

## Appendix

### I. Additional Methodology

**eTable 1** Causes of death in the Million Death Study, categorized using 3-character codes from the *International Statistical Classification of Diseases and Related Health Problems* version 10 (ICD-10). The estimated sensitivity and specificity of verbal autopsy is indicated for each cause of death.<sup>1</sup>

Cause of Death	ICD-10 Codes	Sensitivity (%)	Specificity (%)
Ischemic heart disease	I20–I25, I46, R55, R96	75.0	92.7
Stroke	G45–G46, I60–I67, I69, G81–83	75.0	95.0
Injury	D53, F79, K46, N43, Q20, Q21, Q24, V02, V03, V04, V05, V09, V12, V13, V14, V18, V23, V24, V26, V27, V28, V29, V33, V34, V38, V39, V44, V47, V48, V49, V54, V58, V59, V64, V68, V69, V78, V79, V80, V81, V84, V87, V89, V98, V99, W11, W14, W15, W20, W23, W36, W54, W55, W57, W69, W70, W74, W77, W79, W85, W86, W87, X00, X02, X04, X06, X08, X09, X20, X30, X32, X33, X44, X45, X48, X49, X91, X94, X95, X99, Y00, Y04, Y08, Y09, Y86, Y88, Z88	84.9	96.0
Cancer	C16, C14, C26, C22, C95, C55, C34, C10, C71, C80, C15, C06, C76, C32, C40, C41, C18, C39, C64	61.1	96.0
Respiratory	J45, J18, J44	21.4	97.0

### Cases

In accordance with local coding conventions, I46 (cardiac arrest), R55 (syncope and collapse), and R96 (other sudden death, cause unknown) were included in the definition of ischemic heart disease. In practice, these adjustments made little absolute difference because the vast majority of premature mortality in this category were classified under I21 (88.9%), I22 (3.9%), and I25 (3.0%).

Similarly, we included codes for hemiplegia and other paralytic syndromes (G81–G83) based on local coding conventions. In practice, this adjustment made little absolute difference because the vast majority of deaths in this category were classified under I64 (72.9%), I69 (17.1%), and I61 (6.5%).

### **Controls**

After excluding deaths due to ischemic heart disease and stroke, we examined the remaining causes of death with at least 50 cases each. We eliminated any causes of death with a known etiological association with hypertension or diabetes based on a review of the literature. We first grouped together the causes of death related to injury. As injury deaths consisted predominantly of young men, we defined two additional control groups dying of cancer and respiratory conditions, which were the most common remaining causes of death. We pooled the control groups together for the main estimates, and generated additional estimates using each control group separately.

### **High-Burden States**

There is a cluster of states in northeastern and eastern India that where the rate of stroke mortality is three times greater higher than the national average.<sup>2</sup> We characterized these states as “high-burden” states. Because cardiovascular risk factor distributions might be different in these states, we analyzed this cluster separately for the stroke outcomes. The high-burden states are: Assam, West Bengal, Chhattisgarh, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, and Meghalaya, for men and women; Odisha for women only.

### **Time Trends**

We tested whether the effects of hypertension and diabetes varied by year. For ischemic heart disease, there was a significant interaction between hypertension and year ( $p=0.0002$ ) and diabetes and year ( $p=0.0001$ ). For stroke, there was a significant interaction between hypertension and year in both high- and low-burden states ( $p=0.002$  and  $p=0.01$  respectively), and between diabetes and year in low-burden states only ( $p=0.002$ ). These interaction terms were included in all logistic regression models.

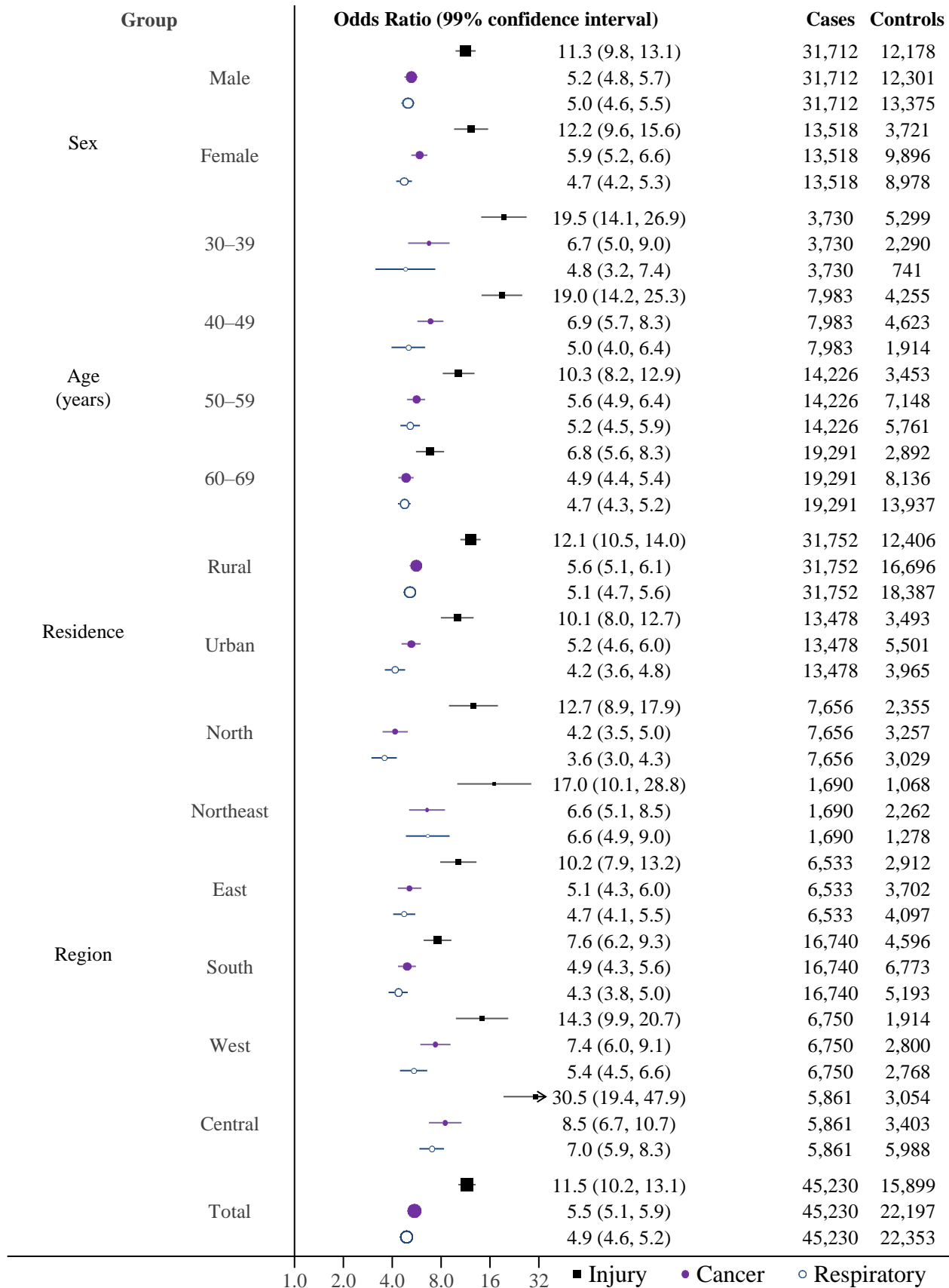
## II. Additional Results

**eTable 2** Baseline characteristics of case and control populations aged 30 to 69 years in the Million Death Study (2001 to 2014). All values in the table are unadjusted percentages unless otherwise indicated. Missing values were <0.5% unless otherwise indicated.

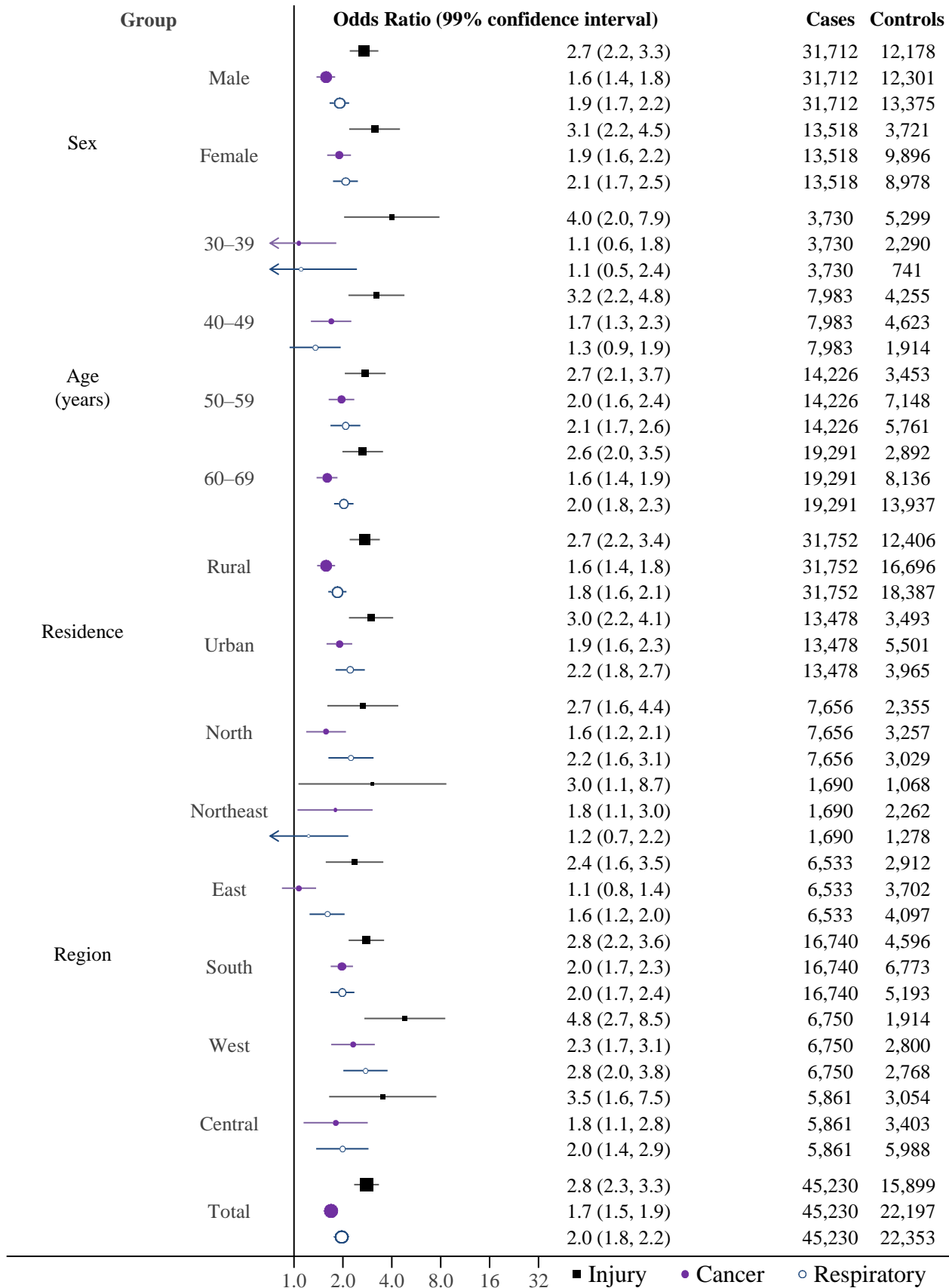
Characteristics	Cases				Controls		
	Ischemic Heart Disease (n=45,230)	Stroke			Injury (n=15,899)	Cancer (n=22,197)	Respiratory (n=22,353)
		High-Burden (n=8,176)	Low-Burden (n=14,275)	Total (n=22,451)			
<b>Previous Comorbidities</b>							
Diabetes	6,056 (13.4)	967 (11.8)	1,826 (12.8)	2,793 (12.4)	273 (1.7)	958 (4.3)	875 (3.9)
Unknown	3,299 (7.3)	947 (11.6)	1,004 (7.0)	1,951 (8.7)	1,290 (8.1)	1,798 (8.1)	1,834 (8.2)
Hypertension	16,113 (35.6)	3,665 (44.8)	5,787 (40.5)	9,452 (42.1)	549 (3.5)	1,914 (8.6)	2,128 (9.5)
Unknown	3,006 (6.6)	697 (8.5)	891 (6.2)	1,588 (7.1)	1,316 (8.3)	1,778 (8.0)	1,911 (8.5)
Heart Disease	25,513 (56.4)	1,445 (17.7)	1,327 (9.3)	2,772 (12.3)	300 (1.9)	659 (3.0)	1,048 (4.7)
Unknown	2,500 (5.5)	919 (11.2)	1,087 (7.6)	2,006 (8.9)	1,295 (8.1)	1,758 (7.9)	1,854 (8.3)
Stroke	4,478 (9.9)	4,854 (59.4)	7,736 (54.2)	12,590 (56.1)	184 (1.2)	336 (1.5)	290 (1.3)
Unknown	3,028 (6.7)	495 (6.1)	669 (4.7)	1,164 (5.2)	1,244 (7.8)	1,615 (7.3)	1,652 (7.4)
Cancer	240 (0.5)	48 (0.6)	92 (0.6)	140 (0.6)	57 (0.4)	18,378 (82.8)	217 (1.0)
Unknown	3,223 (7.1)	817 (10.0)	969 (6.8)	1,786 (8.0)	1,205 (7.6)	593 (2.7)	1,688 (7.6)
Asthma	2,619 (5.8)	540 (6.6)	743 (5.2)	1,283 (5.7)	289 (1.8)	1,176 (5.3)	18,372 (82.2)
Unknown	3,149 (7.0)	804 (9.8)	945 (6.6)	1,749 (7.8)	1,206 (7.6)	1,611 (7.3)	609 (2.7)
<b>Medications (2004–14 only)</b>							
Taking medications	8,819 (23.2)	1,339 (19.6)	3,881 (34.5)	5,220 (28.9)	672 (5.1)	7,193 (39.5)	5,923 (34.3)
Unknown	6,562 (17.3)	1,404 (20.5)	1,659 (14.8)	3,063 (16.9)	1,997 (15.1)	2,918 (16.0)	2,989 (17.3)
Missing	3,773 (9.9)	608 (8.9)	1,268 (11.3)	1,876 (10.4)	1,440 (10.9)	1,927 (10.6)	1,766 (10.2)
<b>Smoking (men only)</b>							
None	17,569 (55.4)	2,155 (48.1)	5,103 (58.2)	7,258 (54.8)	7,047 (57.9)	5,551 (45.1)	5,904 (44.1)
Cigarettes only	2,436 (7.7)	334 (7.5)	379 (4.3)	713 (5.4)	752 (6.2)	996 (8.1)	474 (3.5)
Bidis only	8,231 (26.0)	1,341 (29.9)	2,535 (28.9)	3,876 (29.3)	2,961 (24.3)	3,948 (32.1)	5,333 (39.9)
Cigarettes and bidis	2,477 (7.8)	538 (12.0)	449 (5.1)	987 (7.5)	932 (7.7)	1,446 (11.8)	1,199 (9.0)
Missing	999 (3.2)	114 (2.5)	296 (3.4)	410 (3.1)	486 (4.0)	360 (2.9)	465 (3.5)
<b>Alcohol Use (men only)</b>							
None	21,565 (68.0)	3,281 (73.2)	5,958 (68.0)	9,239 (69.8)	7,788 (64.0)	7,950 (64.6)	9,382 (70.1)
1–4	5,100 (16.1)	523 (11.7)	1,471 (16.8)	1,994 (15.1)	2,090 (17.2)	1,932 (15.7)	2,036 (15.2)
5–7	3,117 (9.8)	412 (9.2)	855 (9.8)	1,267 (9.6)	1,436 (11.8)	1,596 (13.0)	1,097 (8.2)
Unknown	584 (1.8)	97 (2.2)	132 (1.5)	229 (1.7)	272 (2.2)	306 (2.5)	237 (1.8)
Missing	1,346 (4.2)	169 (3.8)	346 (3.9)	515 (3.9)	592 (4.9)	517 (4.2)	623 (4.7)

**eFigure 1 (next page)** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and ischemic heart disease mortality, displayed separately for each control group. Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each shape is proportional to the sample size (cases and controls).

