

**Hypertension Awareness, Treatment, and Control in US Adults: Trends in the
Hypertension Control Cascade by Population Subgroup (National Health and Nutrition
Examination Survey, 1999–2016)**

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Web Table 1. Hypertension Prevalence, Awareness, Treatment, Control and Control Among Those Treated—US adults aged ≥ 25 , National Health and Nutrition Examination Survey, 1999–2016

	1999–2004	2005–2010	2011–2016
Hypertension prevalence, % (SE)			
25–44	11.8 (0.7)	12.0 (0.6)	12.8 (0.7)
45–64	39.5 (1.3)	39.7 (1.1)	40.7 (0.9)
≥ 65	70.6 (1.0)	70.2 (1.1)	67.6 (1.3)
Hypertension awareness, % (SE)			
25–44	62.5 (3.1)	66.7 (2.6)	74.3 (2.0)*,†
45–64	74.1 (1.6)	81.8 (1.0)*	83.2 (1.1)*
≥ 65	74.0 (1.1)	83.7 (1.0)*	86.7 (0.9)*,†
Hypertension treatment, % (SE)			
25–44	46.1 (3.4)	51.2 (2.7)	56.6 (2.3)*
45–64	62.8 (1.7)	73.1 (1.2)*	74.6 (1.5)*
≥ 65	67.1 (1.6)	79.9 (0.9)*	82.1 (1.1)*
Hypertension control, % (SE)			
25–44	33.5 (3.0)	38.6 (2.6)	44.6 (2.3)*
45–64	39.3 (1.7)	51.7 (1.4)*	55.7 (1.9)*
≥ 65	31.7 (1.3)	49.3 (1.1)*	49.9 (1.6)*
Hypertension control <u>among treated</u> , % (SE)			
25–44	72.7 (3.2)	75.3 (2.4)	78.8 (2.2)
45–64	62.6 (1.5)	70.7 (1.4)*	74.6 (1.5)*
≥ 65	47.2 (1.5)	61.7 (1.1)*	60.8 (1.6)*

* Statistically significant difference ($P < 0.05$) as compared with 1999–2004.

† Statistically significant difference ($P < 0.05$) as compared with 2005–2010.

Web Table 2. Hypertension Prevalence, Awareness, Treatment, Control, and Control Among Those Treated by Age Group in 2-Year Survey Cycles—US Adults Aged ≥25, National Health and Nutrition Examination Survey, 1999–2016

