

64. "Narcolepsy (NAR-ko-LEP-see)"

65. "Insomnia"

?

- 1. YES
- 2. NO ----> (NEXT SLEEP DISORDER)
- DK -----> (NEXT SLEEP DISORDER)

(62-65)C. Have you EVER had treatment for...

[SLEEP DISORDER] ?

- 1. YES
- 2. NO
- DK

VII. Sleep Aids

204. In the past year, when experiencing difficulty sleeping, which of the following were you MOST LIKELY to do...

(READ LIST) (SELECT ONE ONLY)

(IWER: IF R SELECTS MORE THAN ONE, PROBE: "For the sake of the study, can you pick just the ONE you usually do from the list?")

1. TAKE A PRESCRIPTION MEDICATION,
2. TAKE AN OVER-THE-COUNTER SLEEP AID, OR
3. TAKE A HERBAL OR NUTRITIONAL SUPPLEMENT, SUCH AS MELATONIN (mel-uh-TOE-nin)?
6. DO NOTHING (DO NOT READ)
7. OTHER (SPECIFY)_____ (DO NOT READ)
- DK (DO NOT READ)

66. In the past year, have you ever taken medication to help you sleep?

1. YES
2. NO ---> Q103
- DK -----> Q103

67. Was this medication...

(READ LIST)

1. PRESCRIPTION, OR
2. OVER THE COUNTER?
3. BOTH (DO NOT READ) (VOLUNTEERED)
- DK (DO NOT READ)

103. IN THE PAST YEAR, how often did you drink alcohol to help you fall asleep...

(READ LIST)

1. OFTEN, (ALWAYS/FREQUENTLY)
2. SOMETIMES,
3. RARELY, OR
4. NEVER?
- DK (DO NOT READ)

VIII. Teens and Sleep

INTRO.Q22
INTRO.Q22.

Now I'd like to ask about some sleeping issues of younger people.

22A. How many children 18 and under are currently living in your household?

(IWER: IF NECESSARY CLARIFY: "Please include only children who are under 19 years old who live with you for most of the year.")

-
- 00. NONE/DON'T HAVE ANY
- 99. REFUSED -----> INTRO.Q77
- DK -----> INTRO.Q77

22A.1. [Is the child/How many of the children] currently living in your household [/are] between the ages of 10 and 18?

(IWER: IF NECESSARY CLARIFY: "Please include only children who are older than 9 and younger than 19 who live with you for most of the year.")

-
- 00. NONE/DON'T HAVE ANY
- 99. REFUSED -----> INTRO.Q77
- DK -----> INTRO.Q77

Q22A.2. Are you the parent or gaurdian of [this child?/these children?]

- 1. YES
- 2. NO ----> INTRO.Q77
- DK -----> INTRO.Q77

27B.(1-10). How old is your [1st/2nd/3rd/etc. (oldest/youngest/next)] child?

(IWER: CLARIFY IF NECESSARY: "Your [1st/2nd/3rd/etc. (oldest/youngest/next)] child")

(IWER: CLARIFY IF NECESSARY: "We are only asking about your children between the ages of 10 and 18")

-
- 99. REFUSED
- DK

27BB.(1-10). Is your [1st/2nd/3rd/etc. (oldest/youngest/next)] child a BOY or a GIRL?

(IWER: CLARIFY IF NECESSARY: "Your [1st/2nd/3rd/etc. (oldest/youngest/next)] child")

- 1. BOY
- 2. GIRL
- DK

207.(1-10)C. What time does this child's school start?

(IWER: CLARIFY IF NECESSARY: "Your [1st/2nd/3rd/etc. (oldest/youngest/next)] child")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

207.(1-10)D. What time does this child usually go to bed on SCHOOL DAYS?

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did this child MOST OFTEN or USUALLY go to bed on school days?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

207.(1-10)E. And, at what time does this child usually get up on a SCHOOL DAY?

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did this child MOST OFTEN or USUALLY get up on school days?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM
DK

207.(1-10)G. What time does this child usually go to bed on the WEEKEND?