## A. Hypertension and Ischemic Heart Disease

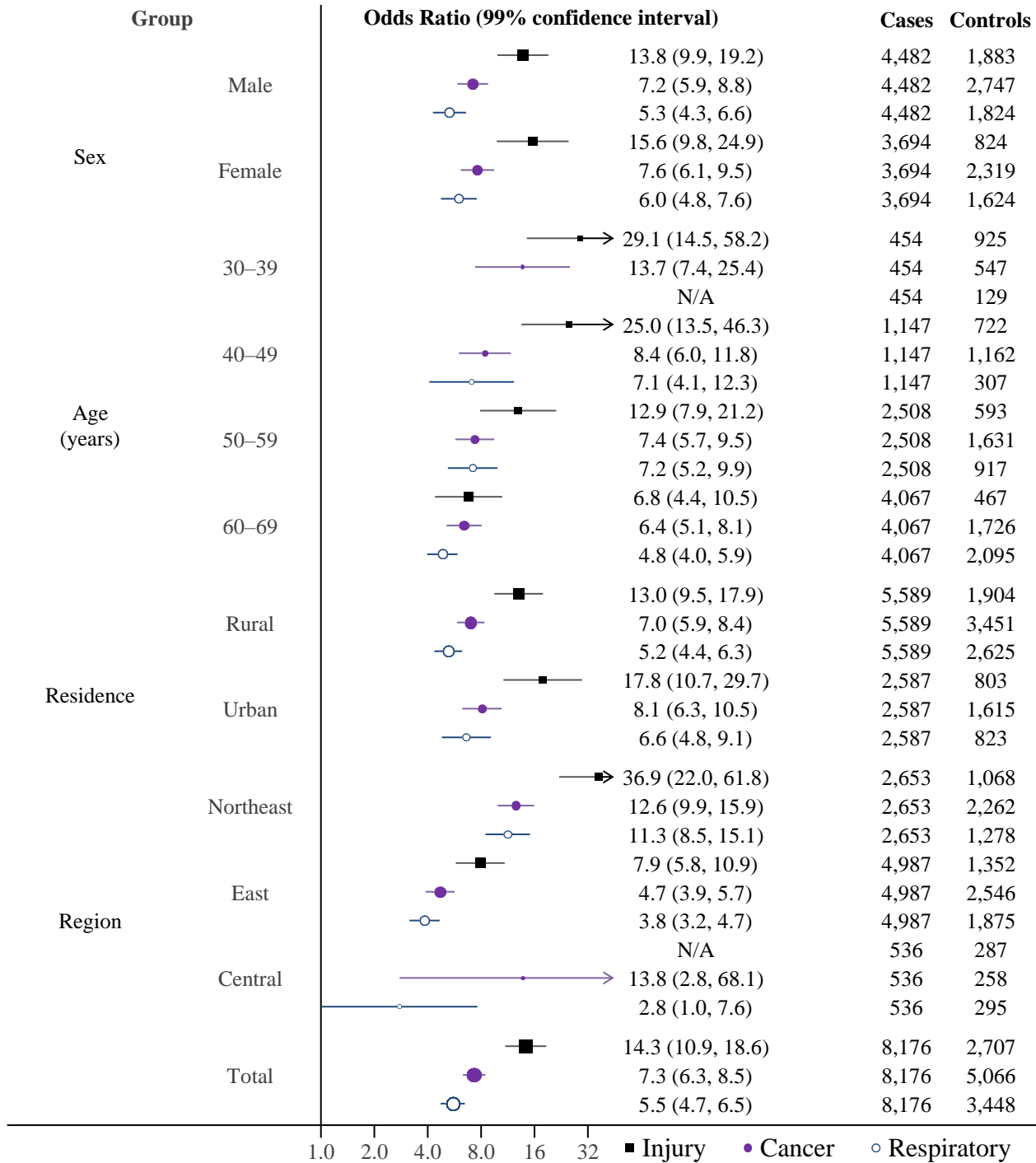


## B. Diabetes and Ischemic Heart Disease

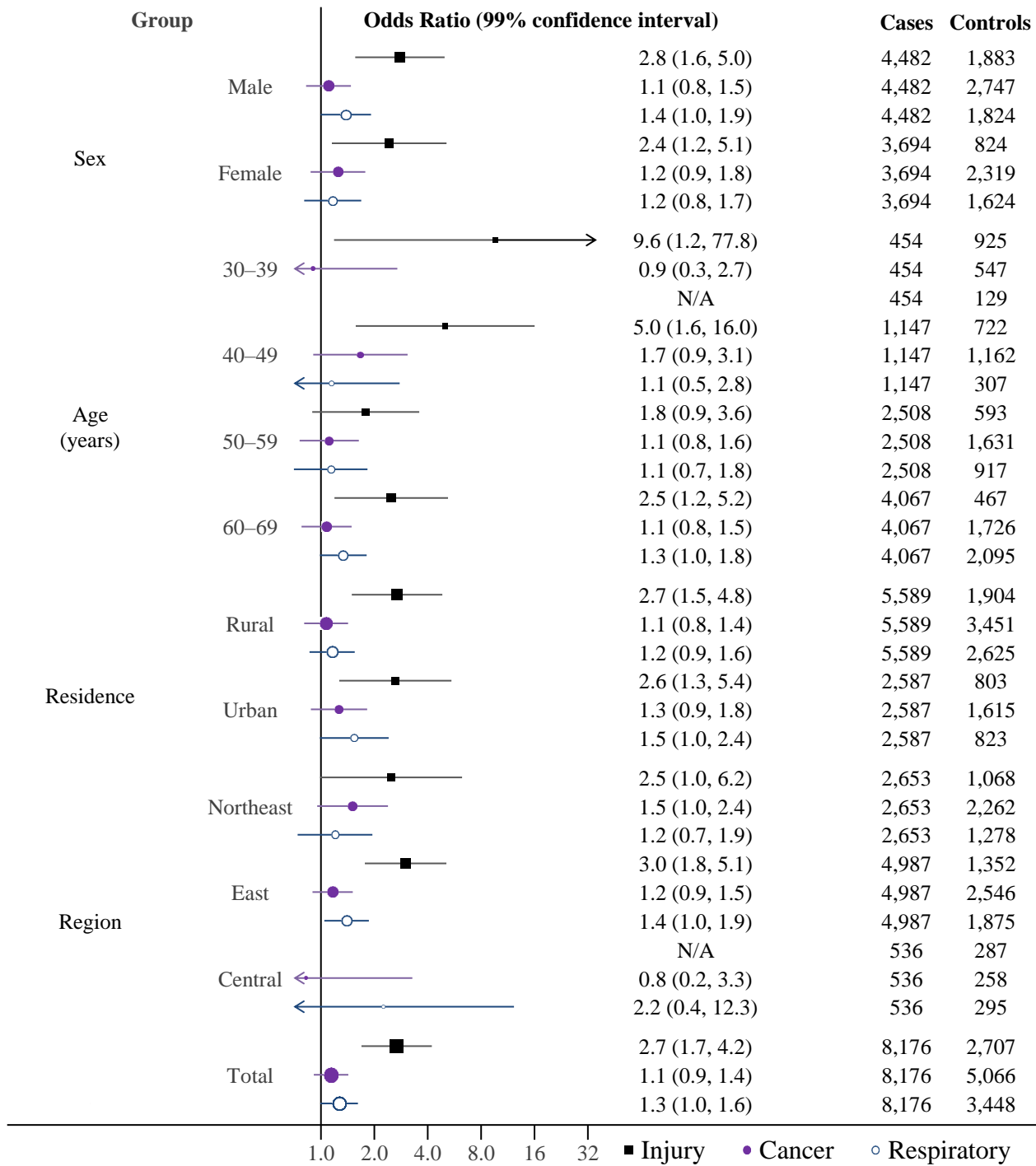


**eFigure 2** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in high-burden states, displayed separately for each control group. Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each shape is proportional to the sample size (cases and controls).

**A. Hypertension and Stroke, High-Burden States**



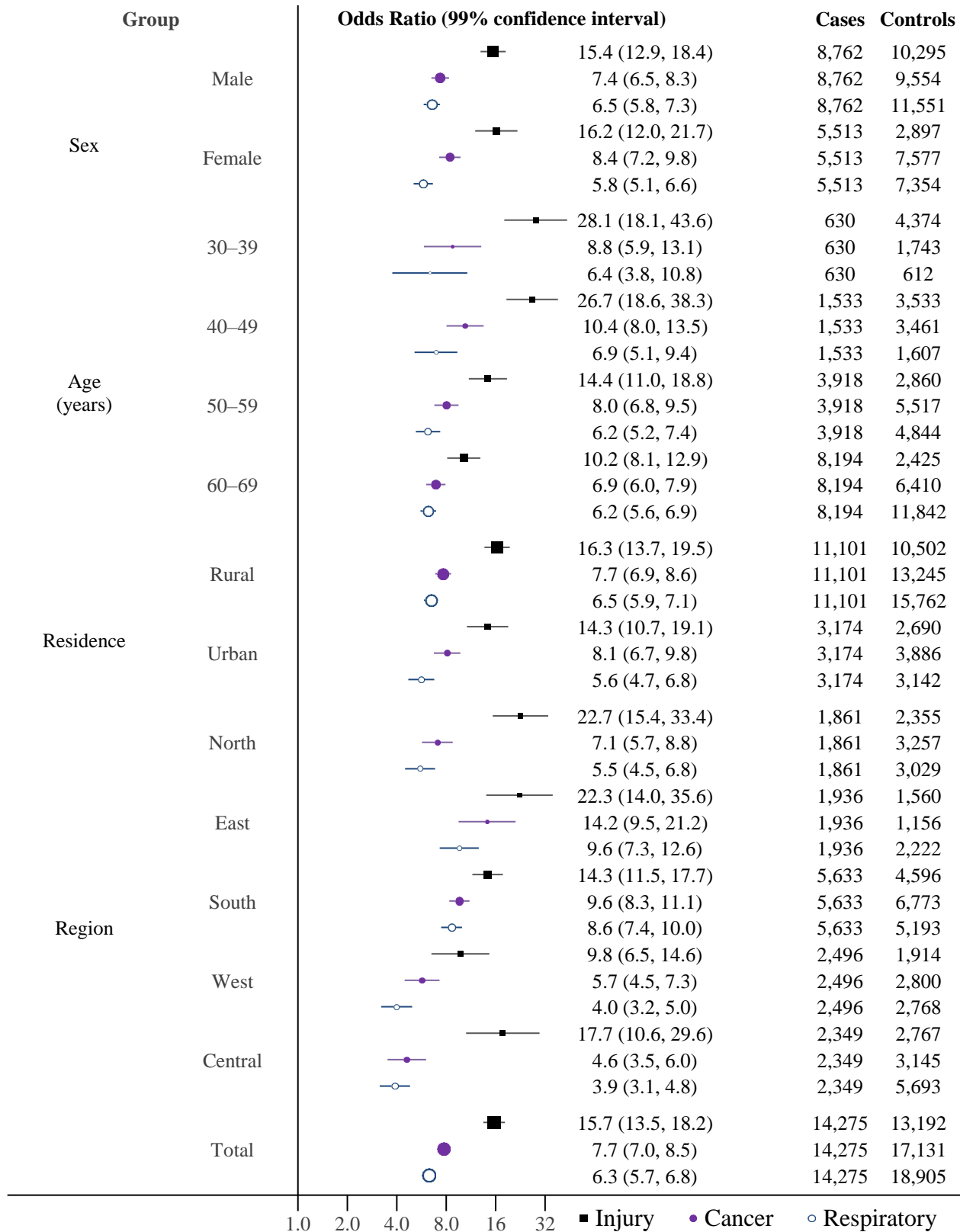
## B. Diabetes and Stroke, High-Burden States



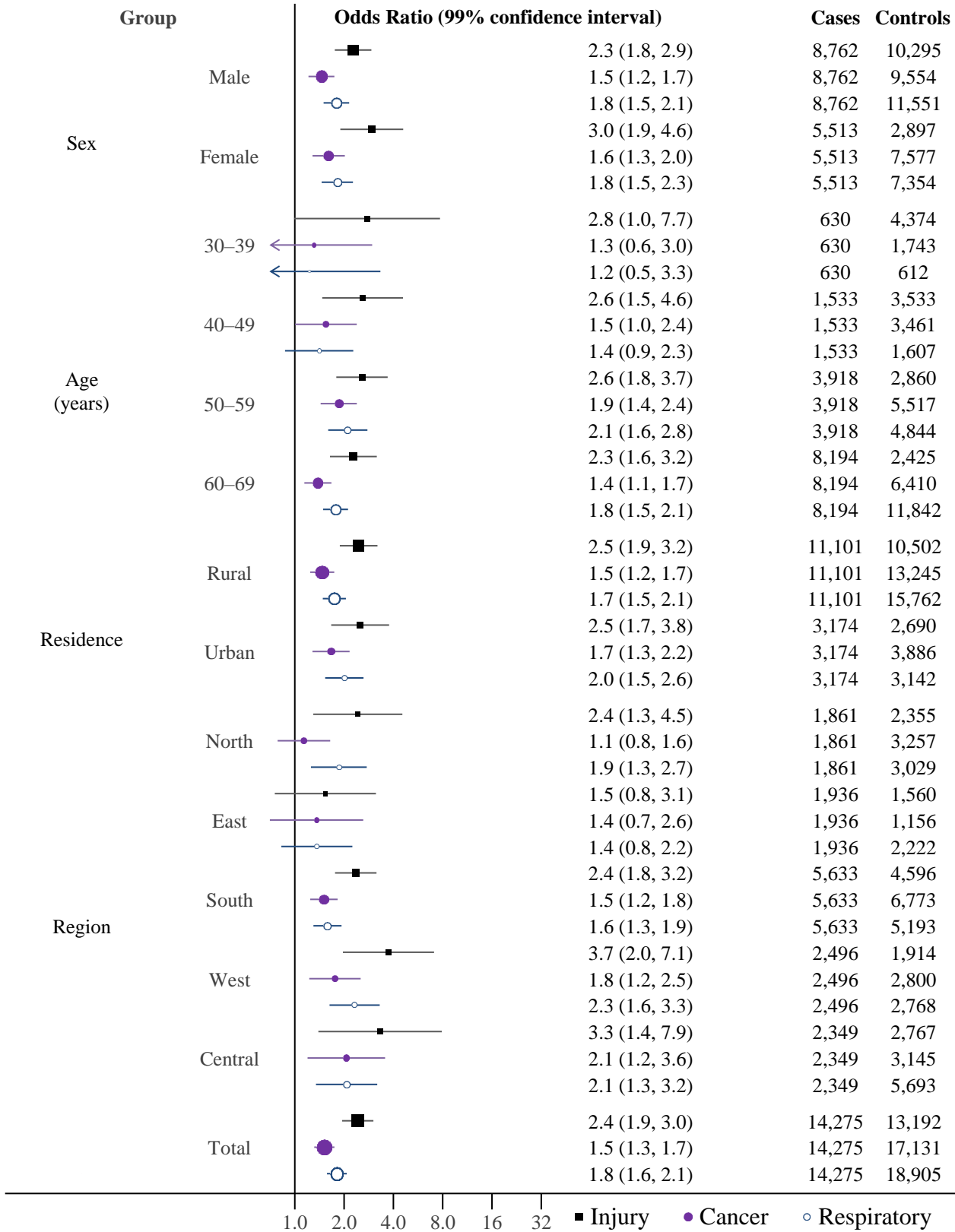


**eFigure 3 (next page)** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in low-burden states, displayed separately for each control group. Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each shape is proportional to the sample size (cases and controls).

### A. Hypertension and Stroke, Low-Burden States

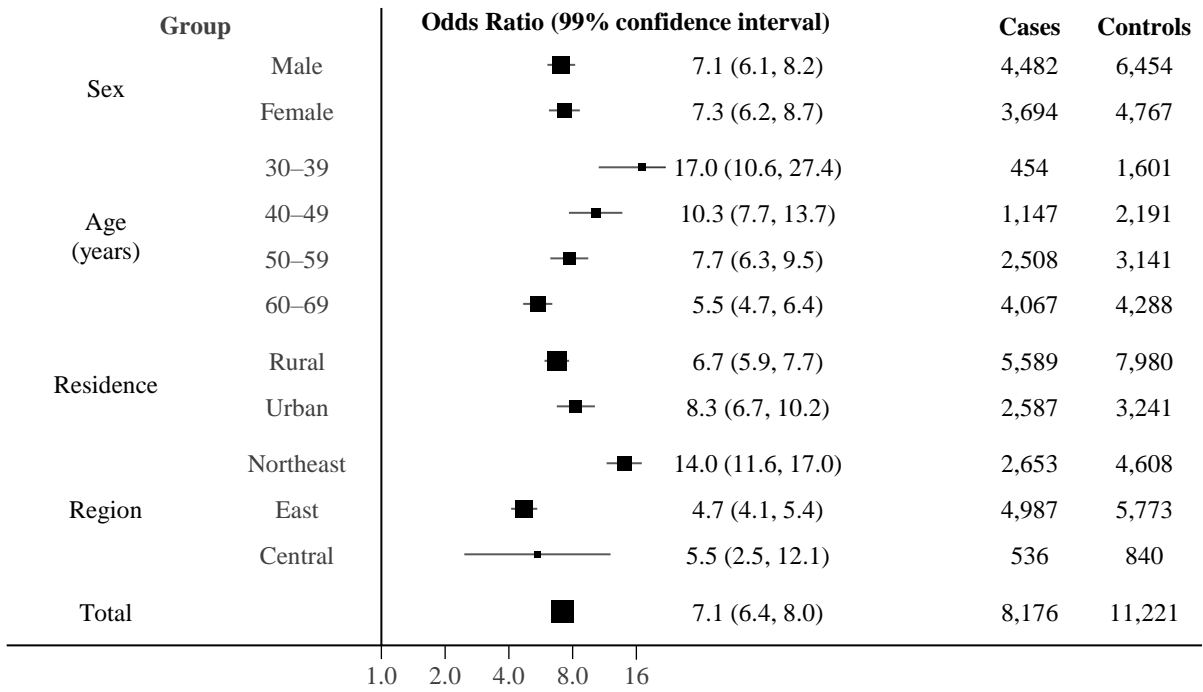


## B. Diabetes and Stroke, Low-Burden States

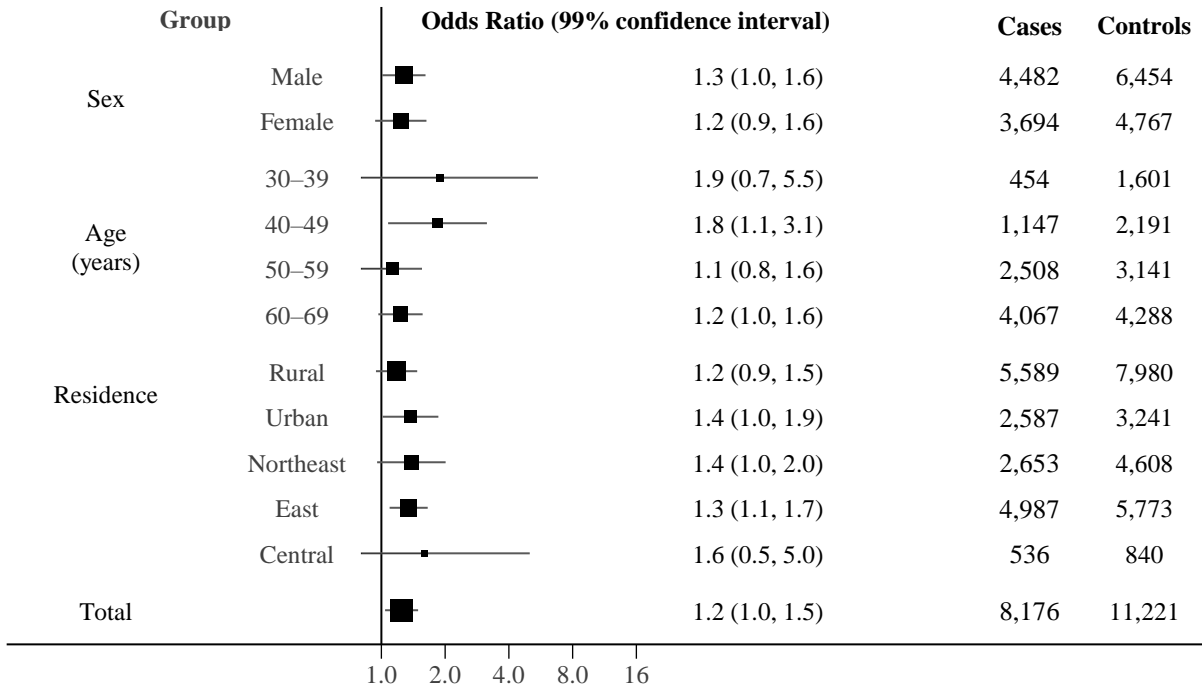


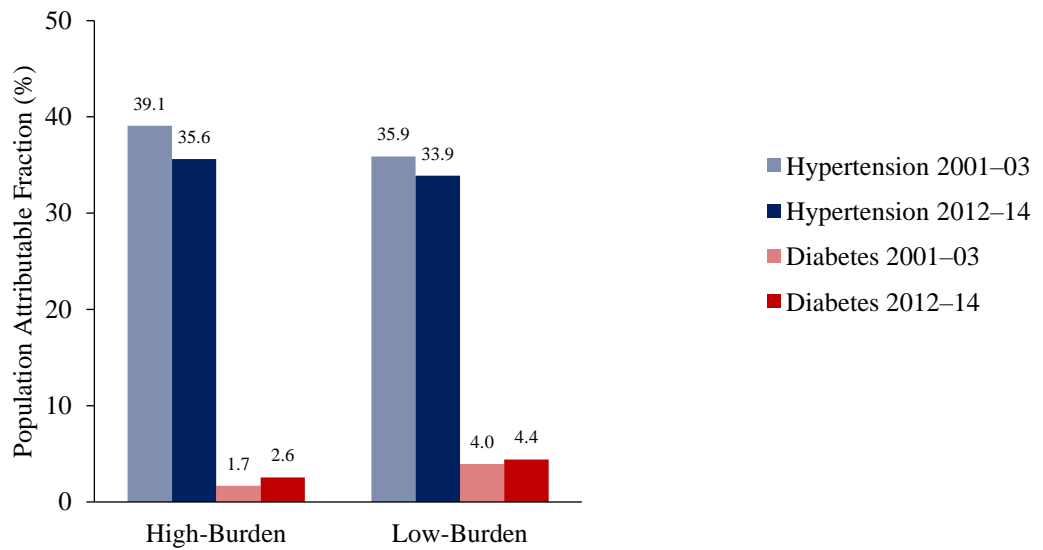
**eFigure 4 (next page)** Association between hypertension (A) or diabetes (B) and stroke mortality in high-burden states. The total and stratified estimates are adjusted for age, sex, urban/rural residence, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