	1999–2000	2001–2002	2003–2004	2005–2006	2007–2008	2009–2010	2011–2012	2013–2014	2015–2016	Difference (SE) 2015–2016 Minus 2013–2014	Difference (SE) 2015–2016 Minus 1999–2000
Hypertension prevalence, % (SE)											
25–44	12.3 (1.8)	10.4 (0.8)	12.5 (0.9)	12.0 (1.4)	13.3 (0.9)	10.7 (0.7)	12.6 (1.4)	13.0 (1.0)	12.8 (1.4)	-0.2 (1.7)	0.4 (2.3)
45–64	37.9 (2.2)	37.7 (2.4)	42.8 (2.3)	39.8 (2.1)	39.8 (1.3)	39.5 (2.2)	40.5 (1.5)	41.2 (1.5)	40.5 (1.8)	-0.7 (2.3)	2.6 (2.9)
≥65	70.3 (2.0)	70.7 (1.4)	70.0 (2.1)	68.8 (1.1)	70.3 (2.4)	71.2 (1.8)	67.5 (1.9)	69.5 (1.5)	66.0 (2.6)	-3.5 (3.0)	-4.3 (3.3)
Hypertension awareness, % (SE)											
25–44	61.4 (7.0)	57.8 (4.1)	66.8 (4.6)	60.3 (3.9)	72.8 (4.9)	66.1 (4.3)	70.8 (4.5)	78.2 (2.0)	73.6 (3.3)	-4.6 (3.9)	12.2 (7.7)
45–64	75.0 (3.3)	72.2 (2.3)	75.1 (2.9)	81.0 (2.0)	80.4 (1.3)	84.0 (1.7)	82.9 (2.4)	84.3 (1.6)	82.2 (1.7)	-2.1 (2.3)	7.2 (3.7)
≥65	67.9 (1.8)	74.2 (1.5)	79.7 (1.9)	82.4 (1.7)	83.1 (1.2)	85.4 (2.0)	87.5 (1.6)	88.2 (1.6)	84.7 (1.7)	-3.4 (2.3)	16.8 (2.4)*
Hypertension treatment, % (SE)											
25–44	43.4 (6.5)	41.6 (3.7)	52.1 (6.4)	40.5 (3.6)	57.0 (4.5)	56.5 (4.5)	54.1 (4.4)	57.3 (3.7)	58.1 (4.0)	0.8 (5.5)	14.7 (7.7)
45–64	66.1 (3.1)	61.3 (2.1)	61.9 (3.5)	70.2 (2.0)	71.1 (1.9)	77.8 (2.3)	75.4 (3.0)	75.8 (2.4)	72.6 (2.2)	-3.2 (3.2)	6.2 (3.8)
≥65	60.1 (3.1)	67.0 (2.4)	74.3 (2.1)	77.7 (1.6)	79.7 (1.2)	82.1 (1.8)	84.1 (1.9)	82.6 (2.2)	80.0 (1.8)	-2.6 (2.8)	19.9 (3.5)*
Hypertension control, % (SE)											
25–44	28.7 (5.1)	28.2 (2.9)	42.4 (6.3)	30.9 (3.8)	47.4 (4.3)	36.2 (4.4)	45.8 (5.5)	46.7 (3.3)	41.3 (3.1)	-5.3 (4.5)	12.6 (6.0)*
45–64	39.9 (2.9)	38.9 (2.4)	39.4 (3.2)	48.2 (2.3)	49.7 (2.5)	57.1 (2.3)	56.3 (3.3)	57.0 (3.6)	53.8 (2.8)	-3.2 (4.6)	13.7 (4.1)*
≥65	24.3 (2.4)	32.2 (1.7)	38.8 (2.1)	44.0 (1.8)	48.1 (1.9)	55.1 (2.2)	50.1 (2.6)	54.1 (2.5)	45.9 (3.1)	-8.2 (4.0)*	21.6 (4.0)*
Hypertension control among treated, % (SE)											
25–44	66.2 (6.0)	67.7 (5.9)	81.3 (4.5)	76.4 (5.3)	83.1 (2.6)	65.0 (4.9)	84.7 (4.3)	81.4 (2.4)	71.1 (4.1)	-10.3 (4.8)*	5.0 (7.3)
45–64	60.3 (2.6)	63.4 (2.4)	63.6 (2.8)	68.9 (2.9)	69.8 (2.2)	73.4 (2.0)	74.6 (2.0)	75.2 (2.8)	74.1 (3.0)	-1.1 (4.1)	13.8 (4.0)*
≥65	40.4 (2.8)	48.0 (1.9)	52.2 (2.8)	56.6 (2.0)	60.3 (1.9)	67.2 (1.7)	59.6 (2.4)	65.5 (2.2)	57.3 (3.3)	-8.1 (4.0)*	17.0 (4.4)*

* Statistically significant difference ($P < 0.05$) as compared with reference survey cycle.

Web Table 3. Hypertension Prevalence, Awareness, Treatment, Control and Control Among Those Treated by Age Group and Sex—US adults aged ≥25, National Health and Nutrition Examination Survey, 1999–2016