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did this child MOST OFTEN or USUALLY go to bed on the weekend?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM

DK

207.(1-10)H. And, at what time does this child usually get up on the WEEKEND?

(IWER: IF R SAYS "Last 2 weeks was ATYPICAL" OR "No typical time" OR "It varies" PROBE: "What time did this child MOST OFTEN or USUALLY get up on the weekend?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM

DK

207.(1-10)K. How difficult is it to get this child to go to bed at night on a school day? Would you say...

(READ LIST)

1. VERY DIFFICULT,
 2. SOMEWHAT DIFFICULT, OR
 3. NOT DIFFICULT?
- DK (DO NOT READ)

207.(1-10)L. How difficult is it to get this child up in the morning on a school day? Would you say...

(READ LIST)

1. VERY DIFFICULT,
 2. SOMEWHAT DIFFICULT, OR
 3. NOT DIFFICULT?
- DK (DO NOT READ)

207.(1-10)M. What activity is this child MOST LIKELY to do one hour before bedtime?

(DO NOT READ LIST)

1. WATCH TV
 2. USE THE COMPUTER
 3. TALK ON THE PHONE
 4. DO HOMEWORK
 5. WORK AT A JOB

 7. OTHER (SPECIFY) _____
- DK

207.(1-10)N. How often has this child been late to school due to over sleeping or being too tired?

(READ LIST)

1. EVERY DAY OR ALMOST EVERY DAY,
 2. A FEW DAYS A WEEK,
 3. A FEW DAYS A MONTH, OR
 4. RARELY OR NEVER?
- DK (DO NOT READ)

207.(1-10)P. What would be the best school start time for this child?

(IWER: CLARIFY IF NECESSARY: "Your [1st/2nd/3rd/etc. (oldest/youngest/next)] child")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ HR:MIN AM/PM
DK

IX. Workplace

INTRO.Q77
INTRO.Q77.

The next questions are about your work and sleep.

77. What was your employment status in the past 3 months? Were you...

(IWER: IF R SAYS "self employed" PROBE: "Is that full-time or part-time")

(READ LIST, PAUSING AFTER EACH FOR A 'YES' OR 'NO')

(SELECT ALL THAT APPLY)

- 01. WORKING MORE THAN ONE JOB?
- 02. WORKING FULL-TIME (AS EMPLOYEE OR SELF-EMPLOYED)?
- 03. WORKING PART-TIME (AS EMPLOYEE OR SELF-EMPLOYED)?
- 04. STUDENT?
- 05. HOMEMAKER?
- 06. UNEMPLOYED?
- 07. OR SOMETHING ELSE? (SPECIFY) _____
- 08. RETIRED (DO NOT READ) (VOLUNTEERED)
- 09. DISABLED (DO NOT READ) (VOLUNTEERED)
- 10. VOLUNTEER (DO NOT READ) (VOLUNTEERED)
- 11. REFUSED (DO NOT READ) (VOLUNTEERED)
- DK (DO NOT READ)

IF Q77 = UNEMPLOYED OR (DISABLED AND NOT PART TIME OR FULL TIME OR STUDENT OR HOMEMAKER OR VOLUNTEER), THEN GO TO Q230A

WORK READ THE FOLLOWING INTRO ONLY IF R IS A STUDENT/HOMEMAKER/VOLUNTEER AND DOES NOT FULL OR PART TIME

INTRO.Q80
INTRO.Q80.

For the following work questions, when we say "work" or "job", please think about your (school work/house work/work as a volunteer) .

80. On average, how many total hours per week do you work at all jobs?

(READ LIST IF NECESSARY)

- 01. LESS THAN 10 HOURS,
- 02. 10 TO 20 HOURS,
- 03. 21 TO 30 HOURS,
- 04. 31 TO 40 HOURS,
- 05. 41 TO 50 HOURS,
- 06. 51 TO 60 HOURS,
- 07. 61 TO 70 HOURS,
- 08. 71 TO 80 HOURS,
- 09. 81 TO 90 HOURS, OR
- 10. MORE THAN 91 HOURS?
- 99. REFUSED (DO NOT READ)
- DK (DO NOT READ)

IF Q77 <> FULL-TIME/PART-TIME/MORE THAN ONE JOB/VOLUNTEER, THEN GO TO Q209A

80.2A. (I'm going to read you a list, please tell me) Which of the following best describes the TYPE of work you do? Would you say...