### A. Hypertension and stroke, high-burden states



### B. Diabetes and stroke, high-burden states

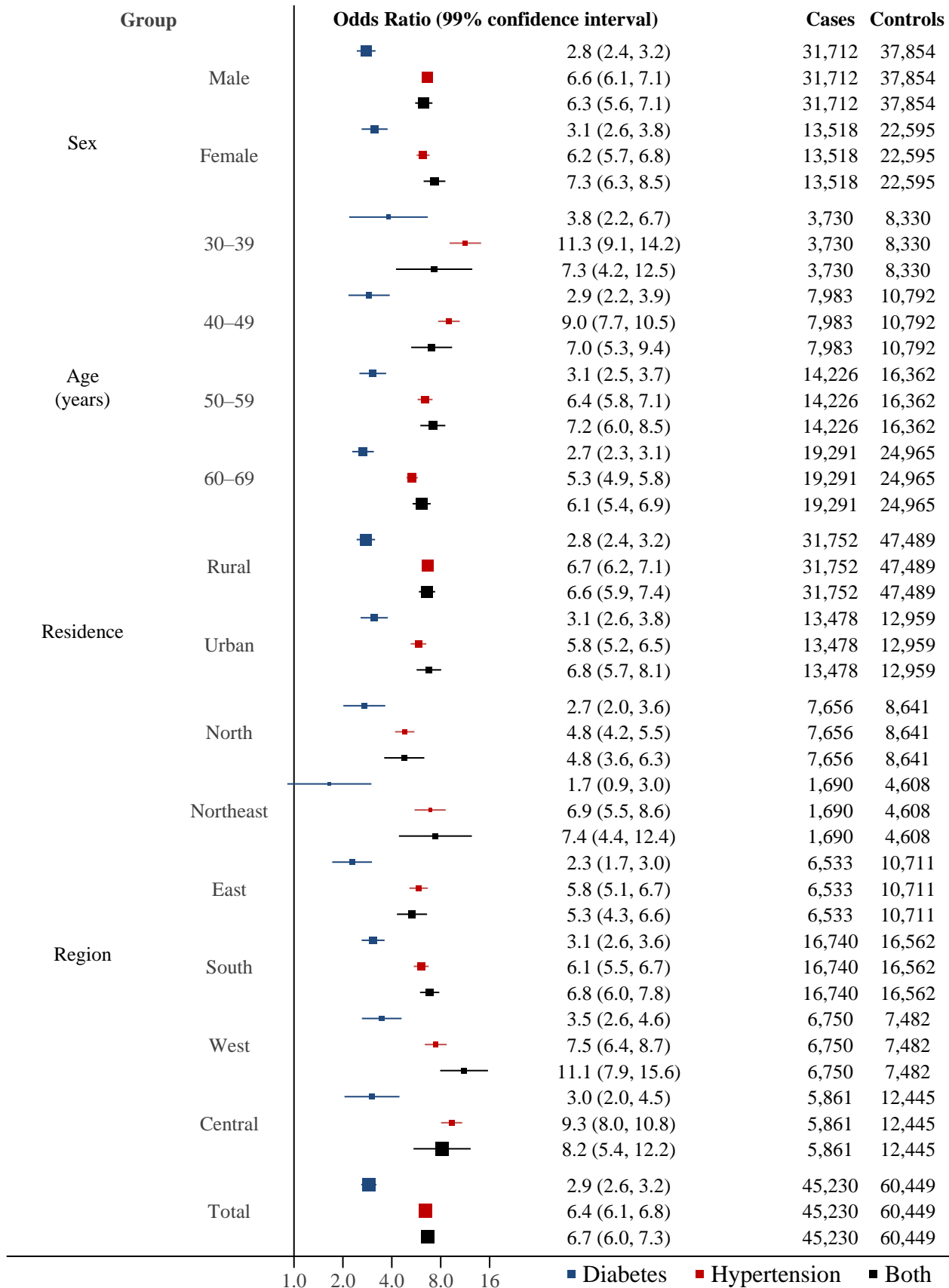




**eFigure 5** Population attributable fractions (%) for stroke in high- and low-burden states during the beginning (2001–03) and end (2012–14) of the study period. Blue bars represent hypertension; red bars represent diabetes.

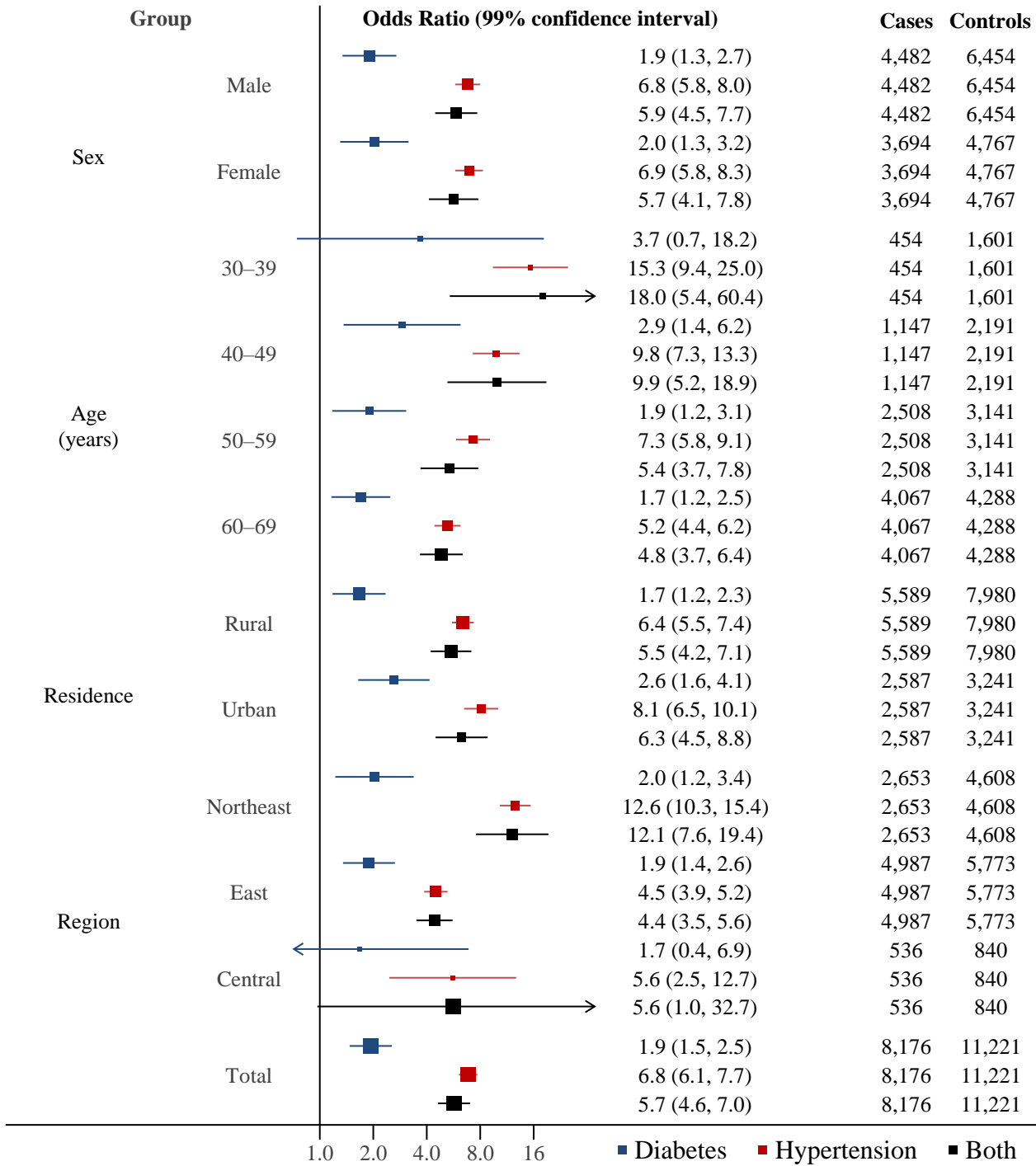
**eFigure 6 (next page)** Total and stratified estimates of the association between hypertension, diabetes, or both and (A) ischemic heart disease, (B) stroke (high-burden states), and (C) stroke (low-burden states). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

## A. Ischemic Heart Disease

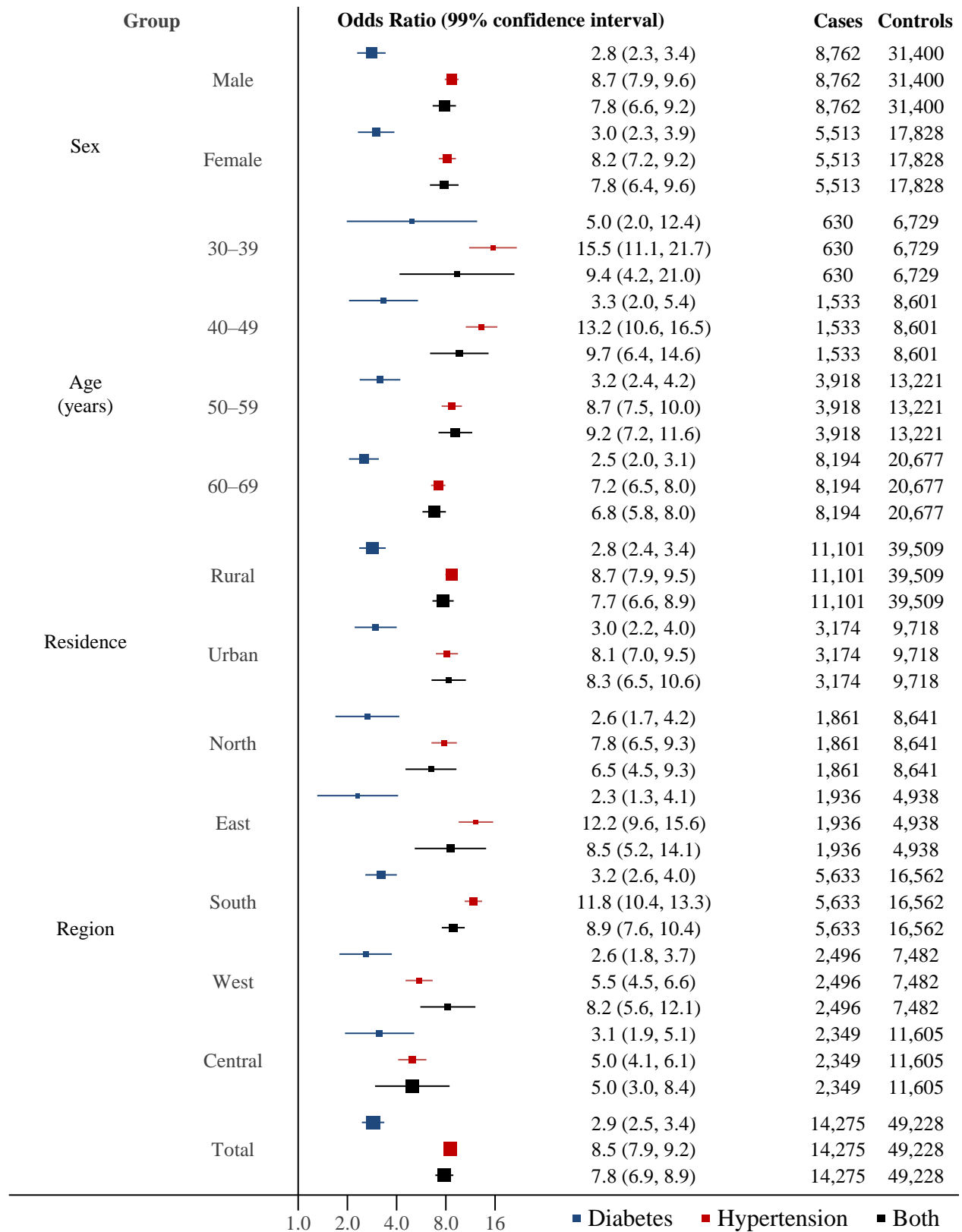




## B. Stroke, High-Burden States



### C. Stroke, Low-Burden States



**eTable 3** Association between hypertension and diabetes with ischemic heart disease and stroke by state. Some states located in the northeast region were combined due to low sample size. These states are s Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, and Meghalaya. High burden states for male stroke deaths were Assam, West Bengal, Chhattisgarh, and the northeast states. High burden states for female stroke deaths were Assam, West Bengal, Orissa, Chhattisgarh, and the northeastern states.

Outcome	Risk Factor	State	Odds Ratio (99% CI)	Cases	Controls
Ischemic Heart Disease	Hypertension	Bihar	12.0 (8.9–16.2)	1801	2759
		Uttar Pradesh	11.9 (9.5–14.8)	2091	5531
		Rajasthan	9.8 (7.6–12.6)	1510	3428
		Gujarat	9.6 (7.6–12.1)	2657	3278
		Orissa	9.3 (6.8–12.7)	1046	2331
		Madhya Pradesh	9.2 (6.2–13.7)	1642	2645
		Andhra Pradesh	8.5 (6.8–10.6)	4107	3851
		Chhattisgarh	8.2 (4.0–17.1)	618	840
		Northeast States	7.6 (5.8–10.0)	1028	2827
		Tamil Nadu	7.6 (6.2–9.3)	4989	3891
		Assam	7.5 (5.2–10.7)	662	1781
		Jharkhand	6.9 (4.3–11.1)	613	782
		Haryana	6.5 (4.3–9.9)	1709	1895
		Delhi	5.9 (3.6–9.5)	926	824
		Maharashtra	5.5 (4.4–6.9)	2960	3159
		Jammu & Kashmir	5.4 (4.1–7.2)	1104	1856
		Karnataka	3.9 (3.2–4.8)	3811	4617
		West Bengal	3.8 (3.2–4.4)	3073	4839
		Kerala	3.3 (2.8–4.0)	2939	3278
	Punjab	3.2 (2.5–4.0)	2458	1729	
	Diabetes	Kerala	2.9 (2.3–3.5)	2939	3278
		Tamil Nadu	2.6 (2.0–3.4)	4989	3891
		Rajasthan	2.6 (1.3–5.1)	1510	3428
		Maharashtra	2.6 (1.8–3.7)	2960	3159
		Chhattisgarh	2.6 (0.9–7.6)	618	840
		Haryana	2.5 (1.3–4.9)	1709	1895
		Madhya Pradesh	2.4 (1.1–5.3)	1642	2645
		Gujarat	2.3 (1.5–3.4)	2657	3278
		Delhi	2.2 (1.2–4.0)	926	824
		Orissa	2.1 (1.2–3.6)	1046	2331
		Karnataka	1.9 (1.4–2.5)	3811	4617
		Assam	1.8 (0.9–3.3)	662	1781
		Bihar	1.6 (1.0–2.7)	1801	2759
Jammu & Kashmir		1.6 (0.8–3.1)	1104	1856	
Uttar Pradesh	1.5 (0.9–2.3)	2091	5531		
Northeast States	1.4 (0.7–2.6)	1028	2827		
West Bengal	1.4 (1.1–1.7)	3073	4839		
Jharkhand	1.3 (0.6–3.1)	613	782		
Punjab	1.2 (0.9–1.8)	2458	1729		
Andhra Pradesh	0.9 (0.7–1.3)	4107	3851		

Stroke, High Burden	Hypertension	Assam	23.6 (17.3–32.2)	1251	1781
		Northeast states (excluding Assam)	9.3 (7.2–11.9)	1402	2827
		West Bengal	4.1 (3.5–4.8)	4188	4839
		Chhattisgarh	5.5 (2.5–12.1)	536	840
		Orissa (women)		799	934
	Diabetes	Chhattisgarh	1.6 (0.5–5.0)	536	840
		Northeast states (excluding Assam)	1.5 (0.9–2.5)	1402	2827
		West Bengal	1.4 (1.1–1.7)	4188	4839
		Assam	1.2 (0.7–2.0)	1251	1781
		Orissa (women)		799	934
Stroke, Low Burden	Hypertension	Andhra Pradesh	29.2 (22.4–37.9)	1445	3851
		Kerala	17.6 (13.7–22.7)	1087	3278
		Bihar	13.1 (9.2–18.6)	839	2759
		Jammu & Kashmir	12.1 (8.2–18.0)	388	1856
		Jharkhand	11.0 (6.2–19.6)	254	782
		Haryana	9.7 (5.7–16.4)	359	1895
		Punjab	8.2 (5.8–11.6)	462	1729
		Gujara	2.6 (2.2–3.0)	737	3278
		Rajasthan	7.3 (5.2–10.2)	547	3428
		Delhi	5.6 (2.8–11.3)	226	824
		Karnataka	5.5 (4.4–6.9)	1560	4617
		Tamil Nadu	5.4 (4.2–7.0)	1193	3891
		Uttar Pradesh	5.3 (4.0–7.2)	887	5531
		Madhya Pradesh	4.8 (3.0–7.7)	915	2645
		Maharashtra	3.7 (2.8–4.8)	1326	3159
	Orissa (men)		843	1397	
	Diabetes	Madhya Pradesh	3.6 (1.6–8.0)	915	2645
		Tamil Nadu	2.6 (1.9–3.7)	1193	3891
		Haryana	2.6 (1.0–7.0)	359	1895
		Maharashtra	2.3 (1.5–3.6)	1326	3159
		Rajasthan	1.7 (0.7–4.2)	547	3428
		Karnataka	1.7 (1.2–2.3)	1560	4617
		Uttar Pradesh	1.6 (1.0–2.8)	887	5531
		Gujarat	1.6 (0.8–3.4)	737	3278
		Delhi	1.5 (0.6–3.6)	226	824
		Kerala	1.3 (0.9–1.7)	1087	3278
		Jharkhand	1.2 (0.4–3.5)	254	782
		Jammu & Kashmir	1.2 (0.4–3.1)	388	1856
		Punjab	1.1 (0.7–1.9)	462	1729
		Andhra Pradesh	0.8 (0.5–1.2)	1445	3851
Bihar		0.7 (0.4–1.5)	839	2759	
Orissa (men)		843	1397		