Outcome, Age Group (years), and Sex		Estimate, % (SE)			Difference (Women vs. Men), % (SE)		
		1999–2004	2005–2010	2011–2016	1999–2004	2005–2010	2011–2016
Prevalence							
25–44	Men	14.3 (1.1)	14.9 (0.8)	14.1 (1.1)			
	Women	9.1 (0.7)	8.9 (0.6)	11.4 (0.8)*†	-5.2 (1.3)‡	-6.1 (0.8)‡	-2.7 (1.2)‡,
45–64	Men	38.5 (1.8)	39.5 (1.3)	43.3 (1.4)*†			
	Women	40.5 (1.5)	39.9 (1.5)	38.2 (1.2)	2.0 (1.9)	0.5 (1.8)	-5.1 (1.8)‡,§,
≥65	Men	62.7 (1.7)	65.6 (1.7)	63.7 (1.7)*			
	Women	76.5 (1.1)	73.7 (1.3)	70.6 (1.4)	13.8 (2.0)	8.1 (2.1)‡,	7.0 (1.8)‡,§
Awareness							
25–44	Men	57.8 (3.3)	58.0 (3.2)	66.4 (2.9)			
	Women	70.8 (4.1)	81.9 (3.5)*	84.5 (2.0)*	13.0 (4.4)‡	23.9 (4.3)‡	18.1 (3.2)‡
45–64	Men	72.6 (2.1)	78.8 (1.4)*	81.0 (1.5)*			
	Women	75.4 (2.6)	84.7 (1.3)*	85.5 (1.7)*	2.8 (3.6)	5.8 (1.9)‡	4.5 (2.3)
≥65	Men	74.6 (1.5)	84.0 (1.3)*	85.8 (1.4)*			
	Women	73.6 (1.5)	83.5 (1.3)*	87.4 (1.1)*†	-1.0 (2.2)	-0.6 (1.7)	1.5 (1.6)
Treatment							
25–44	Men	40.0 (3.9)	41.5 (3.3)	45.3 (3.3)			
	Women	57.0 (4.3)	68.3 (4.0)	71.2 (2.8)*	17.0 (5.3)‡	26.8 (4.9)‡	25.8 (4.0)‡
45–64	Men	61.0 (1.9)	69.1 (1.5)*	70.1 (1.9)*			
	Women	64.4 (2.6)	76.9 (1.6)*	79.4 (1.9)*	3.5 (2.9)	7.8 (1.9)‡	9.3 (2.5)‡
≥65	Men	68.3 (1.8)	80.0 (1.3)*	80.9 (1.3)*			
	Women	66.4 (2.1)	79.9 (1.2)*	83.0 (1.4)*	-1.9 (2.4)	-0.1 (1.8)	2.0 (1.7)
Control							
25–44	Men	27.7 (3.7)	29.4 (2.9)	32.0 (2.7)			
	Women	43.8 (4.4)	54.8 (4.5)	61.0 (2.9)*	16.2 (5.8)‡	25.4 (5.2)‡	29.0 (2.9)‡
45–64	Men	39.7 (2.4)	48.2 (2.0)*	50.2 (2.5)*			
	Women	39.0 (2.1)	55.1 (1.8)*	61.5 (2.1)*†	-0.7 (3.0)	6.8 (2.5)‡	11.3 (2.7)‡,§
≥65	Men	38.7 (1.9)	53.4 (1.6)*	55.1 (2.0)*			
	Women	27.3 (1.5)	46.5 (1.2)*	46.2 (2.0)*	-11.3 (2.2)‡	-7.0 (1.7)‡	-8.9 (2.4)‡

Control among treated							
25–44	Men	69.2 (5.3)	70.8 (3.5)	70.5 (3.9)			
	Women	77.0 (4.1)	80.1 (3.4)	85.7 (2.3)	7.7 (7.3)	9.3 (5.1)	15.2 (4.5)
45–64	Men	65.1 (3.0)	69.8 (2.2)	71.7 (2.2)*			
	Women	60.5 (1.8)	71.6 (1.6)	77.5 (2.0)*,†	-4.6 (3.8)	1.8 (2.7)	5.8 (2.9)‡,§
≥65	Men	56.6 (2.1)	66.8 (1.5)*	68.1 (1.9)*			
	Women	41.2 (1.8)	58.1 (1.3)*	55.7 (2.0)*	-15.4 (2.7)‡	-8.7 (1.8)‡,§	-12.4 (2.4)‡

* Statistically significant difference ($P < 0.05$) as compared with 1999–2004 within category of age and sex.

† Statistically significant difference ($P < 0.05$) as compared with 2005–2010 within category of age and sex.

‡ Statistically significant difference ($P < 0.05$) within survey cycle for women versus men.

