

WEB MATERIAL

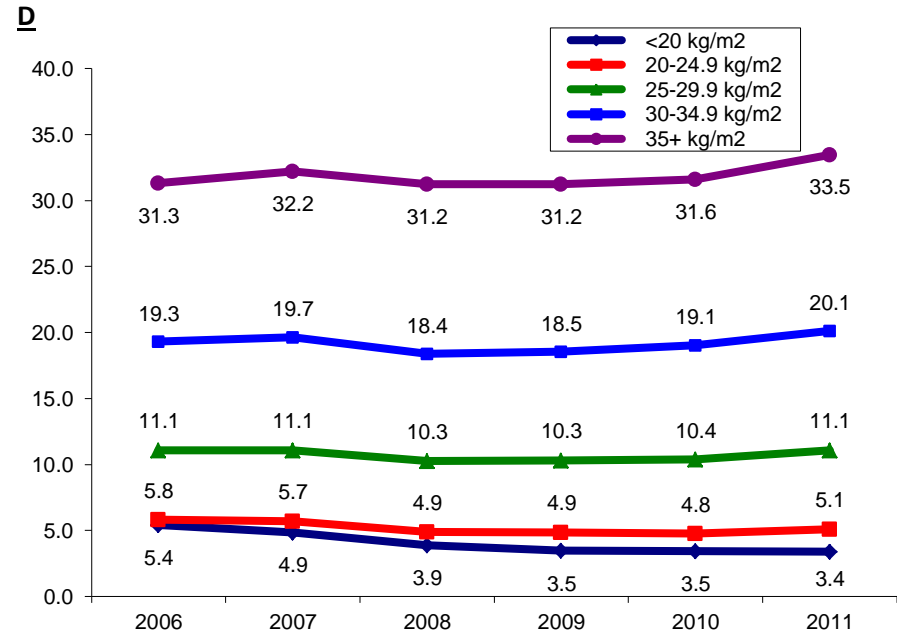
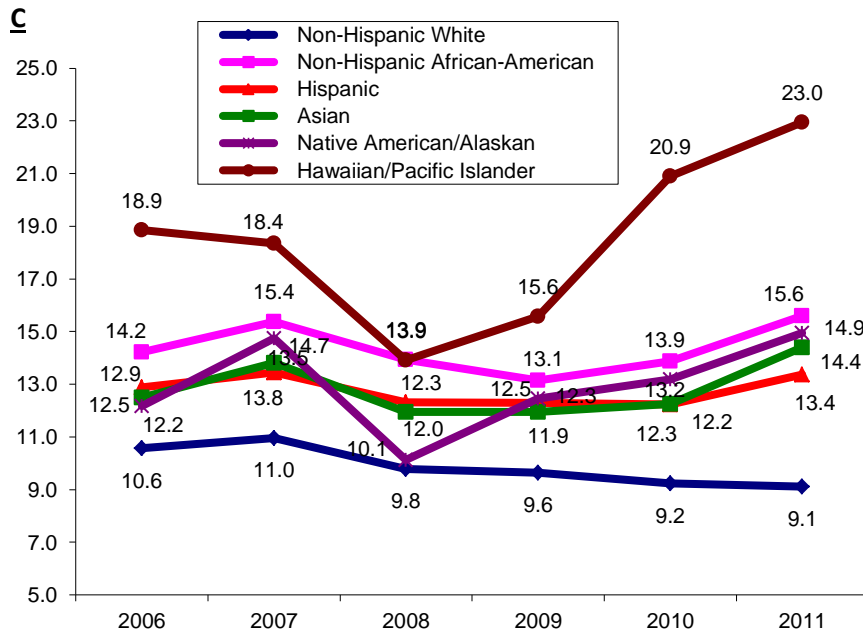
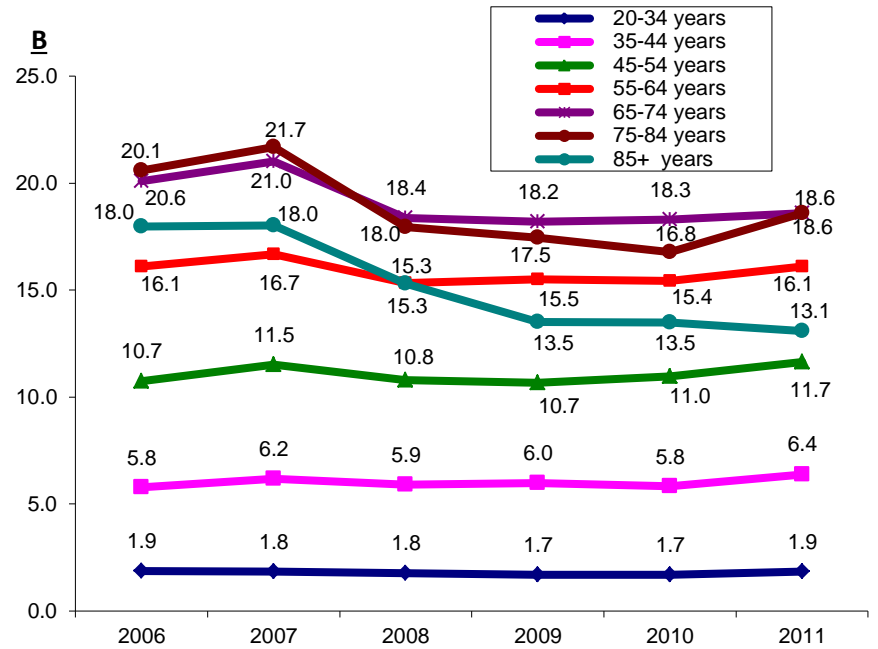
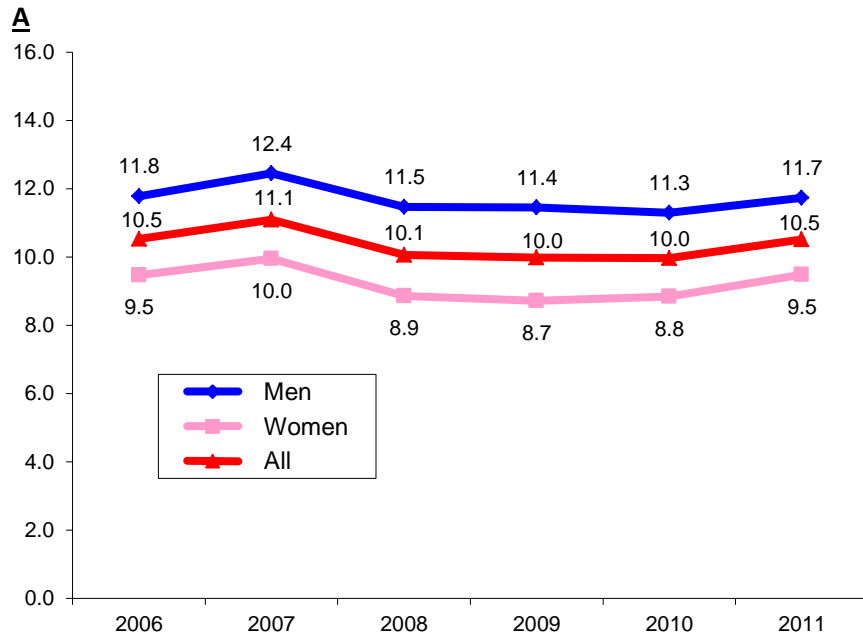
Trends in Diabetes Incidence Among 7 Million Insured Adults, 2006–2011: The SUPREME-DM Project