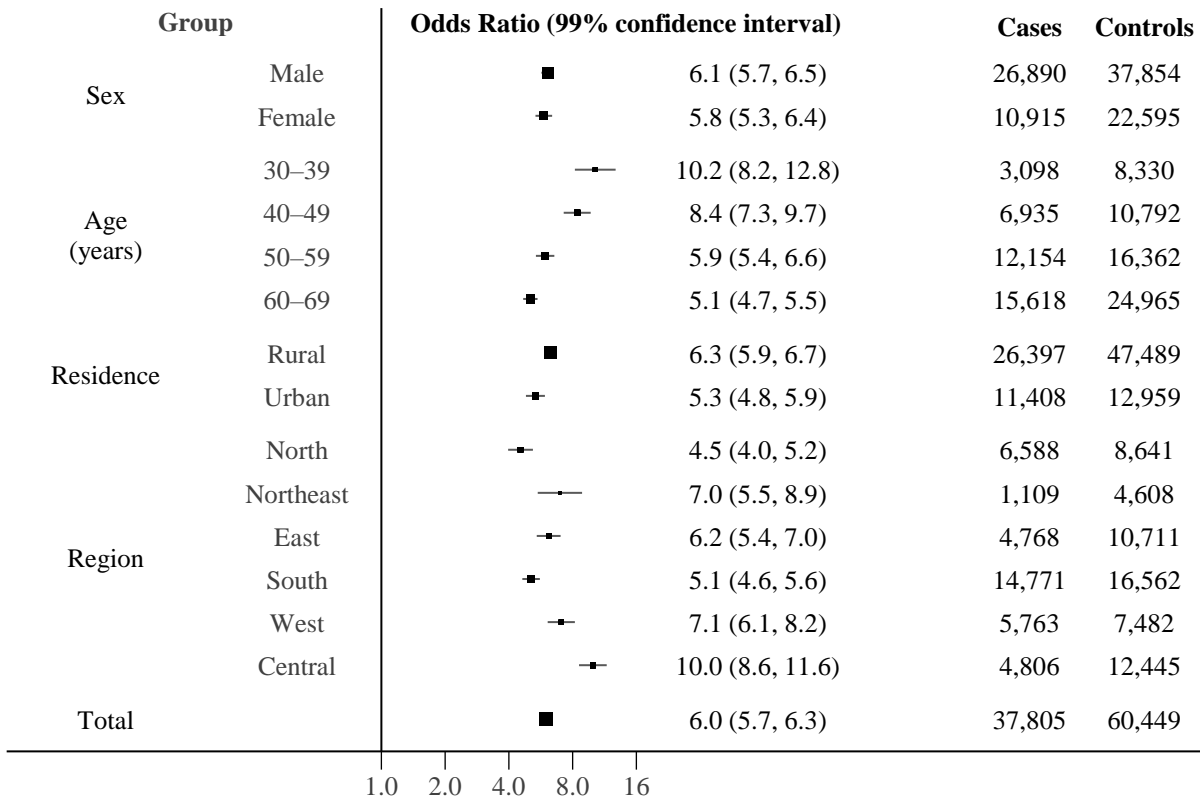
\*Odds ratios for stroke in Orissa could not be computed due to sample size limitations.

Abbreviations: CI, confidence interval

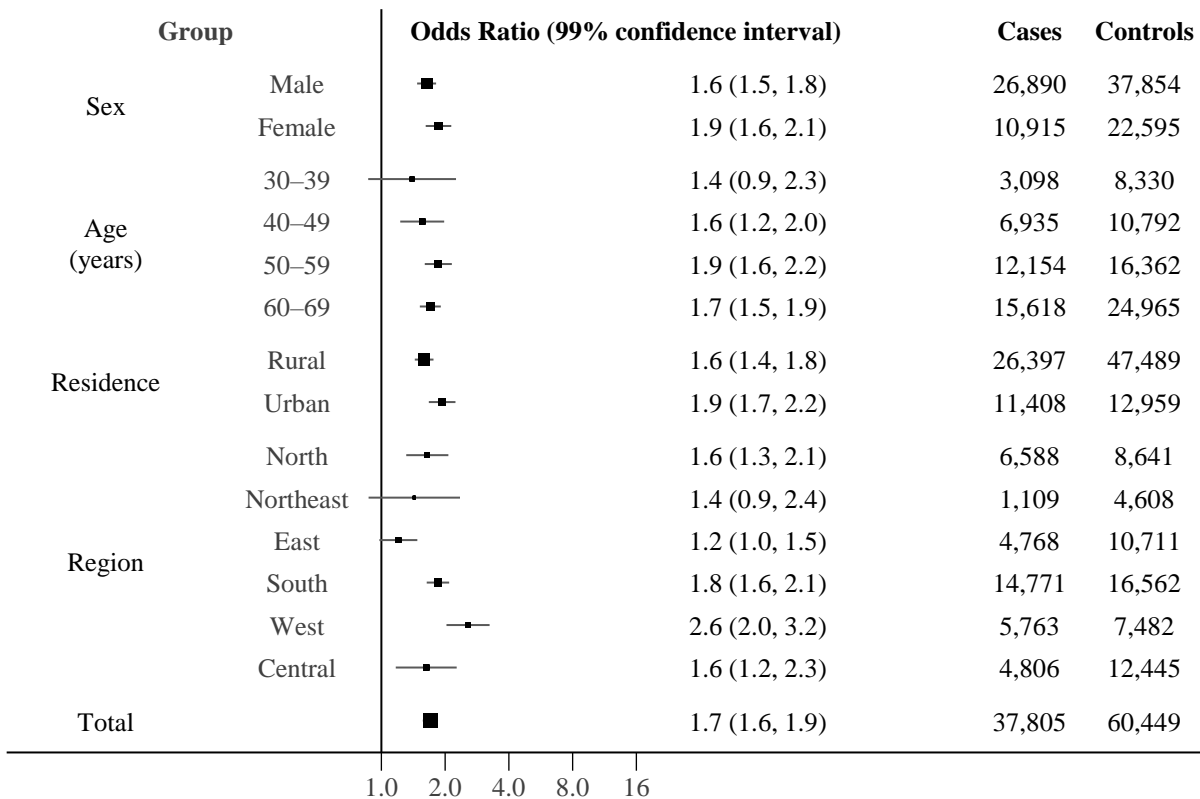
**eFigure 7 (next page)** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and ischemic heart disease mortality, where both physicians initially agreed on cause of death category without further adjudication. Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year\*. The area of each box is proportional to the sample size (cases and controls).

\*We tested whether the effects of diabetes and hypertension varied by year. There was a significant interaction between diabetes and year ( $p=0.0001$ ) and hypertension and year ( $p=0.0002$ ). These interaction terms were included in all models.

### A. Hypertension and Ischemic Heart Disease



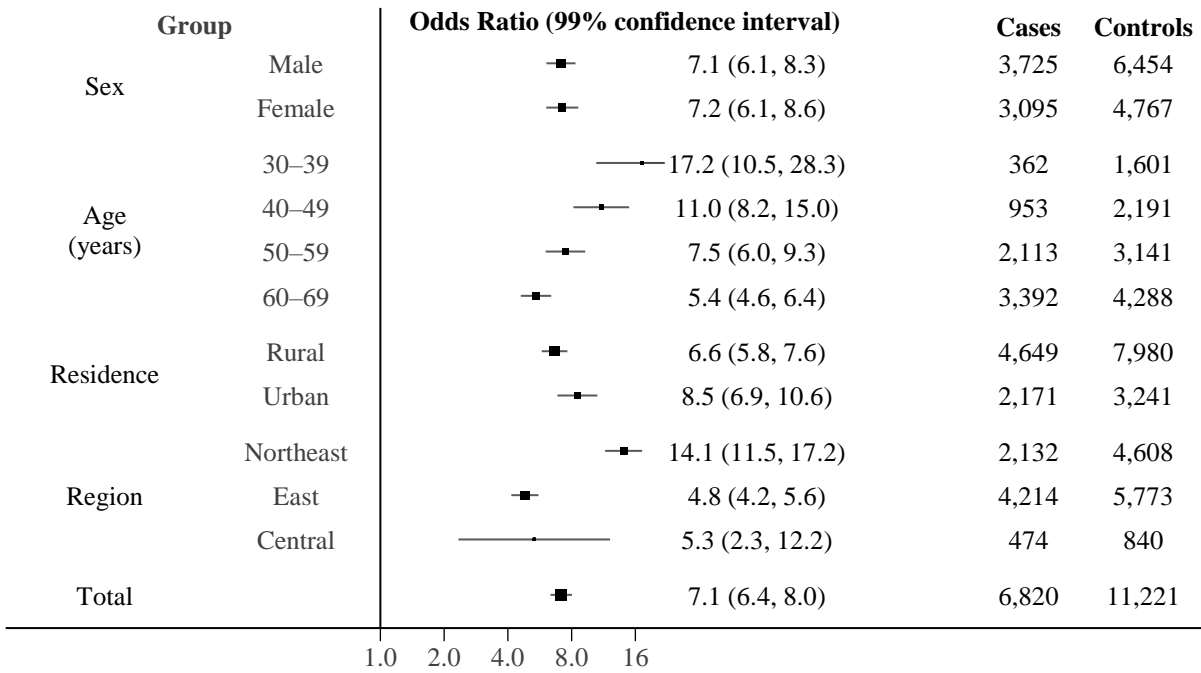
### B. Diabetes and Ischemic Heart Disease



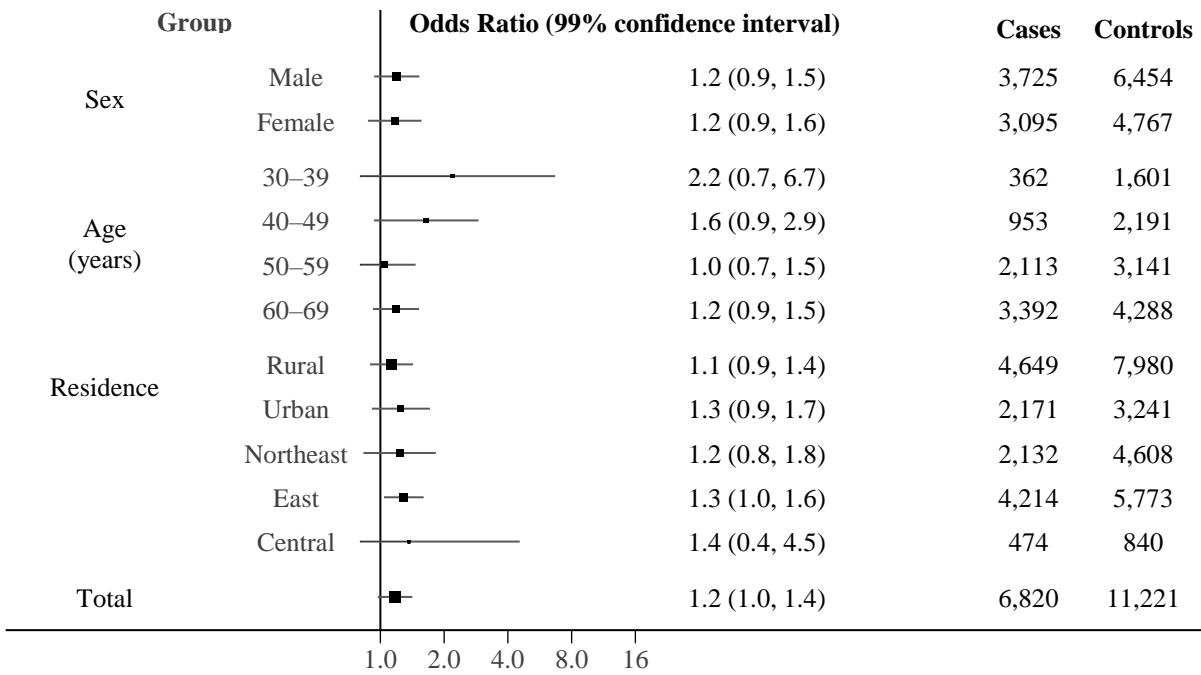
**eFigure 8** Association between hypertension (A,C) or diabetes (B,D) and stroke mortality in high-burden (A,B) and low-burden (C,D) states, where both physicians initially agreed on cause of death category without further adjudication. The total and stratified estimates are adjusted for age, sex, urban/rural residence, region, smoking, alcohol use, and year\*. The area of each box is proportional to the sample size (cases and controls).

\*We tested whether the effects of diabetes and hypertension varied by year. There was a significant interaction between diabetes and year in low-burden states only ( $p=0.002$ ), and between hypertension and year in both high- and low-burden states ( $p=0.002$  and  $p=0.01$  respectively). These interaction terms were included in all models.