§ Statistically significant change in difference ($P < 0.05$) as compared with 1999–2004 (i.e., interaction).

|| Statistically significant change in difference ($P < 0.05$) as compared with 2005–2010 (i.e., interaction).

Web Table 4. Hypertension Prevalence, Awareness, Treatment, Control and Control Among Those Treated by Age Group and Race/Ethnicity—US Adults Aged ≥25, National Health and Nutrition Examination Survey, 1999–2016

Outcome, Age Group (years), and Race/Ethnicity		Estimate, % (SE)			Difference (Reference White), % (SE)		
		1999–2004	2005–2010	2011–2016	1999–2004	2005–2010	2011–2016
Prevalence							
25–44	White	10.7 (0.8)	11.8 (0.8)	12.2 (1.1)			
	Black	20.3 (1.5)	20.0 (1.3)	22.3 (1.3)	9.6 (1.7) [‡]	8.2 (1.7) [‡]	10.0 (1.4) [‡]
	Hispanic	9.4 (1.0)	7.9 (0.9)	12.0 (1.1) [†]	-1.3 (1.2)	-3.8 (1.2) [‡]	-0.2 (1.4)
45–64	White	37.6 (1.6)	37.5 (1.3)	38.7 (1.3)			
	Black	57.2 (1.9)	58.9 (2.1)	60.0 (1.6)	19.6 (2.5) [‡]	21.4 (2.4) [‡]	21.3 (2.1) [‡]
	Hispanic	35.2 (2.0)	35.3 (2.0)	35.0 (2.6)	-2.4 (2.7)	-2.2 (2.3)	-3.7 (2.8)
≥65	White	69.4 (1.2)	69.0 (1.3)	65.7 (1.5)			
	Black	81.9 (2.2)	83.5 (1.4)	80.7 (1.5)	12.5 (2.4) [‡]	14.5 (1.8) [‡]	15.0 (1.9) [‡]
	Hispanic	69.1 (2.1)	67.7 (2.5)	68.5 (2.8)	-0.3 (2.5)	-1.3 (2.7)	2.8 (2.8)
Awareness							
25–44	White	66.5 (4.1)	67.6 (3.4)	75.4 (3.6)			
	Black	62.4 (4.3)	71.2 (3.7)	79.2 (2.5) [*]	-4.1 (5.9)	3.6 (4.4)	3.8 (4.9)
	Hispanic	44.4 (5.9)	46.4 (6.0)	65.6 (4.4) ^{*,†}	-22.1 (7.6) [‡]	-21.2 (6.3) [‡]	-9.8 (6.3)
45–64	White	72.9 (2.0)	82.0 (1.3) [*]	83.6 (1.6) [*]			
	Black	81.4 (1.6)	84.9 (1.5)	85.5 (1.5)	8.5 (2.3) [‡]	2.9 (1.9)	1.9 (2.2) [§]
	Hispanic	70.7 (3.8)	75.6 (2.0)	78.6 (2.8)	-2.2 (4.3)	-6.4 (2.3) [‡]	-5.0 (3.3)
≥65	White	73.5 (1.2)	83.1 (1.1) [*]	87.2 (1.2) ^{*,†}			
	Black	80.6 (1.9)	90.4 (1.7) [*]	89.1 (1.0) [*]	7.2 (2.0) [‡]	7.4 (2.1) [‡]	1.9 (1.5) ^{§,}
	Hispanic	69.7 (2.2)	77.5 (4.2)	83.7 (2.4) [*]	-3.8 (2.5)	-5.5 (4.3)	-3.5 (2.6)
Treatment							
25–44	White	49.0 (4.2)	52.4 (3.4)	60.0 (3.5) [*]			
	Black	45.9 (4.2)	58.7 (4.1) [*]	57.9 (3.2) [*]	-3.1 (5.7)	6.3 (4.9)	-2.0 (4.6)
	Hispanic	24.0 (5.2)	29.0 (4.8)	45.0 (4.7) ^{*,†}	-25.0 (6.1) [‡]	-23.4 (6.2) [‡]	-15.0 (5.7) [‡]
45–64	White	62.3 (1.9)	73.9 (1.7) [*]	75.3 (2.2) [*]			
	Black	70.4 (2.1)	74.4 (1.9)	77.8 (1.9) [*]	8.0 (2.6) [‡]	0.5 (2.6) [§]	2.5 (3.0)
	Hispanic	56.6 (4.9)	67.4 (2.5)	70.9 (3.0) [*]	-5.7 (5.0)	-6.5 (2.7) [‡]	-4.4 (3.8)
≥65	White	66.5 (1.6)	79.5 (1.1) [*]	82.4 (1.4) [*]			
	Black	75.9 (2.0)	86.8 (2.0) [*]	85.3 (1.2) [*]	9.4 (2.2) [‡]	7.4 (2.4) [‡]	2.9 (1.7) [§]
	Hispanic	62.5 (1.7)	71.3 (4.5)	79.3 (2.4) [*]	-4.0 (2.1)	-8.1 (4.6)	-3.2 (2.9)