(READ LIST)

(IWER: IF NECESSARY CLARIFY: "Please think only about your PRIMARY job. (or the job for which you work the most hours")

- 01. PROFESSIONAL,
- 02. MANAGERIAL,
- 03. PROPRIETOR OF A SMALL BUSINESS,
- 04. CLERICAL,
- 05. SALES,
- 06. SKILLED CRAFTSMAN OR FOREMAN,
- 07. FARMER, FARM MANAGER, OR FARM LABOR,
- 08. UNSKILLED LABOR,
- 09. SERVICE, OR
- 10. SOMETHING ELSE? (SPECIFY) _____
- DK (DO NOT READ)

80.2B. Which of the following best describes the INDUSTRY in which you work?
Would you say...

(READ LIST)

(IWER: IF NECESSARY CLARIFY: "Please think only about your PRIMARY
job. (or the job for which you work the most hours")

01. AGRICULTURE, FORESTRY, OR FISHING,
 02. MINING,
 03. CONSTRUCTION,
 04. MANUFACTURING,
 05. TRANSPORTATION OR PUBLIC UTILITIES,
 06. WHOLESALE OR RETAIL TRADE,
 07. FINANCE, INSURANCE, OR REAL ESTATE,
 08. SERVICE,
 09. GOVERNMENT, OR
 10. SOMETHING ELSE? (SPECIFY) _____
- DK (DO NOT READ)

X. Work Schedules

INTRO.Q80.3
INTRO.Q80.3.

Next, I'd like to ask you some questions about your work schedule in the past THREE MONTHS.

80.3. How many jobs do you work?

___ # OF JOBS
DK --> Q78

80.4A.(1-4). For your (primary/second/third/fourth) job, do you work primarily from HOME or at a WORKPLACE?

1. HOME
2. WORKPLACE
DK

80.4.(1-4). At what time do you start your (primary/second/third/fourth) job?

(IWER: IF R SAYS "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY begin your (primary/second/third/fourth) job?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM

9996. VARIES

DK

80.5.(1-4). At what time do you end your (primary/second/third/fourth) job?

(IWER: IF R SAYS "No typical time" OR "It varies" PROBE: "What time did you MOST OFTEN or USUALLY end your (primary/second/third/fourth) job?")

(IF NEEDED, PROBE: "Is that AM or PM?")

(NOON = 12:00P / MIDNIGHT = 12:00A)

__:__ __ HR:MIN AM/PM

9996. VARIES

DK

78. Thinking about the past 3 months, which of the following best describes your work schedule...

(IWER: If R SAYS THAT THE LAST TWO WEEKS HAVE BEEN ATYPICAL PROBE: "Please think about the two weeks before that.")

(READ LIST) (SELECT ALL THAT APPLY) (DO NOT PROBE FOR OTHERS)

1. REGULAR DAY SHIFTS,
 2. REGULAR EVENING SHIFTS,
 3. REGULAR NIGHT SHIFTS, OR
 4. ROTATING SHIFTS?
- DK (DO NOT READ)

IF Q78 <> 4 THEN GO TO Q209A

79. How often does your work schedule rotate...

(READ LIST) (DO NOT PROBE FOR OTHERS)

1. EVERY DAY,
 2. EVERY TWO DAYS TO A WEEK,
 3. WEEKLY,
 4. EVERY TWO WEEKS,
 5. MONTHLY, OR
 6. MORE THAN MONTHLY?
7. OTHER (SPECIFY)_____ (DO NOT READ)
- DK (DO NOT READ)

209A. Are you satisfied or dissatisfied that your present work schedule allows you to get enough sleep?