### A. Hypertension and Stroke, High-Burden States

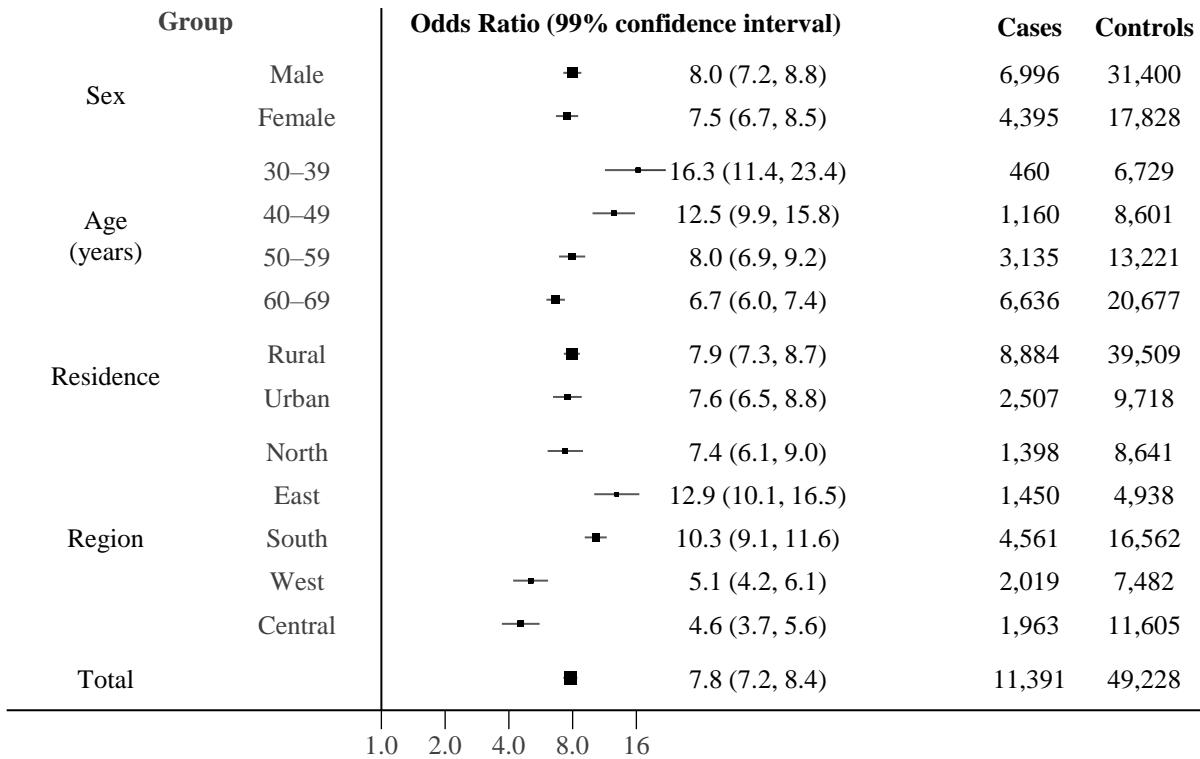


### B. Diabetes and Stroke, High-Burden States

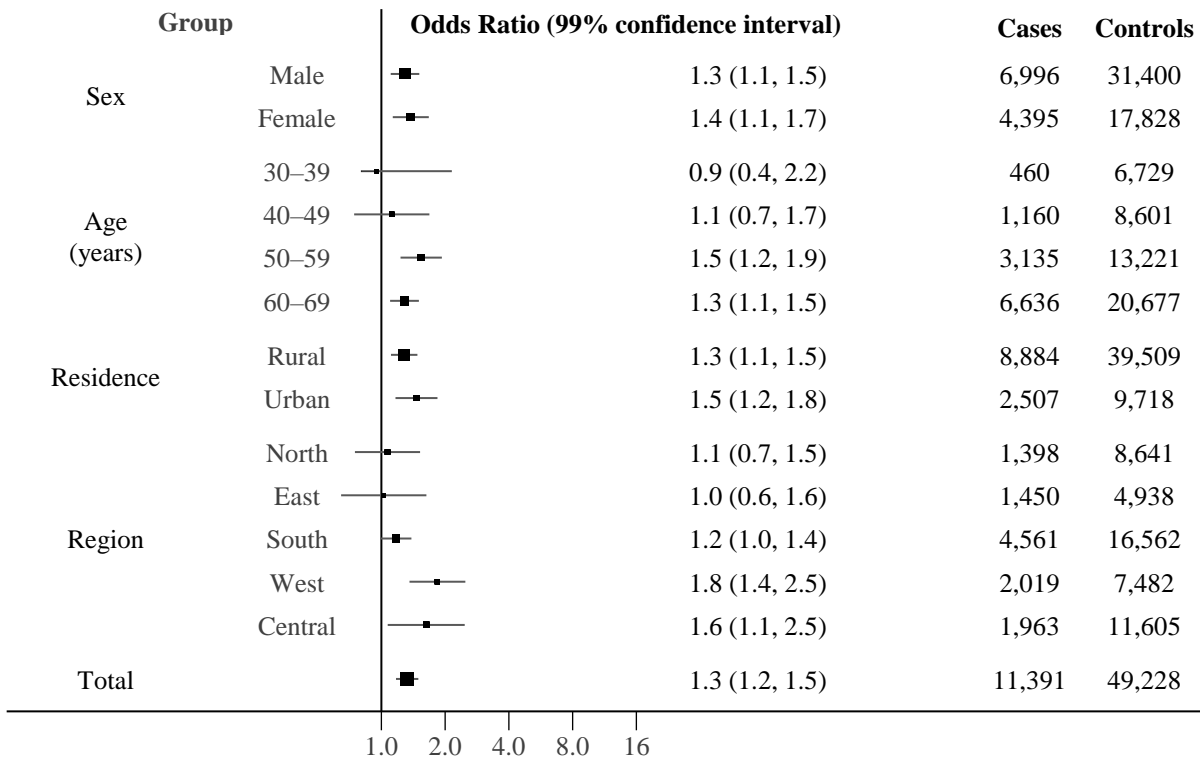




### C. Hypertension and Stroke, Low-Burden States

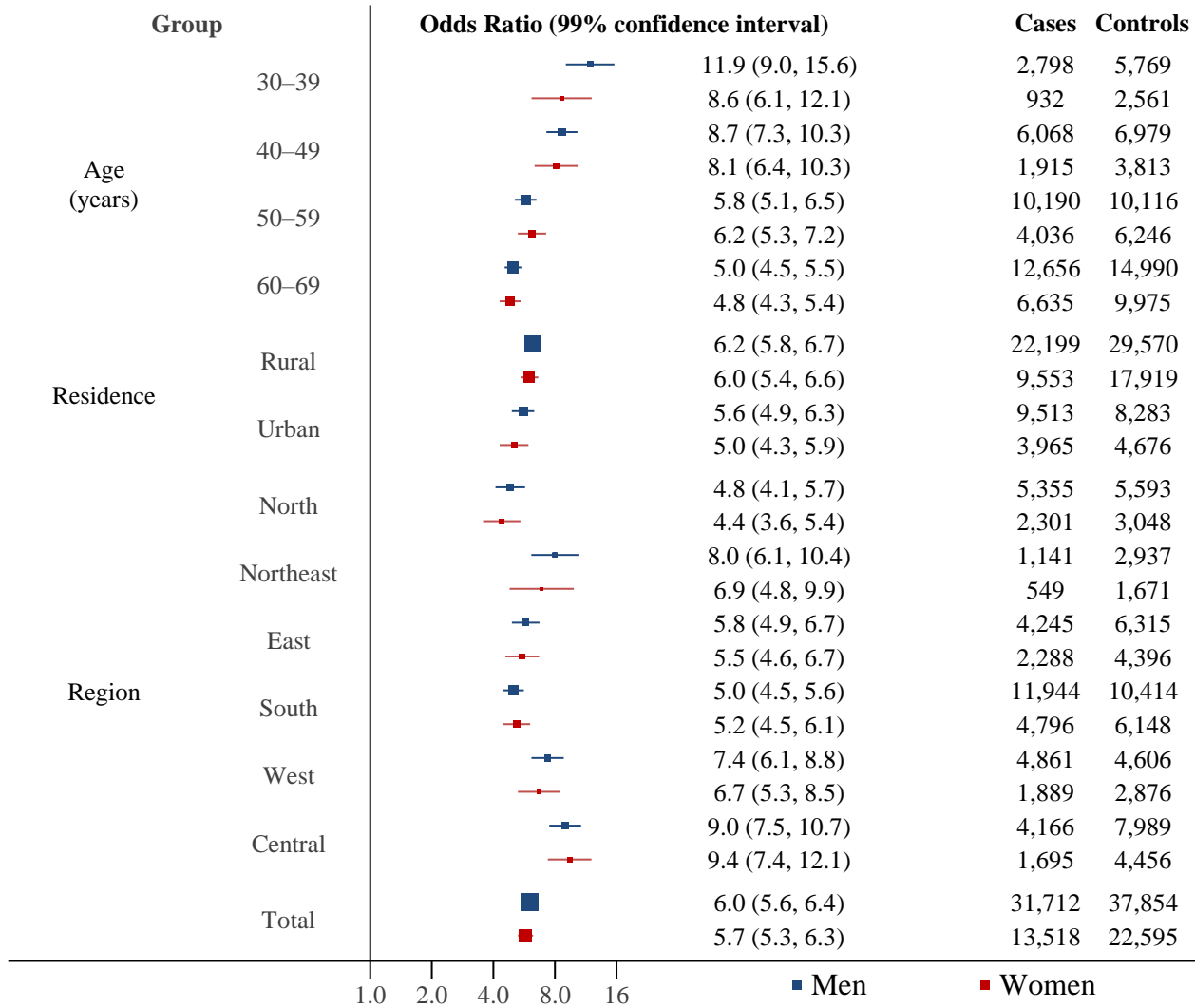


### D. Diabetes and Stroke, Low-Burden States

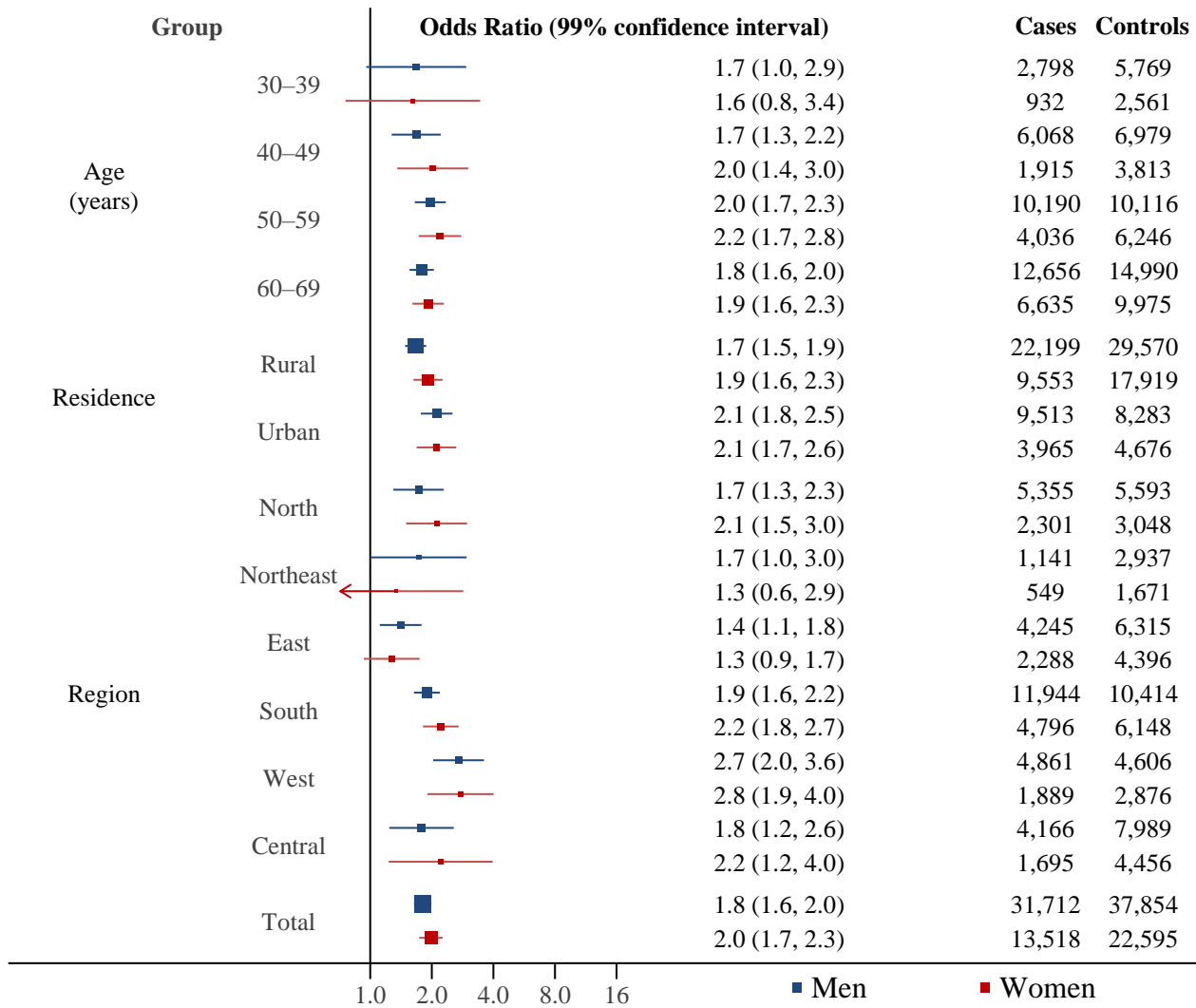


**eFigure 9** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and ischemic heart disease mortality, displayed separately for men and women. Estimates are adjusted for age, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Ischemic Heart Disease**

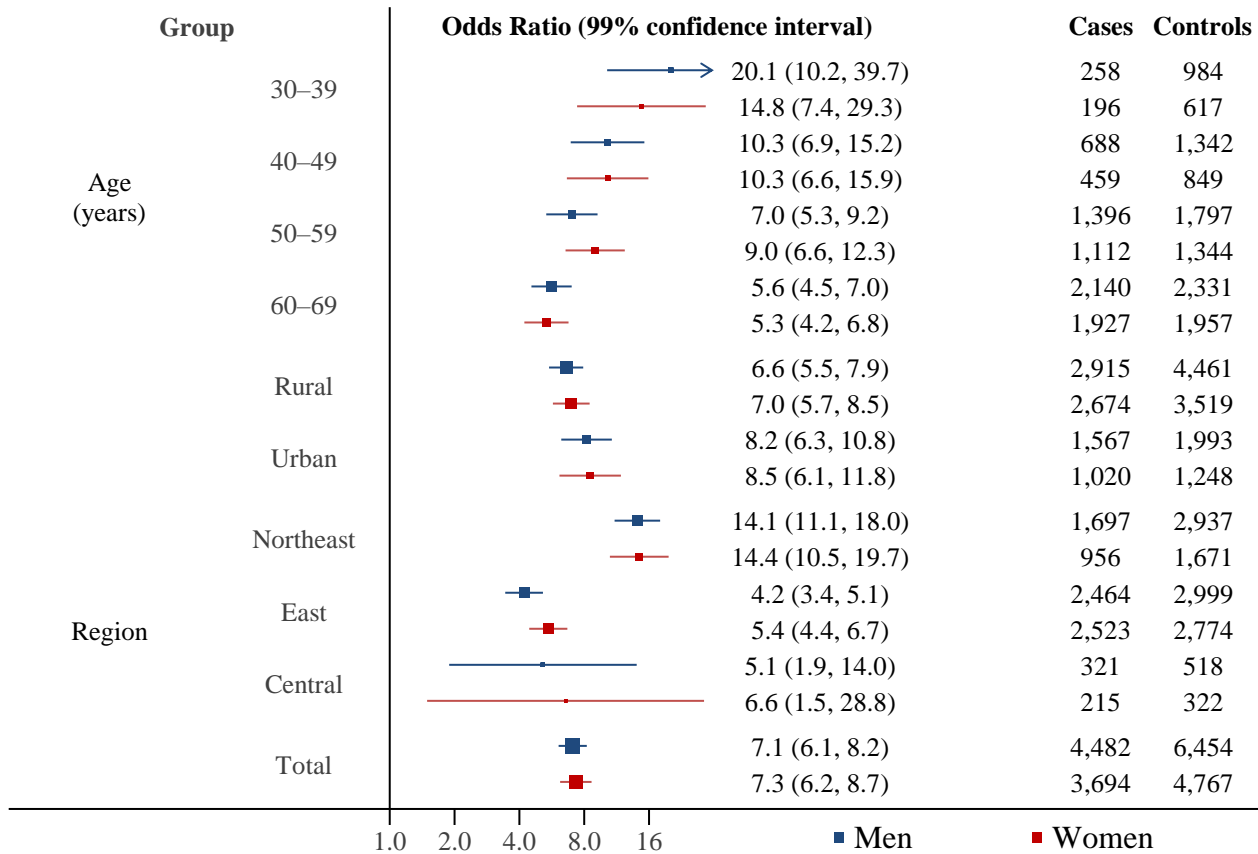


## B. Diabetes and Ischemic Heart Disease

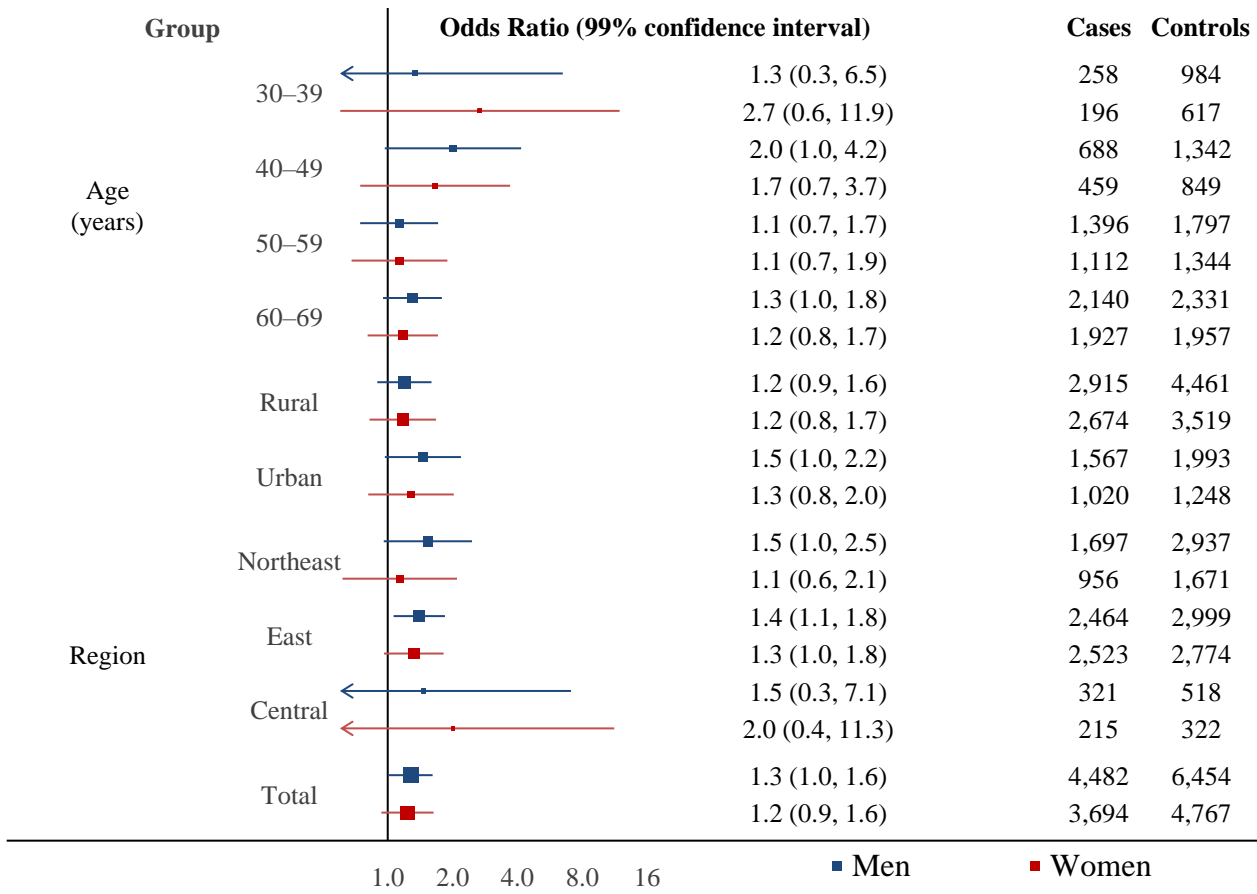


**eFigure 10** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in high-burden states, displayed separately for men and women. Estimates are adjusted for age, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Stroke, High-Burden States**



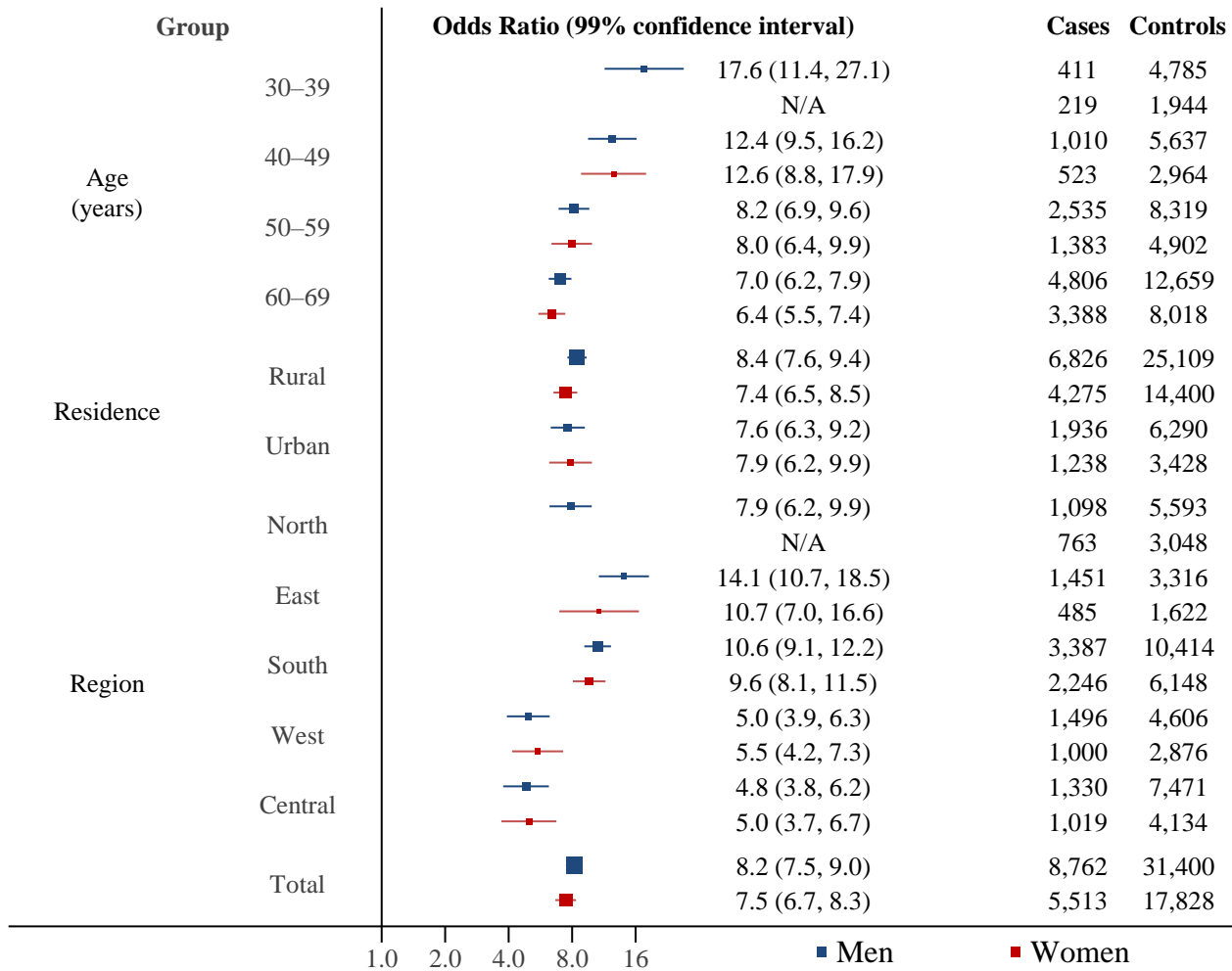
## B. Diabetes and Stroke, High-Burden States