Control								
25–44	White	38.9 (4.0)	42.1 (3.5)	50.4 (3.5)*				
	Black	24.9 (2.8)	35.6 (3.6)*	38.1 (3.4)*	-14.0 (4.7)‡	-6.5 (4.6)	-12.3 (4.6)‡	
	Hispanic	15.6 (3.7)	16.8 (3.9)	35.1 (4.3)*,†	-23.3 (5.1)‡	-25.3 (5.6)‡	-15.2 (4.9)‡	
45–64	White	41.6 (2.0)	54.6 (1.8)*	58.4 (2.8)*				
	Black	38.0 (2.0)	45.8 (2.1)*	50.9 (2.2)*	-3.6 (2.7)‡	-8.8 (2.6)‡	-7.6 (3.7)‡	
	Hispanic	30.8 (4.3)	46.1 (2.1)*	50.0 (3.9)*	-10.7 (4.3)‡	-8.5 (2.7)‡	-8.5 (5.0)	
≥65	White	32.2 (1.4)	50.0 (1.3)*	51.3 (2.0)*				
	Black	31.9 (2.2)	49.9 (2.7)*	45.9 (1.9)*	-0.3 (2.7)	-0.1 (3.1)	-5.3 (2.4)‡	
	Hispanic	25.5 (2.3)	34.8 (3.2)*	46.0 (3.6)*,†	-6.7 (2.6)‡	-15.2 (3.4)‡,§	-5.2 (4.2)	
Control among treated								
25–44	White	79.3 (4.3)	80.3 (3.5)	84.0 (3.0)				
	Black	54.3 (4.9)	60.6 (5.5)	65.8 (4.2)	-25.0 (6.3)‡	-19.7 (7.0)‡	-18.2 (5.2)‡	
	Hispanic	65.1 (7.9)	57.9 (10.0)	78.2 (5.9)	-14.2 (9.2)‡	-22.4 (11.0)‡	-5.8 (6.5)	
45–64	White	66.7 (2.0)	73.9 (1.4)*	77.7 (2.1)*				
	Black	54.0 (2.4)	61.5 (2.3)*	65.4 (1.8)*	-12.7 (3.1)‡	-12.4 (2.6)‡	-12.3 (2.7)‡	
	Hispanic	54.4 (4.4)	68.4 (2.6)*	70.6 (3.5)*	-12.3 (4.5)‡	-5.5 (2.8)	-7.1 (4.1)	
≥65	White	48.4 (1.7)	62.9 (1.2)*	62.2 (1.9)*				
	Black	42.0 (2.6)	57.4 (3.1)*	53.8 (2.2)*	-6.4 (3.1)‡	-5.4 (3.3)	-8.3 (2.5)‡	
	Hispanic	40.8 (3.6)	48.7 (3.2)*	58.0 (3.6)*	-7.6 (4.1)	-14.2 (3.6)‡	-4.1 (4.1)	

*Statistically significant difference ($P < 0.05$) as compared with 1999–2004 within category of age and race/ethnicity.

†Statistically significant difference ($P < 0.05$) as compared with 2005–2010 within category of age and race/ethnicity.

‡Statistically significant difference ($P < 0.05$) within survey cycle for blacks or Hispanics as compared with whites.