(PROBE: "Would that be COMPLETELY, VERY, or SOMEWHAT?")

1. COMPLETELY SATISFIED
 2. VERY SATISFIED
 3. SOMEWHAT SATISFIED
4. NEITHER SATISFIED NOR DISSATISFIED
5. SOMEWHAT DISSATISFIED
 6. VERY DISSATISFIED,
 7. COMPLETELY DISSATISFIED
- DK

211. After how many hours of work do you feel too sleepy to do quality or safe work? (Would you say...)

(READ LIST IF NECESSARY)

1. LESS THAN 6 HOURS,
 2. 6 TO JUST UNDER 8 (HOURS),
 3. 8 TO JUST UNDER 10 (HOURS),
 4. 10 TO JUST UNDER 12 (HOURS),
 5. 12 TO JUST UNDER 14 (HOURS), OR
 6. MORE THAN 14 HOURS?
- DK (DO NOT READ)

XI. Sleep Habits Relevant to Work

212. Are you satisfied with the amount of time you are able to sleep during the work week?

- 1. YES
- 2. NO
- DK

213. How many hours do YOU need to sleep to make sure you are not sleepy at work?

(IWER: IF NECESSARY PROBE: "On AVERAGE, how many hours?")

(IWER: IF NECESSARY CLARIFY: "By one day I mean one 24-hour period.")

- #_____ <one-quarter, one-fourth=1/4 >
- DK <one-half=1/2 >
- HR= HOURS <three-quarters, three-fourths=3/4 >
- MI= MINUTES <one-third=1/3 >
- <two-thirds=2/3 >

214. How often do you feel tired or sleepy at work? Would you say...

(READ LIST)

- 1. NEVER,
- 2. LESS THAN ONCE A MONTH,
- 3. 2 TO 3 TIMES A MONTH,
- 4. ONCE A WEEK,
- 5. 2 TO 3 TIMES A WEEK, OR
- 6. ABOUT EVERY DAY?

DK (DO NOT READ)

216A. How often is it difficult to wake up on work days? (Would you say...)

(READ LIST IF NECESSARY)

- 1. NEVER,
- 2. LESS THAN ONCE A MONTH,
- 3. 2 TO 3 TIMES A MONTH,
- 4. ONCE A WEEK,
- 5. 2 TO 3 TIMES A WEEK, OR
- 6. ABOUT EVERY DAY?

DK (DO NOT READ)

216B. How often is it difficult to wake up on non-work days? (Would you say...)

(READ LIST IF NECESSARY)

1. NEVER,
2. LESS THAN ONCE A MONTH,
3. 2 TO 3 TIMES A MONTH, OR
4. ONCE A WEEK,

DK (DO NOT READ)

IF Q77 <> FULL-TIME/PART-TIME/MORE THAN ONE JOB/VOLUNTEER, THEN GO TO Q219

217. Have you ever changed jobs or employers so you could get more sleep?

1. YES
 2. NO
- DK

219. How often have problems at work disturbed your sleep at home? (Would you say...)

(READ LIST IF NECESSARY)

1. NEVER,
2. LESS THAN ONCE A MONTH,
3. 2 TO 3 TIMES A MONTH,
4. ONCE A WEEK,
5. 2 TO 3 TIMES A WEEK, OR
6. ABOUT EVERY DAY?

DK (DO NOT READ)

XII. Sleepiness on the Job

WORK READ THE FOLLOWING INTRO ONLY IF R IS A STUDENT/HOMEMAKER/VOLUNTEER AND DOES NOT FULL OR PART TIME

INTRO.Q220A

For the following work questions, when we say "work" or "job", please continue to think about your (school work/house work/work as a volunteer) .

INTRO.Q220B

Now I'm going to ask you some questions about how you work on days after you've experienced sleeplessness compared to days when you feel rested. By sleeplessness, we mean not getting enough sleep, or getting poor sleep.

220(A-F). [First,/(How about,)]...