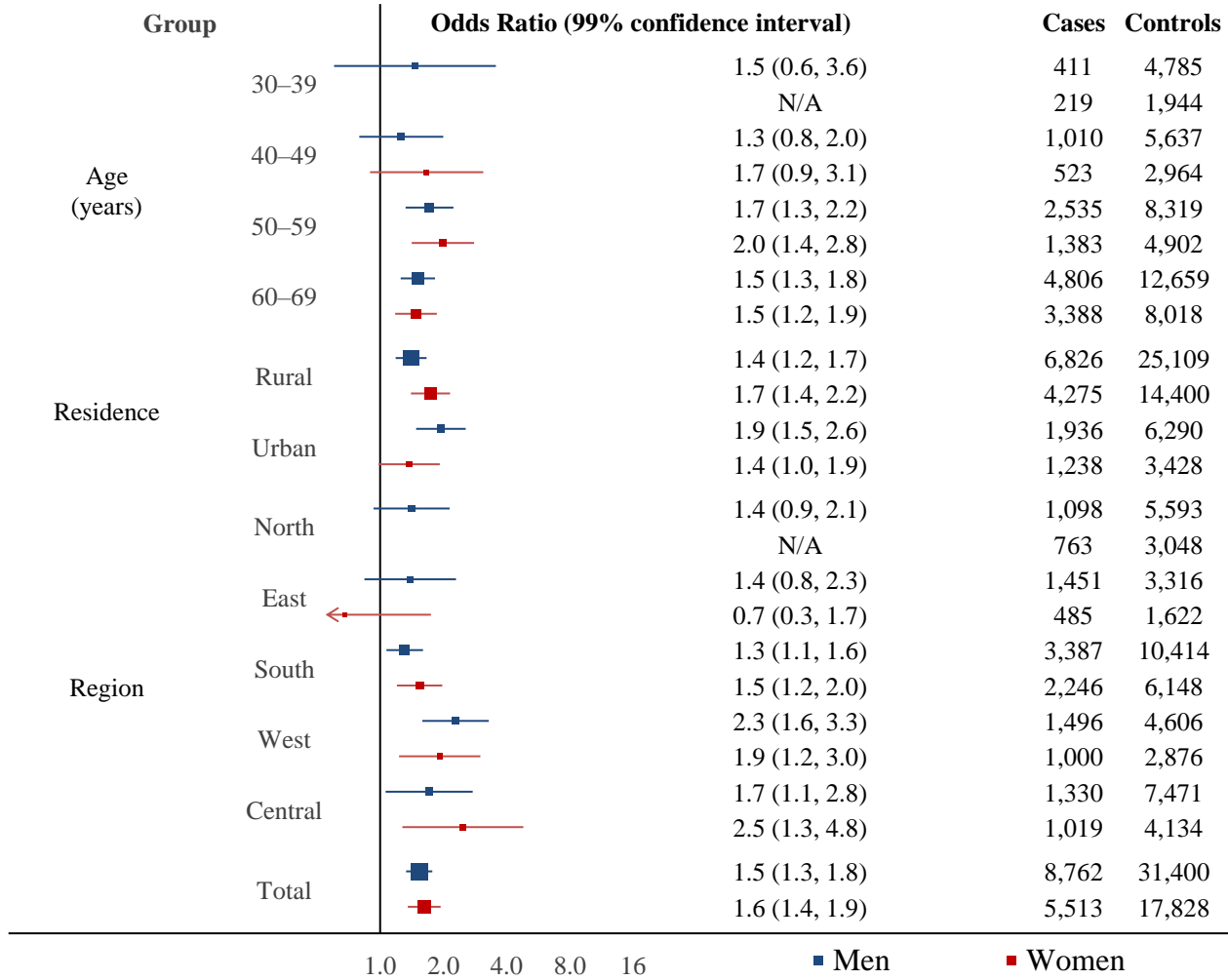
**eFigure 11** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in low-burden states, displayed separately for men and women. Estimates are adjusted for age, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

Abbreviation: N/A, cannot be estimated due to limited data

**A. Hypertension and Stroke, Low-Burden**

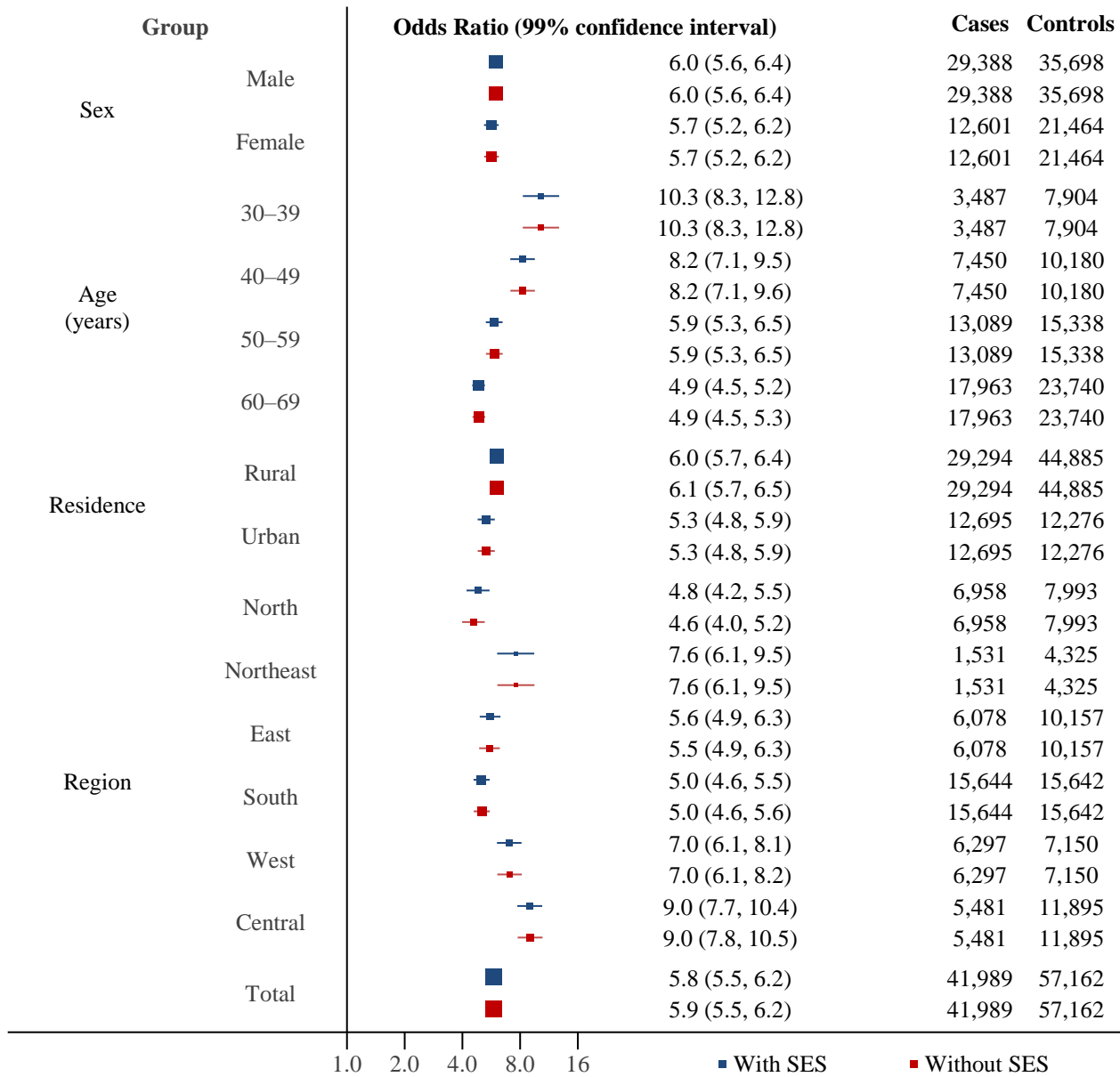


## B. Diabetes and Stroke, Low-Burden



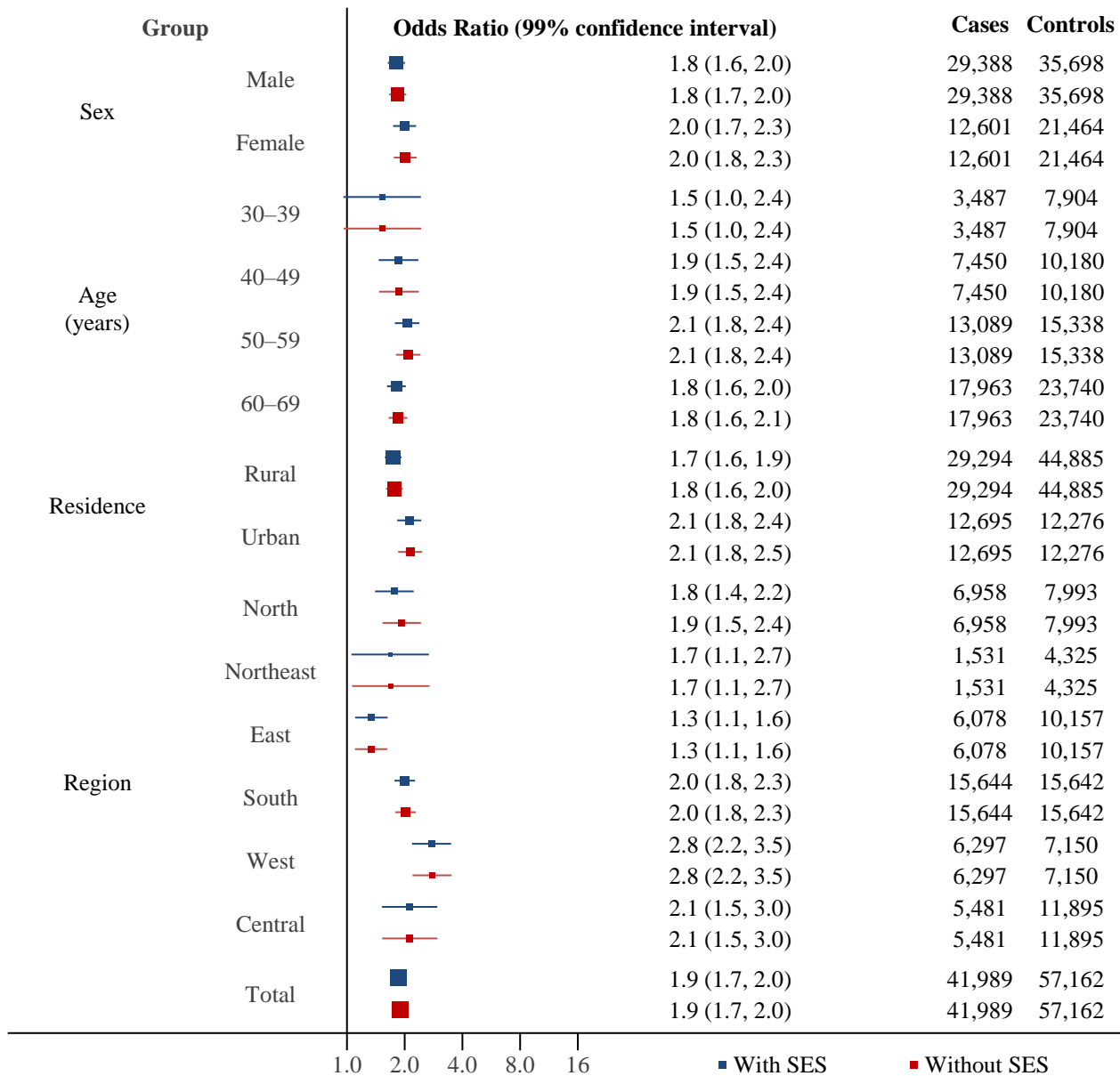
**eFigure 12** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and ischemic heart disease mortality, with and without socioeconomic status (SES) adjustment (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Ischemic Heart Disease**



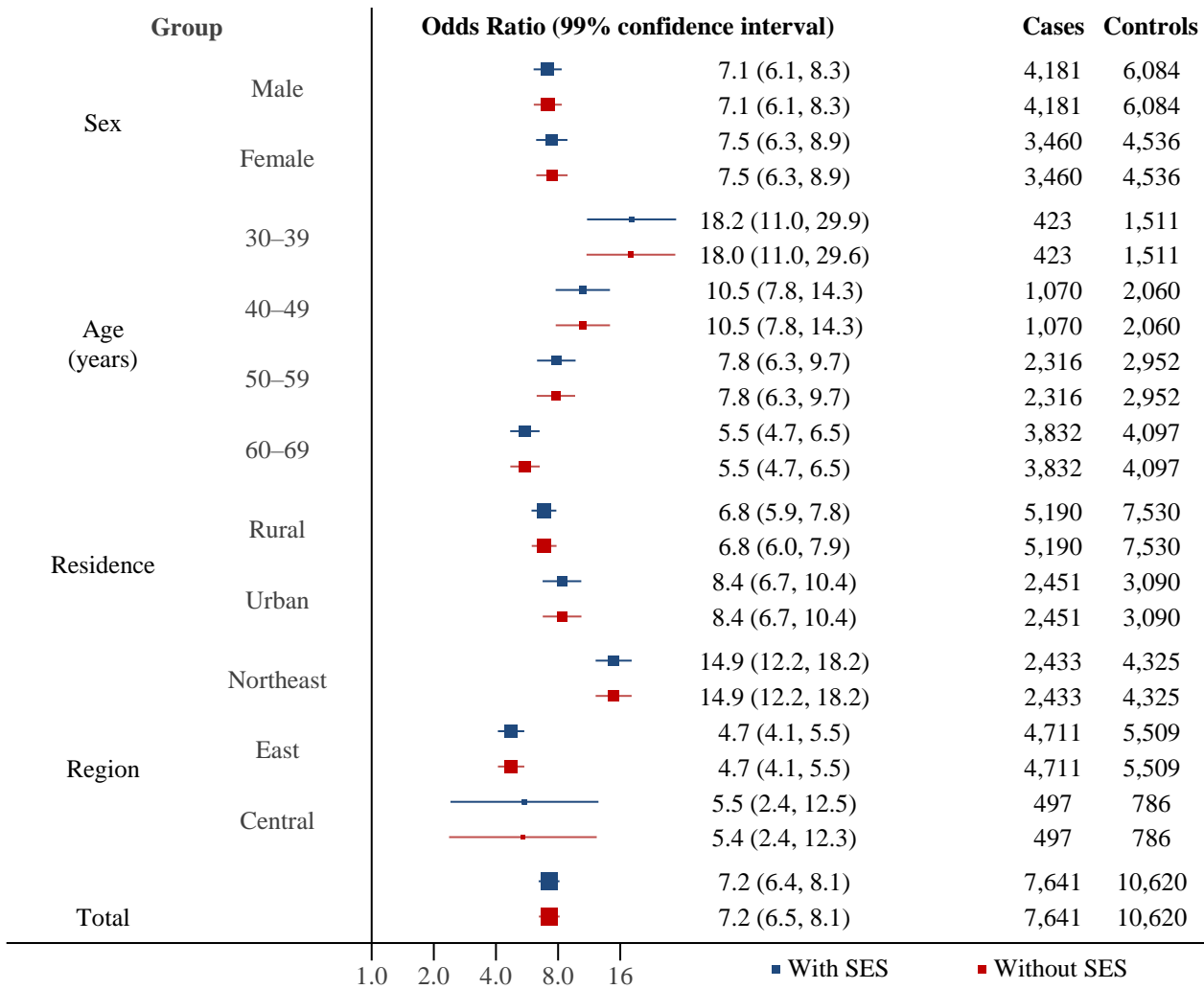


## B. Diabetes and Ischemic Heart Disease

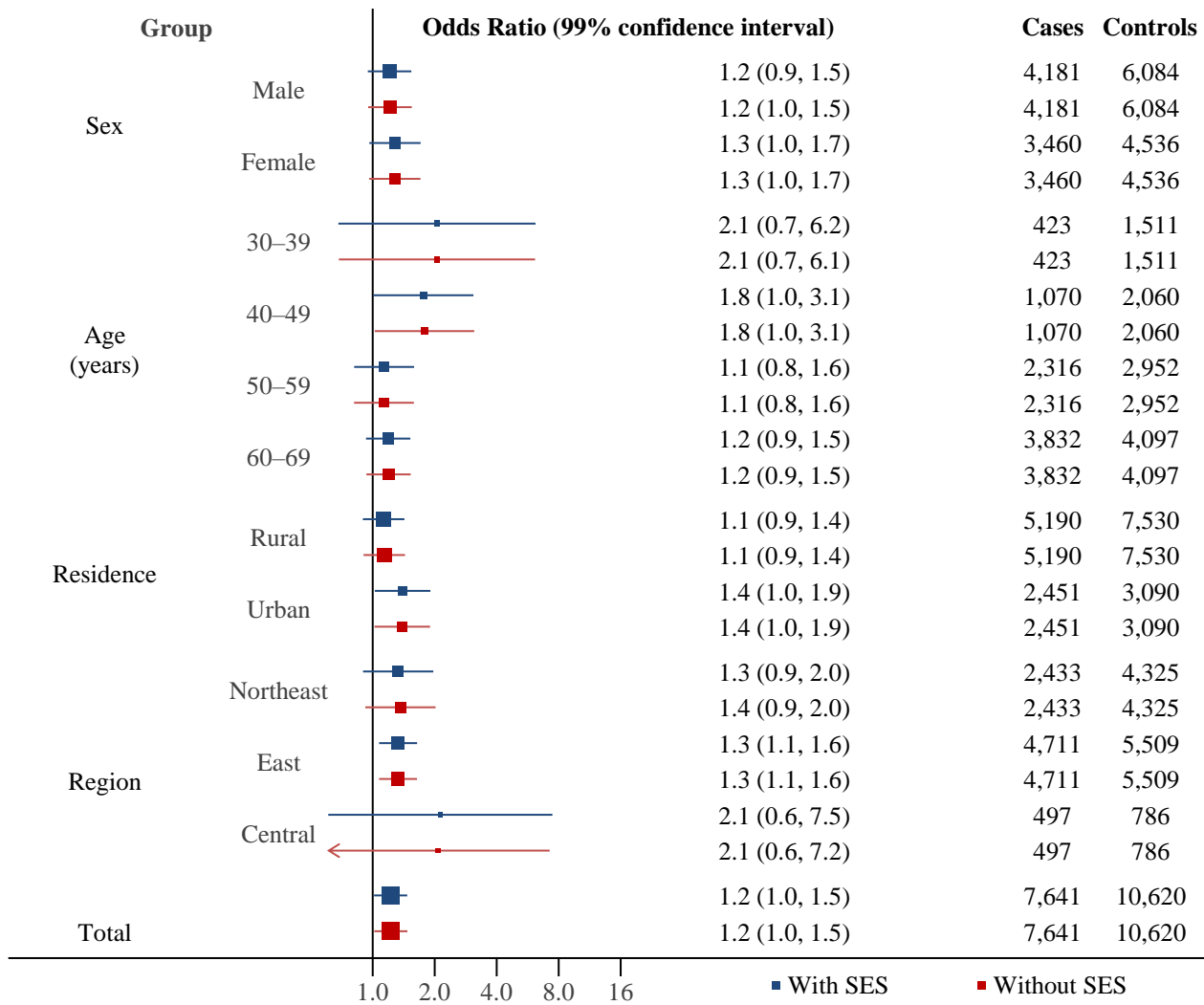


**eFigure 13** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in high-burden states, with and without socioeconomic status (SES) adjustment (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Stroke, High-Burden**