§Statistically significant change in difference ($P < 0.05$) as compared with 1999–2004 (i.e., interaction).

¶Statistically significant change in difference ($P < 0.05$) as compared with 2005–2010 (i.e., interaction).

Web Table 5. Trends in hypertension control by age group before and after adjustment for demographic and clinical characteristics—US adults aged ≥25, National Health and Nutrition Examination Survey, 1999–2016

Age Group (years) and Time Period	Unadjusted		Adjusted for Sex, Race/Ethnicity, and Age		Additionally Adjusted for BMI and Diabetes		Additionally Adjusted for Insurance Coverage and Usual Source of Care		Additionally Adjusted for Hypertension Awareness	
	Prevalence (95% CI)	Prevalence Ratio (95% CI)	Prevalence (95% CI)	Prevalence Ratio (95% CI)	Prevalence (95% CI)	Prevalence Ratio (95% CI)	Prevalence (95% CI)	Prevalence Ratio (95% CI)	Prevalence (95% CI)	Prevalence Ratio (95% CI)
25–44										
1999–2004	33.5 (27.7-39.4)	Referent	33.7 (28.3-39.1)	Referent	34.0 (28.5-39.5)	Referent	33.9 (28.3-39.5)	Referent	52.8 (45.9-59.7)	Referent
2005–2010	38.6 (33.5-43.7)	1.15 (0.90-1.40)	38.8 (33.4-43.9)	1.15 (0.92-1.38)	38.5 (33.5-43.6)	1.13 (0.90-1.36)	38.3 (33.4-43.3)	1.13 (0.90-1.36)	56.1 (50.4-61.8)	1.06 (0.89-1.24)
2011–2016	44.6 (40.0-49.2)	1.33 (1.06-1.60)	44.1 (39.5-48.7)	1.31 (1.07-1.55)	43.2 (38.7-47.8)	1.27 (1.03-1.51)	43.8 (39.1-48.6)	1.29 (1.04-1.54)	60.8 (56.1-65.6)	1.15 (0.98-1.33)
<i>2011–2016 vs. 2005–2010</i>		1.15 (0.96-1.35)		1.13 (0.95-1.32)		1.12 (0.94-1.31)		1.14 (0.95-1.33)		1.08 (0.95-1.22)
45–64										
1999–2004	39.3 (36.1-42.6)	Referent	39.2 (36.0-42.4)	Referent	40.3 (37.1-43.4)	Referent	40.1 (37.0-43.2)	Referent	53.2 (50.5-55.9)	Referent
2005–2010	51.7 (48.9-54.5)	1.32 (1.18-1.44)	51.7 (49.0-54.3)	1.32 (1.19-1.44)	51.7 (49.0-54.4)	1.28 (1.17-1.40)	52.1 (49.5-54.8)	1.30 (1.18-1.42)	63.3 (60.3-66.3)	1.19 (1.11-1.27)
2011–2016	55.7 (51.9-59.4)	1.42 (1.27-1.57)	55.9 (52.1-59.7)	1.43 (1.27-1.58)	55.2 (51.2-59.1)	1.37 (1.23-1.51)	55.1 (51.2-58.9)	1.37 (1.23-1.52)	67.1 (63.6-70.6)	1.26 (1.17-1.35)
<i>2011–2016 vs. 2005–2010</i>		1.08 (0.98-1.17)		1.08 (0.99-1.17)		1.07 (0.97-1.16)		1.06 (0.97-1.15)		1.06 (0.99-1.13)
≥65										
1999–2004	31.7 (29.2-34.2)	Referent	32.2 (29.8-34.6)	Referent	32.4 (29.8-34.9)	Referent	32.6 (30.0-35.1)	Referent	43.3 (40.6-46.0)	Referent
2005–2010	49.3 (47.1-51.5)	1.56 (1.41-1.70)	49.3 (47.1-51.5)	1.53 (1.40-1.66)	49.2 (46.8-51.5)	1.52 (1.38-1.65)	49.1 (46.8-51.5)	1.51 (1.37-1.64)	59.0 (56.8-61.3)	1.37 (1.27-1.46)
2011–2016	49.9 (46.7-53.1)	1.57 (1.41-1.73)	49.5 (46.2-52.7)	1.54 (1.38-1.69)	49.1 (45.8-52.3)	1.52 (1.36-1.67)	49.2 (45.9-52.5)	1.51 (1.35-1.66)	57.2 (53.9-60.5)	1.32 (1.21-1.43)
<i>2011–2016 vs. 2005–2010</i>		1.01 (0.93-1.09)				1.00 (0.92-1.08)		1.00 (0.92-1.08)		0.97 (0.90-1.04)

BMI, body mass index; CI, confidence Interval.