- A. "making decisions."
- B. "listening."
- C. "concentrating."
- D. "solving problems."
- E. "handling stressful situations."
- F. "relating to coworkers."

((was this MORE DIFFICULT, THE SAME, or LESS DIFFICULT) on days after you experience sleeplessness than on days when you felt rested?)

- 1. MORE DIFFICULT
- 2. THE SAME
- 3. LESS DIFFICULT
- 4. DOES NOT APPLY (VOLUNTEERED)
- DK

ROTATE Q44A,Q45A,Q46A

(44-46)A. [Does your sleeplessness interfere with.../(Does your sleeplessness interfere with.../How about...)]

44. "your concentration"

45. "the amount of work you accomplish by the end of the day"

46. "the overall quality of your work"

?

1. YES

2. NO ----> (NEXT ACTIVITY)

DK -----> (NEXT ACTIVITY)

(44-46)B. If on a work day when you feel rested...

44. "you are able to concentrate at 100 percent, at what percent do you concentrate..."

45. "the amount of work you accomplish by the end of the day is at 100 percent, what percent of this work do you accomplish..."

46. "the overall quality of your work is at 100 percent, at what percent is the quality of your work..."

on days after you didn't get enough sleep or had poor sleep?

____%

DK

221(A-F). [Thinking about the last 3 months, how often.../(Thinking about the last 3 months,) how often...]

- A. "were you late to work"
- B. "did you not go to work"
- C. "did you fall asleep while at work"
- D. "did you leave work early"
- E. "did you make errors at work"
- F. "did you have an injury at work"

(because of sleeplessness?) (Would you say...)

(READ LIST IF NECESSARY)

- 1. FREQUENTLY,
- 2. OCCASIONALLY,
- 3. HARDLY EVER, OR
- 4. NEVER?
- DK

IF Q77 <> FULL-TIME/PART-TIME/MORE THAN ONE JOB/VOLUNTEER, THEN GO TO Q230A

XIII. Employer Policies

227A. Are you allowed to nap at work?

- 1. YES
- 2. NO -----> Q227D
- 9. REFUSED --> Q227D
- DK -----> Q227D

227B. Do you nap at work?

- 1. YES
- 2. NO
- 9. REFUSED
- DK

GO TO Q227C

227D. Would you take a nap at work if your employer allowed it?

- 1. YES
- 2. NO
- 9. REFUSED
- DK

227C. Do you nap before work?

- 1. YES
- 2. NO
- 9. REFUSED
- DK

227C2. Do you nap after work?

- 1. YES
- 2. NO
- 9. REFUSED
- DK

230A. When you do not have enough hours in the day to get everything done, which of the following would be the FIRST THING you usually give up...

(READ LIST)

1. TIME WITH FRIENDS, FAMILY, OR SIGNIFICANT OTHERS,
 2. RECREATIONAL ACTIVITIES,
 3. SLEEP, OR
 4. HOUSEHOLD OR PERSONAL CHORES?
 5. DON'T GIVE UP ANYTHING (DO NOT READ) (VOLUNTEERED) --> Q231A
- DK (DO NOT READ) -----> Q231A

230B. (When you do not have enough hours in the day to get everything done) the SECOND THING you usually give up is...

(READ LIST)

[REPOSE OPTIONS MINUS OPTION SELECTED IN Q230A]

DK (DO NOT READ) --> Q231A

230C. (When you do not have enough hours in the day to get everything done) the THIRD THING you usually give up is...

(READ LIST)

[REPOSE OPTIONS MINUS OPTIONS SELECTED IN Q230A AND Q230B]

DK (DO NOT READ) --> Q231A

231A. Of the following, what is the MOST important TO YOU in maintaining your health? Would you say...

(READ LIST)

1. GOOD NUTRITION,
 2. REGULAR EXERCISE,
 3. GETTING ENOUGH SLEEP, OR
 4. MANAGING STRESS?
- DK (DO NOT READ) -----> INTRO.Q115

231B. (Of the following,) what is the SECOND MOST important in maintaining your health? Would you say...