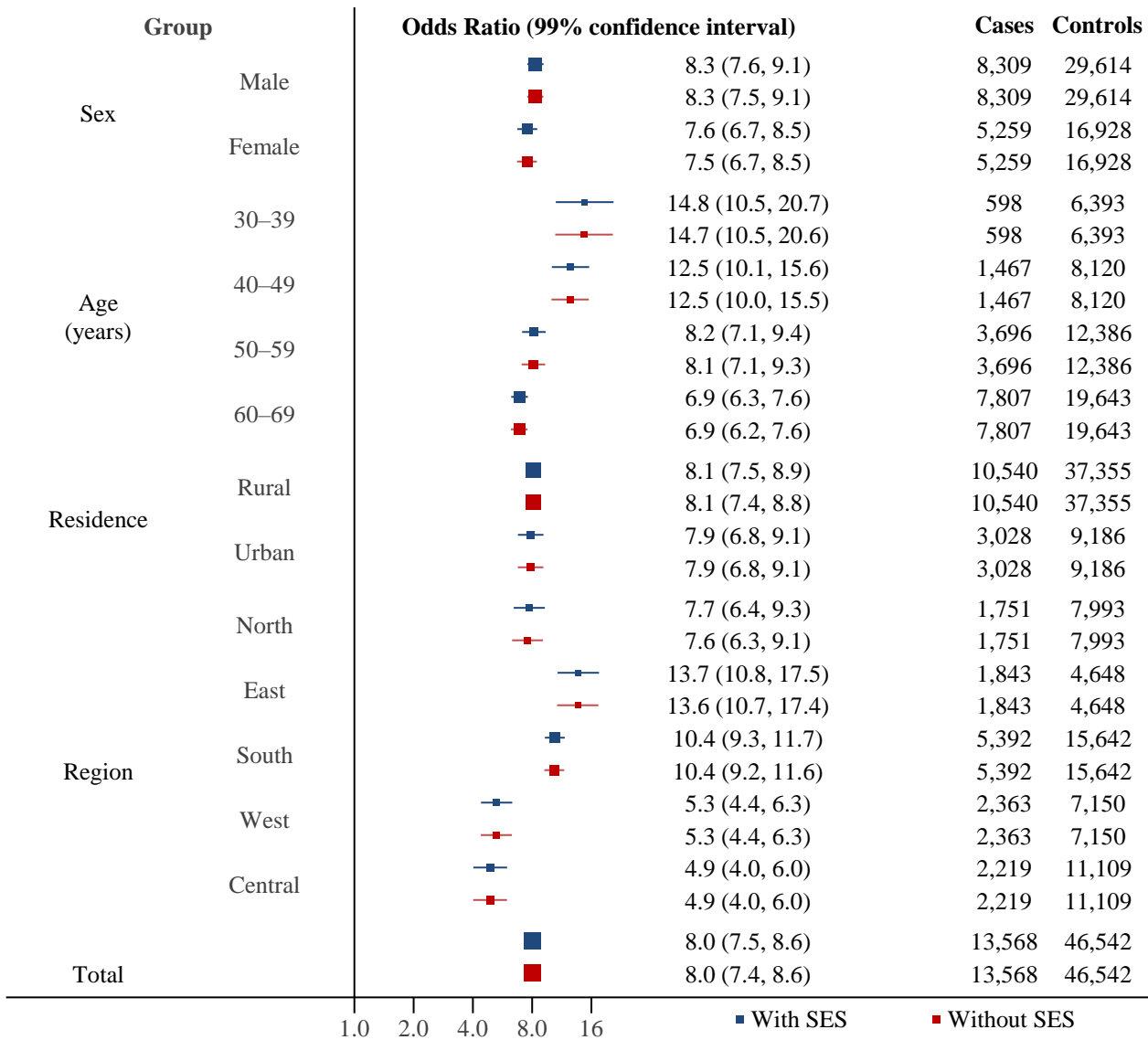


## B. Diabetes and Stroke, High-Burden

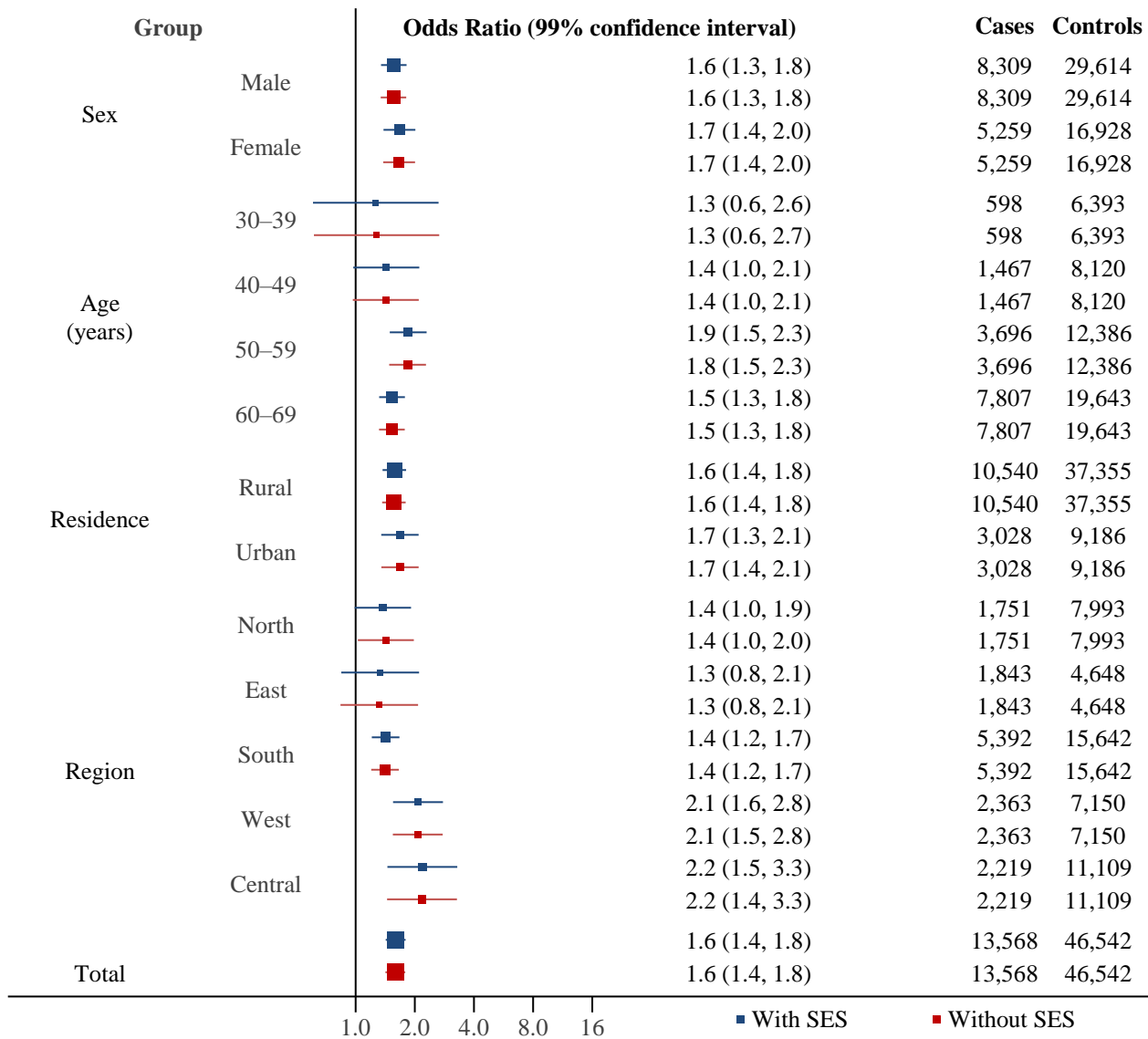


**eFigure 14** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in low-burden states, with and without socioeconomic status (SES) adjustment (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Stroke, Low-Burden**

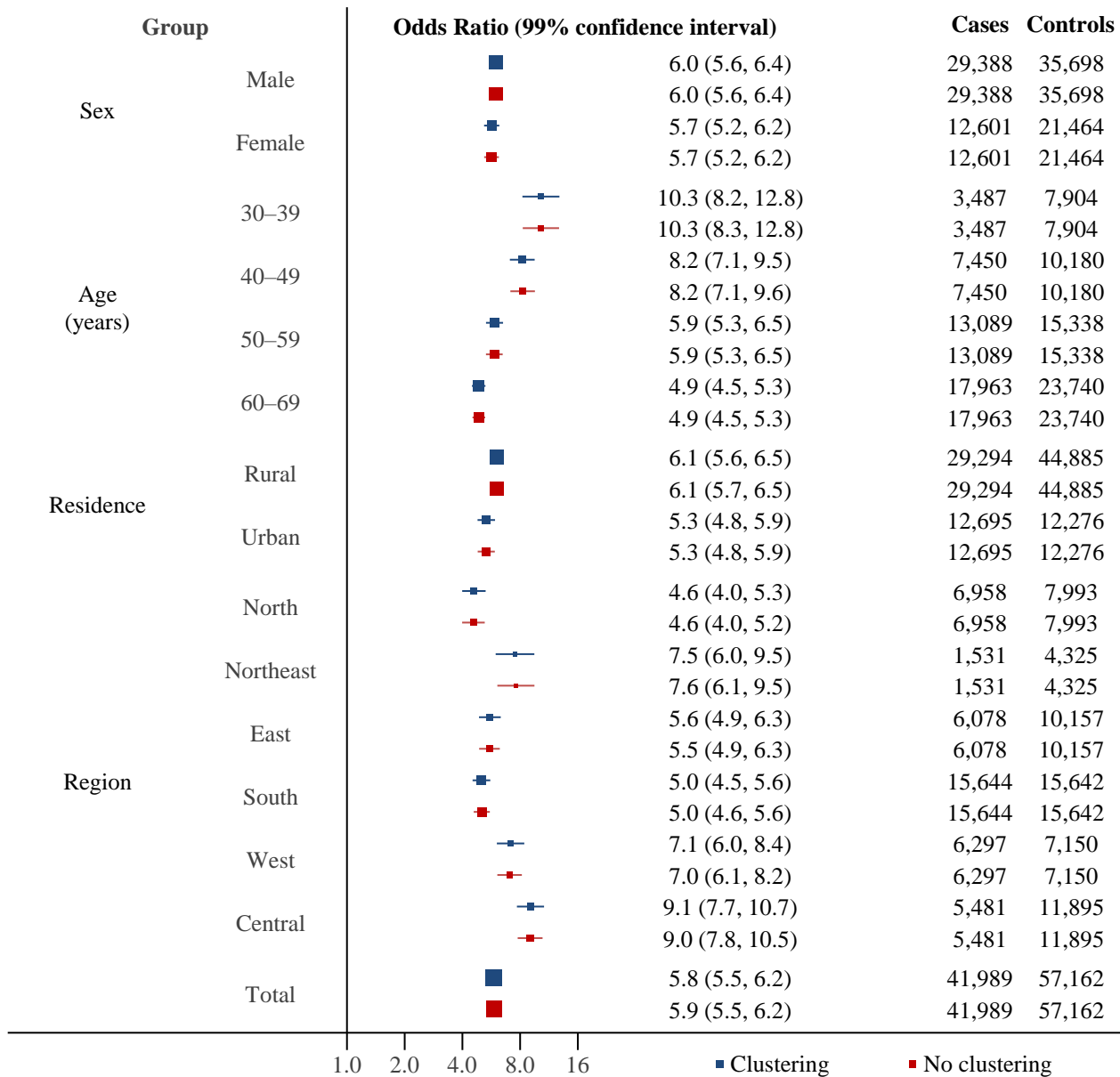


## B. Diabetes and Stroke, Low-Burden

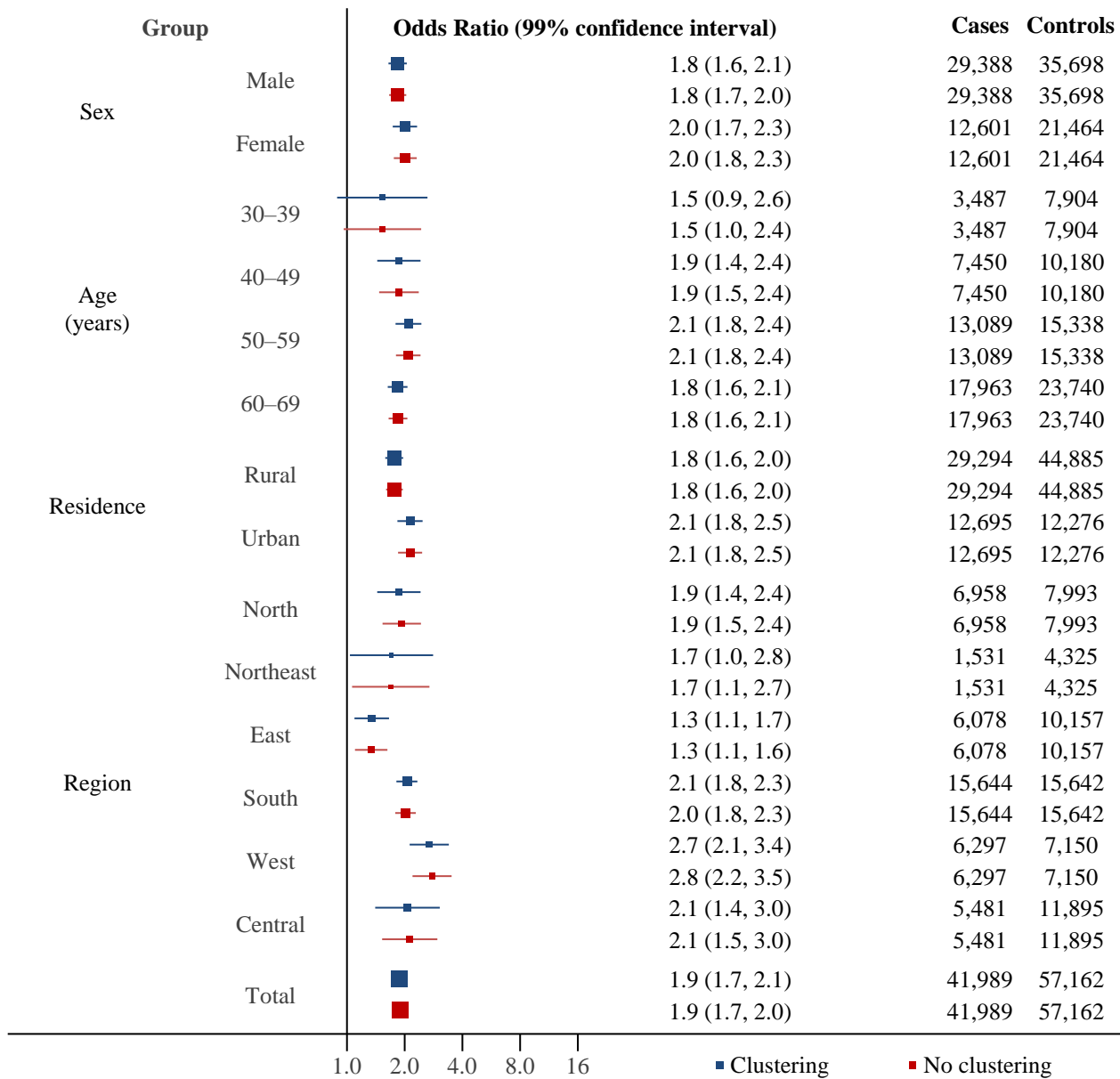


**eFigure 15** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and ischemic heart disease mortality, with and without adjustment for clustering at the district level (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Ischemic Heart Disease**