Diabetes status was based on self-report. Insurance coverage and usual source of care were categorized as yes/no.

Web Table 6. Trends in hypertension control by age group before and after adjustment for demographic and clinical characteristics among those aware of their hypertension—US adults aged ≥25, National Health and Nutrition Examination Survey, 2007–2016

Age Group (years) and Time Period	Unadjusted		Adjusted for Sex, Race/Ethnicity, and Age		Additionally Adjusted for BMI and Diabetes		Additionally Adjusted for Insurance Coverage and Usual Source of Care		Additionally Adjusted for Hypertension Duration	
	Prevalence (95% CI)	Prevalence ratio (95% CI)	Prevalence (95% CI)	Prevalence ratio (95% CI)	Prevalence (95% CI)	Prevalence ratio (95% CI)	Prevalence (95% CI)	Prevalence ratio (95% CI)	Prevalence (95% CI)	Prevalence ratio (95% CI)
25–44										
2007–2010	42.3 (36.0-48.6)	Referent	60.7 (54.9-66.3)	Referent	60.3 (54.9-65.7)	Referent	60.1 (54.7-65.5)	Referent	59.0 (53.7-64.2)	Referent
2011–2016	44.6 (40.0-49.2)	1.05 (0.86-1.24)	60.0 (55.4-64.6)	0.99 (0.87-1.11)	60.3 (55.6-65.0)	1.00 (0.89-1.12)	60.0 (55.2-64.8)	1.00 (0.88-1.11)	61.0 (56.2-65.9)	1.04 (0.92-1.15)
45–64										
2007–2010	65.0 (61.2-68.7)	Referent	64.7 (61.0-68.4)	Referent	64.7 (60.8-68.6)	Referent	64.8 (60.9-68.7)	Referent	65.0 (61.0-68.9)	Referent
2011–2016	66.9 (63.5-70.4)	1.02 (0.95-1.11)	67.2 (63.7-70.6)	1.04 (0.96-1.11)	67.3 (63.7-70.8)	1.04 (0.96-1.12)	67.2 (63.6-70.7)	1.04 (0.96-1.12)	67.1 (63.6-70.6)	1.03 (0.95-1.11)
≥65										
2007–2010	61.4 (58.7-64.1)	Referent	61.7 (59.0-64.3)	Referent	61.9 (58.9-64.8)	Referent	61.9 (59.0-64.7)	Referent	62.1 (59.0-65.2)	Referent
2011–2016	57.8 (54.4-60.8)	0.94 (0.87-1.00)	57.4 (54.1-60.6)	0.93 (0.87-0.99)	57.3 (54.0-60.6)	0.93 (0.86-0.99)	57.4 (54.1-60.7)	0.93 (0.86-1.00)	57.7 (54.3-61.0)	0.93 (0.86-1.00)

BMI, body mass index; CI, confidence Interval.

Diabetes status was based on self-report. Insurance coverage and usual source of care were categorized as yes/no. Duration of hypertension was calculated as age at examination minus age at which the participant was told they had hypertension.

Web Table 7. Hypertension Treatment Goals from Major National Guidelines During 1999–2016

Dates	Guideline	Blood Pressure Goals
1999–2003	JNC6*	<140/90 mmHg for all patients—lower if tolerated
2003–2014	JNC7	<130/80 mmHg for those with diabetes or chronic kidney disease <140/90 for all other patients
2014–2016	JNC8 Panel Member Report	<150/90 mmHg for adults aged ≥ 60 years without diabetes or chronic kidney disease <140/90 for all other patients

JNC, Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure.

* Issued in 1997.