(READ LIST)

[RESPONSE OPTIONS MINUS OPTION SELECTED IN Q231A]

DK (DO NOT READ) --> INTRO.Q115

231C. (Of the following,) what is the THIRD MOST important in maintaining your health? Would you say...

(READ LIST)

[RESPONSE OPTIONS MINUS OPTIONS SELECTED IN Q231A AND Q231B]
DK (DO NOT READ) --> INTRO.Q115

XIV. Demographic Questions

INTRO.Q115

The final set of questions is for classification purposes only.

115. Are you currently MARRIED, LIVING WITH SOMEONE, WIDOWED, DIVORCED, SEPARATED, OR HAVE YOU NEVER BEEN MARRIED?

(IWER: IF NECESSARY: "That is, living with someone in a marriage-like relationship.")

1. MARRIED
2. LIVING WITH SOMEONE
3. WIDOWED
4. DIVORCED
5. SEPARATED
6. NEVER BEEN MARRIED
9. REFUSED
- DK

116. Please STOP me when I read the category that best describes your household's total annual income from all sources, before taxes...

(READ LIST)

(IWER: USE IF NECESSARY/IF R REFUSES: "These types of questions are used to stratify and classify the data collected during the course of the interview. Your answers are COMPLETELY confidential and you will NEVER be identified individually.")

01. UNDER 15,000,
02. 15 TO 25 (24,999),
03. 25 TO 35 (34,999),
04. 35 TO 45 (44,999),
05. 45 TO 55 (54,999),
06. 55 TO 65 (64,999),
07. 65 TO 75 (74,999), OR
08. OVER 75,000?
99. REFUSED (DO NOT READ)
- DK (DO NOT READ)

117. Can you please tell me in what YEAR were you born?

- 19__
99. REFUSED
DK

118. What is the highest level of education you have completed?

(READ LIST IF NECESSARY)

1. LESS THAN HIGH SCHOOL GRADUATE, (DID NOT GRADUATE H.S.)
2. HIGH SCHOOL GRADUATE, (GED)
3. SOME COLLEGE, (BUT DID NOT GRADUATE)
4. COLLEGE GRADUATE,
5. TRADE/TECHNICAL/VOCATIONAL TRAINING, OR
6. POSTGRADUATE WORK/DEGREE?
9. REFUSED (DO NOT READ)
- DK (DO NOT READ)

119. Are you of Hispanic origin or descent?

(IWER: CLARIFY IF NECESSARY: "Such as Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish background")

1. YES
2. NO
9. REFUSED
- DK

120. Which of the following best describes you...

(READ LIST)

1. WHITE (CAUCASIAN),
2. AFRICAN-AMERICAN OR BLACK,
3. ASIAN,
4. NATIVE AMERICAN, OR
5. SOMETHING ELSE? (SPECIFY) _____
6. HISPANIC (DO NOT READ)
9. REFUSED (DO NOT READ)
- DK (DO NOT READ)

121. What is your zip code, please?

(IWER: IF R REFUSES, ENTER "99999")

DK

122. How would you describe the area in which you live...

(READ LIST)

1. RURAL,
2. URBAN, OR
3. SUBURBAN?

4. OTHER _____ (SPECIFY) (DO NOT READ)
9. REFUSED (DO NOT READ)
- DK (DO NOT READ)

123A. Does more than one telephone NUMBER ring in this HOME? Please DO NOT include business numbers.

(IWER: IF R SAYS ANOTHER LINE FOR FAX OR MODEM, THEN ENTER "Yes")

1. YES
2. NO -----> THANKS.SCREEN
9. REFUSED --> THANKS.SCREEN
- DK -----> THANKS.SCREEN

123B. Including the number I dialed, how many numbers ring in this home?

(Please include NON-BUSINESS numbers only.)

(PHONE NUMBER ORIGINALLY DIALED: (###) ### - ####)

- ___ # OF PHONE NUMBERS/LINES IN THIS HOME
99. REFUSED
 - DK

THANKS.SCREEN

Thank you very much for your time.