Table S1. Validation of self-reported sleep apnea in a subsample from the Nurses' Health Studies<sup>1</sup>

Apnea-Hypopnea Index Lowest oxygen saturation, % Sleep duration, min Sleep efficiency, % Waist circumference, cm Neck circumference, cm	Median (range) 21 (6, 58) 78 (52, 88) 316 (204, 482) 75 (49, 90) 108.0 (74.3, 165.7) 36.2 (24.8, 54.6)
	Percent
Apnea-Hypopnea Index category	
Mild (5-14)	11
Moderate (15-29)	58
Severe (≥30)	31
Diagnostic methods <sup>2</sup>	
In-lab polysomnography	92
Home sleep apnea test	9
Overnight oxymetry	24
Evaluation of symptoms by a physician	28
Other	6
Type of sleep apnea	
Obstructive	98
Central	1
Mixed	1
Symptoms <sup>2</sup>	
Loud snoring	65
Excessive daytime sleepiness	47
Fatigue	72
Witnessed apnea	36
Other <sup>3</sup>	21
Treatment <sup>2</sup>	
CPAP <sup>4</sup>	93 (72)
Oral appliance <sup>3</sup>	15 (5)
Oxygen machine	15
Surgery <sup>5</sup>	6
Weight loss	45
Frequency of current CPAP use	
1-2 nights per week	0
3 or more nights per week	100

<sup>&</sup>lt;sup>1</sup>The supplemental questionnaire and request for medical record were sent to 150 NHS/NHSII participants. A total of 108 women returned the questionnaire, and 8 women did not give content for medical record access. Medical records were obtained for 96 women. Data on Apnea-Hypopnea Index, lowest oxygen saturation, sleep duration and sleep efficiency were

extracted from medical records; other data were based on self-reports.

<sup>&</sup>lt;sup>2</sup>The sum exceeds 100% as women were allowed to check all that apply

<sup>&</sup>lt;sup>3</sup>Other reported symptoms that have led to sleep apnea diagnosis included frequency arousal, morning headache, frequent urination, nightmare, restless leg syndrome, and temporomandibular joint disorders

<sup>&</sup>lt;sup>4</sup>The number in the parentheses is the percent for current users

<sup>&</sup>lt;sup>5</sup>Only two types of surgery were reported, nasal surgery and weight-loss surgery

Table S2. Prevalence of self-reported sleep apnea diagnosis in the health professionals compared to the projected US prevalence of moderate-to-severe sleep-disordered breathing (AHI≥15)

	Women		Men	
	Nurses	US estimates <sup>1</sup>	Health Professionals	US estimates <sup>1</sup>
Age <50 yrs <sup>2</sup>				
Overall	5.5 (4.5, 6.8)	3.0 (2.0, 4.0)		10.0 (7.0, 12.0)
BMI <25	1.8 (1.4, 2.3)	0.2 (0.1, 0.3)		0.9 (0.5, 1.6)
BMI 25-29.9	4.0 (3.2, 5.0)	0.7 (0.3, 1.2)		3.8 (2.5, 5.3)
BMI 30-39.9	10.6 (8.6, 12.9)	3.6 (2.0, 5.7)		16.6 (12.5, 21.7)
BMI ≥40	24.5 (20.5, 29.1)	18.6 (11.7, 27.0)		55.0 (41.8, 69.2)
Age 50-70 yrs <sup>3</sup>				
Overall	7.5 (7.2, 7.8)	9.0 (7.0, 11.0)	13.7 (12.7, 14.8)	17.0 (15.0, 21.0)
BMI <25	2.5 (2.3, 2.6)	1.4 (0.7, 2.5)	7.4 (6.8, 8.1)	3.6 (2.0, 5.4)
BMI 25-29.9	5.4 (5.2, 5.7)	4.5 (3.0, 6.3)	13.2 (12.3, 14.2)	10.6 (8.2, 13.0)
BMI 30-39.9	13.9 (13.5, 14.3)	13.9 (10.4, 17.4)	27.1 (25.3, 29.0)	29.0 (24.6, 33.9)
BMI ≥40	30.8 (29.5, 32.2)	33.5 (25.7, 40.8)	49.3 (40.7, 57.9)	56.0 (46.3, 65.3)

<sup>&</sup>lt;sup>1</sup>The numbers were extracted from Peppard et al., which projected the findings from the Wisconsin Sleep Cohort Study to the NHANES population distribution to estimate the national prevalence

<sup>&</sup>lt;sup>2</sup>The age range in women was 47-49 yrs in the female nurses, and 30-49 yrs in Peppard et al.

<sup>&</sup>lt;sup>3</sup>The age range in men was 65-70 yrs in the male health professionals, and 50-70 yrs in Peppard et al.