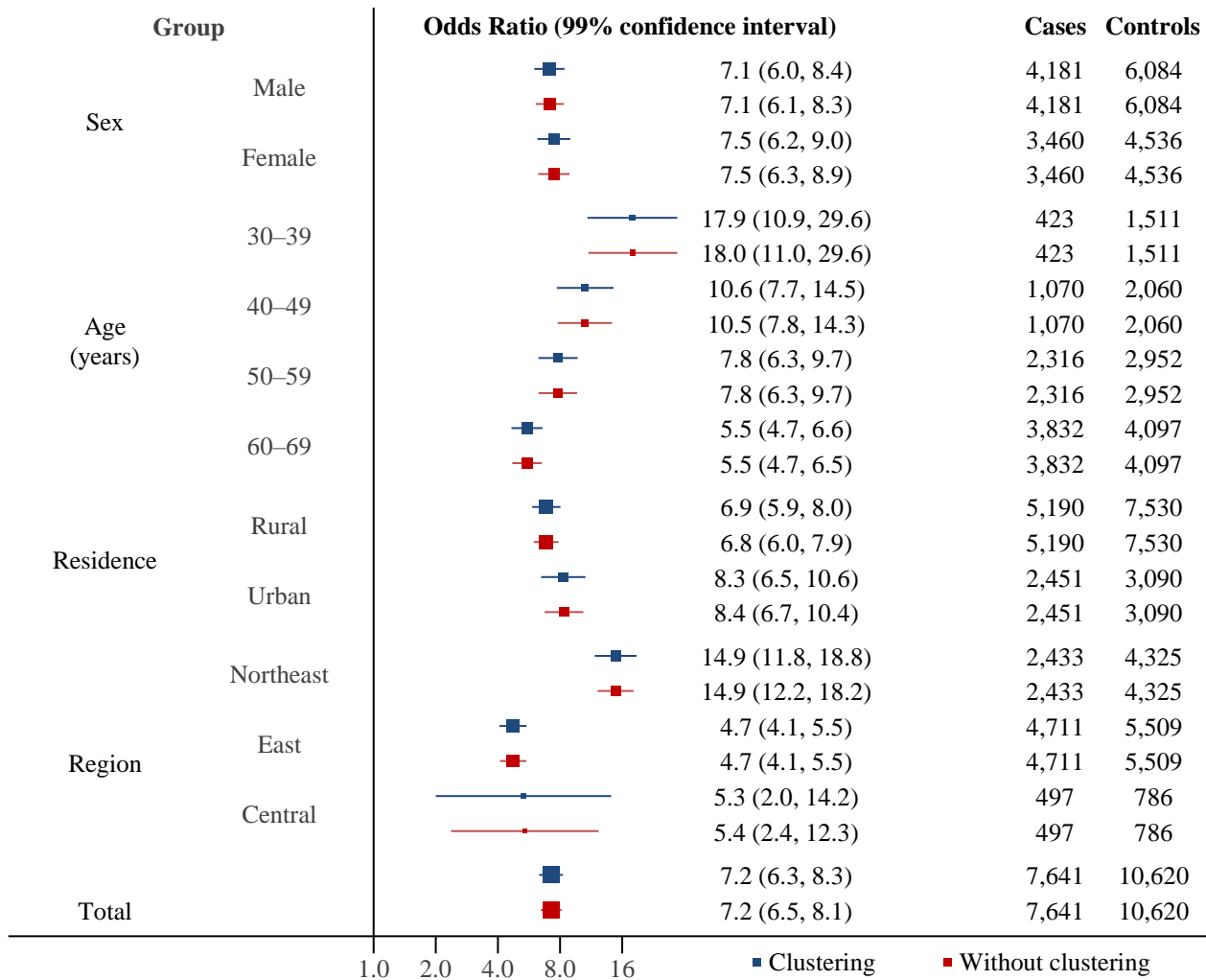


## B. Diabetes and Ischemic Heart Disease



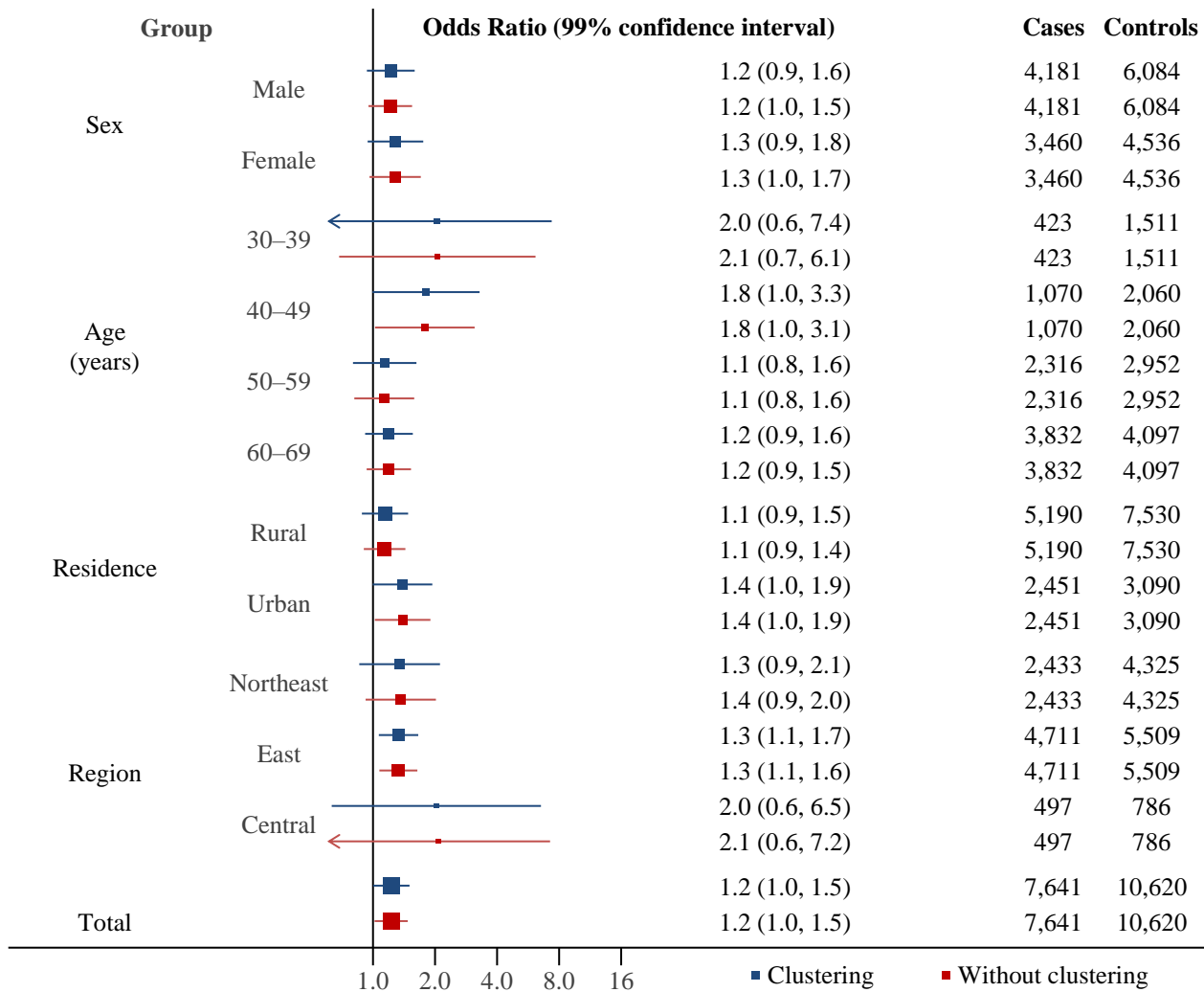
**eFigure 16** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in high-burden states, with and without adjustment for clustering at the district level (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

**A. Hypertension and Stroke, High-Burden**



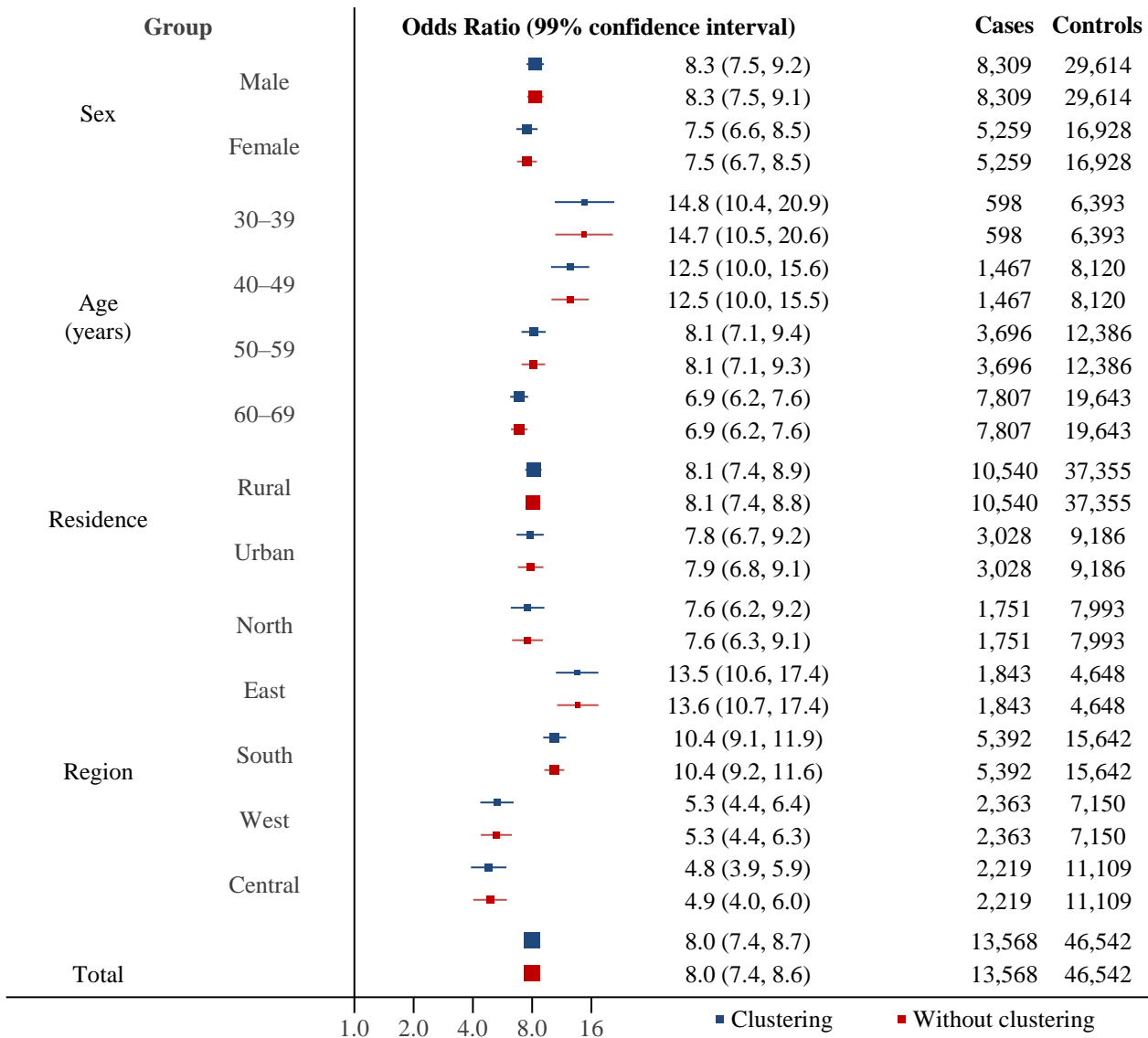


## B. Diabetes and Stroke, High-Burden

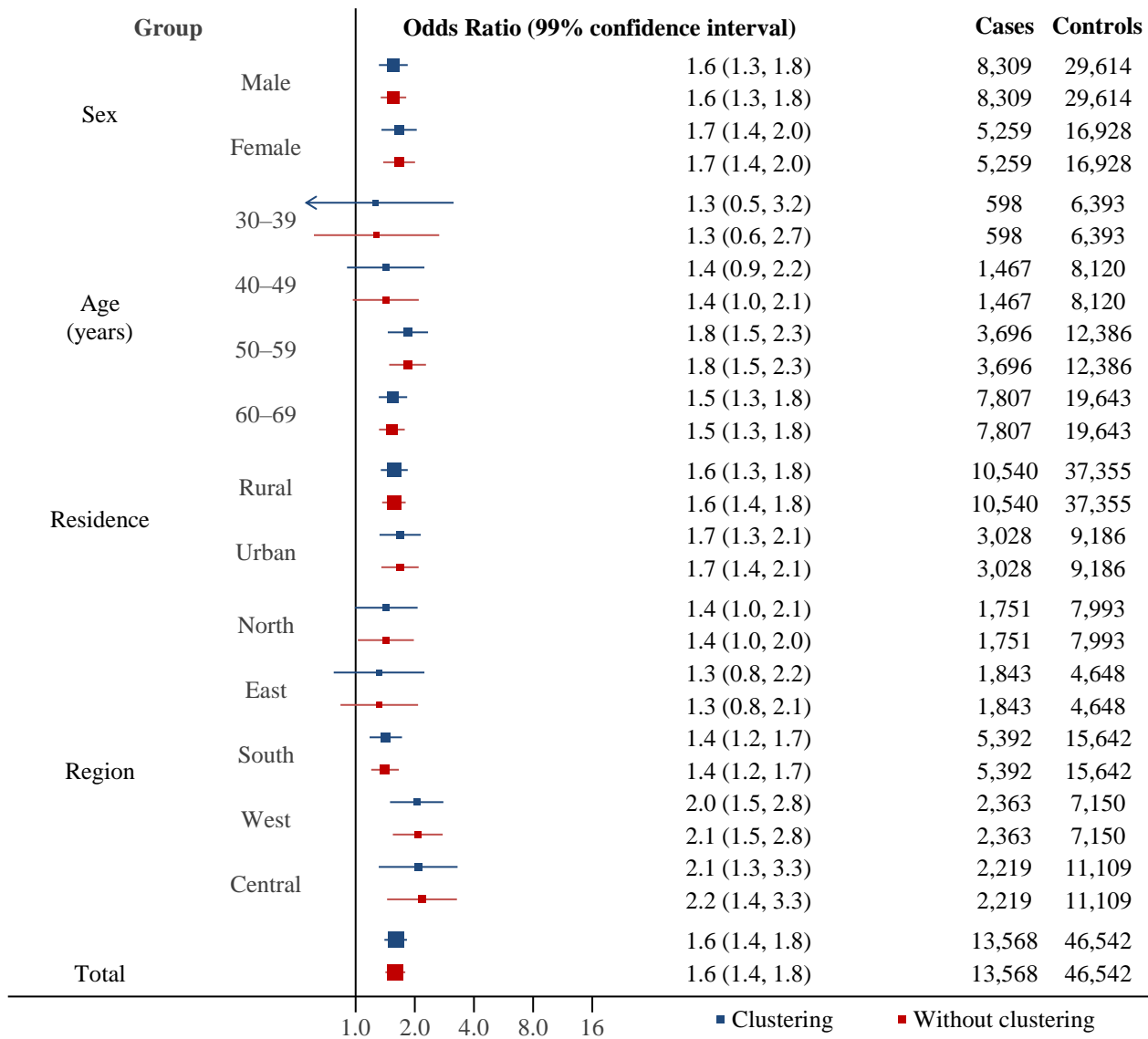


**eFigure 17** Total and stratified estimates of the association between (A) hypertension or (B) diabetes and stroke mortality in low-burden states, with and without adjustment for clustering at the district level (2001 to 2013 only). Estimates are adjusted for age, sex, rurality, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).

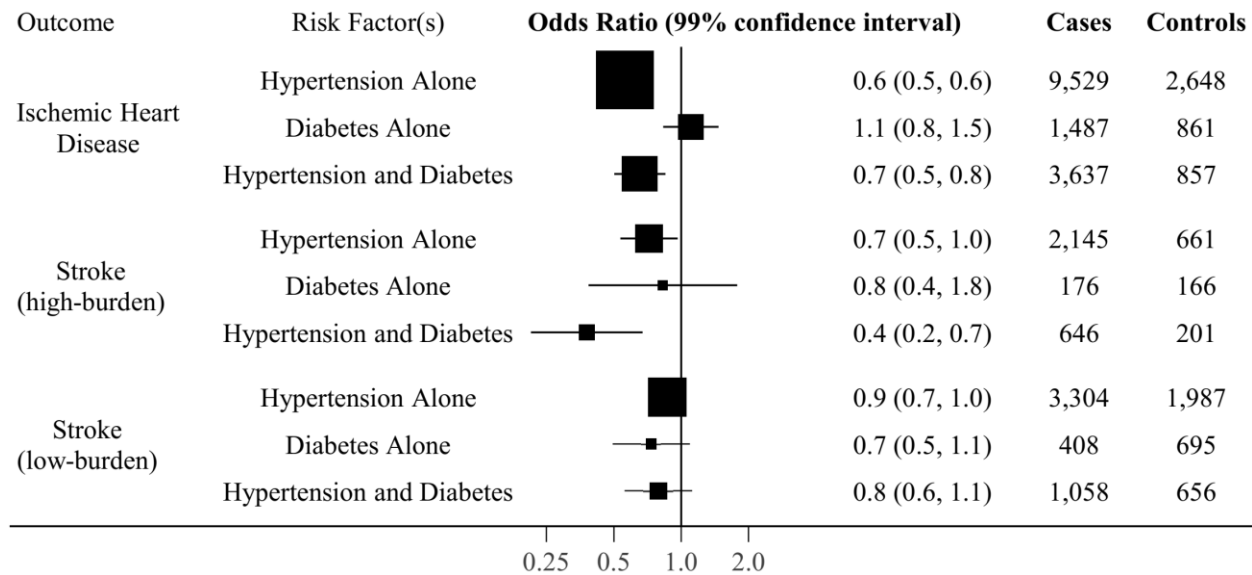
**A. Hypertension and Stroke, Low-Burden**



## B. Diabetes and Stroke, Low-Burden



**eFigure 18** Additional analysis using logistic regression to estimate the association between respondent-reported any medication usage (medication names unavailable) and mortality from ischemic heart disease and stroke among people with hypertension alone, diabetes alone, or both. Data are for 2004 onward (no available medication data for 2001–03). Estimates are adjusted for age, sex, urban or rural residence, region, smoking, alcohol use, and year. The area of each box is proportional to the sample size (cases and controls).



**eTable 4** Sensitivity and additional analyses of the association between respondent-reported medication use and ischemic heart disease or stroke mortality among people with hypertension alone, diabetes alone, or both hypertension and diabetes. Results pertain to India as a whole; findings by state could not be generated due to sample size limitations.

		Odds Ratios (99% confidence interval)										
		Main Estimate	Men	Women	Initial Agreement	Prior Heart Disease	No Prior Heart Disease	Injury Controls	Cancer Controls	Respiratory Controls	SES Adjustment	Clustering Adjustment
Ischemic Heart Disease	Hypertension Alone	0.6 (0.5, 0.6)	0.5 (0.5, 0.6)	0.6 (0.5, 0.7)	0.6 (0.5, 0.6)	0.6 (0.4, 0.8)	0.6 (0.5, 0.7)	1.5 (1.1, 2.3)	0.4 (0.3, 0.5)	0.6 (0.5, 0.7)	0.6 (0.5, 0.6)	0.6 (0.5, 0.7)
	Diabetes Alone	1.1 (0.8, 1.5)	1.2 (0.8, 1.7)	N/A	1.1 (0.8, 1.5)	0.8 (0.3, 2.1)	1.1 (0.8, 1.5)	2.3 (1.3, 4.4)	0.8 (0.5, 1.2)	1.2 (0.8, 1.8)	1.1 (0.8, 1.5)	1.2 (0.8, 1.6)
	Hypertension and Diabetes	0.7 (0.5, 0.8)	0.7 (0.5, 0.9)	N/A	0.6 (0.5, 0.8)	0.7 (0.4, 1.2)	0.7 (0.5, 0.9)	1.3 (0.7, 2.5)	0.4 (0.3, 0.6)	0.8 (0.6, 1.2)	0.7 (0.5, 0.9)	0.7 (0.5, 0.9)
Stroke (high-burden)	Hypertension Alone	0.7 (0.5, 1.0)	0.9 (0.6, 1.4)	0.6 (0.4, 0.9)	0.7 (0.5, 0.9)	0.7 (0.2, 2.2)	0.6 (0.4, 0.8)	2.2 (0.9, 5.4)	0.6 (0.4, 0.9)	0.6 (0.4, 1.0)	0.7 (0.5, 1.0)	0.7 (0.5, 1.0)
	Diabetes Alone	0.8 (0.4, 1.8)	0.8 (0.3, 2.2)	0.6 (0.2, 2.5)	1.1 (0.5, 2.4)	N/A	1.2 (0.4, 3.5)	N/A	0.5 (0.2, 1.3)	N/A	0.9 (0.4, 2.0)	0.9 (0.4, 2.0)
	Hypertension and Diabetes	0.4 (0.2, 0.7)	0.5 (0.2, 1.0)	0.2 (0.1, 0.6)	0.4 (0.2, 0.6)	N/A	0.2 (0.1, 0.5)	N/A	0.2 (0.1, 0.4)	N/A	0.4 (0.2, 0.7)	0.4 (0.2, 0.7)
Stroke (low-burden)	Hypertension Alone	0.9 (0.7, 1.0)	0.8 (0.7, 1.0)	0.9 (0.7, 1.2)	0.9 (0.7, 1.1)	1.1 (0.5, 2.3)	0.7 (0.6, 0.9)	2.2 (1.4, 3.4)	0.6 (0.5, 0.8)	0.9 (0.7, 1.1)	0.8 (0.7, 1.0)	0.8 (0.7, 1.0)
	Diabetes Alone	0.7 (0.5, 1.1)	0.9 (0.5, 1.5)	0.5 (0.3, 1.0)	0.8 (0.5, 1.2)	N/A	0.7 (0.4, 1.1)	1.9 (0.9, 3.9)	0.5 (0.3, 0.9)	0.7 (0.4, 1.2)	0.8 (0.5, 1.2)	0.8 (0.5, 1.2)
	Hypertension and Diabetes	0.8 (0.6, 1.1)	0.7 (0.4, 1.1)	N/A	0.8 (0.5, 1.1)	0.9 (0.3, 2.7)	0.6 (0.4, 1.0)	1.8 (0.8, 3.9)	0.6 (0.4, 0.9)	0.8 (0.5, 1.3)	0.8 (0.6, 1.2)	0.8 (0.6, 1.2)

Abbreviations: N/A, result could not be estimated due to sample size limitations

## Appendix References

1. Kumar R, Thakur JS, Rao BT, Singh MMC, Bhatia SPS. Validity of verbal autopsy in determining causes of adult deaths. *Indian J Public Health*. 2006;50(2):90-94.
2. Ke C, Gupta R, Xavier D, et al. Divergent trends in ischaemic heart disease and stroke mortality in India from 2000 to 2015: a nationally representative mortality study. *The Lancet Global Health*. 2018;6(8):e914-e923. doi:10.1016/S2214-109X(18)30242-0