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Abbreviations: CI, confidence interval; FPG, fasting plasma glucose; A1C, hemoglobin A_{1c}; SUPREME-DM, Surveillance, Prevention, and Management of Diabetes Mellitus.

Web Figure 1. Crude Diabetes Incidence per 1,000 Adults, by Sex (A), Age Group (B), Race/Ethnicity (C), and Body Mass Index (D): SUPREME-DM Project, 2006–2011



Web Table 1. Select Characteristics of US Adults With and Without Incident Diabetes, by Year: SUPREME-DM Project, 2006–2011

	2006	2007	2008	2009	2010	2011
Population						
Incident Diabetes	47,667	50,605	46,544	46,848	47,137	50,249
No Diabetes	4,481,239	4,511,293	4,580,461	4,651,952	4,685,802	4,733,314
Total	4,528,906	4,561,898	4,627,005	4,698,800	4,732,939	4,783,563
% Change from Previous Year						
Incident Diabetes	--	6.2%	-8.0%	0.7%	0.6%	6.6%
No Diabetes	--	0.7%	1.5%	1.6%	0.7%	1.0%
Total	--	0.7%	1.4%	1.6%	0.7%	1.1%
Years Eligibility Prior to Year						
Incident Diabetes	6.5 (2.3)	7.2 (2.7)	7.7 (3.1)	8.3 (3.4)	8.8 (3.7)	9.4 (4.1)
No Diabetes	6.2 (2.5)	6.8 (2.8)	7.3 (3.2)	7.7 (3.6)	8.2 (3.9)	8.7 (4.3)
Age						
Incident Diabetes	59.1 (14.0)	59.1 (13.8)	58.5 (13.7)	58.4 (13.5)	58.4 (13.5)	58.4 (13.6)
No Diabetes	49.0 (16.5)	49.1 (16.5)	49.1 (16.5)	49.1 (16.6)	49.1 (16.7)	49.1 (16.9)
% Women						
Incident Diabetes	48.5%	48.3%	47.6%	47.3%	48.2%	49.0%
No Diabetes	54.1%	54.0%	54.0%	54.2%	54.3%	54.4%
% Non-White						
Incident Diabetes	45.8%	47.3%	48.1%	48.9%	51.1%	54.6%
No Diabetes	40.3%	41.0%	41.7%	42.4%	42.9%	43.2%
Body Mass Index (kg/m²)						
Incident Diabetes	32.5 (8.0)	32.5 (7.9)	32.7 (7.8)	32.7 (7.7)	32.8 (7.9)	32.6 (7.8)
No Diabetes	28.4 (6.7)	28.2 (6.6)	28.2 (6.5)	28.2 (6.6)	28.2 (6.6)	28.1 (6.5)
Fasting Plasma Glucose (mg/dl)						
Incident Diabetes	159.4 (65.5)	156.9 (63.0)	159.2 (64.2)	158.5 (64.2)	154.5 (62.6)	151.3 (60.9)
No Diabetes	96.1 (11.7)	96.5 (11.5)	96.1 (11.4)	96.3 (11.5)	95.7 (11.2)	96.1 (11.0)
Hemoglobin A_{1c} (%)						
Incident Diabetes	7.6 (2.1)	7.7 (2.1)	7.7 (2.1)	7.7 (2.1)	7.7 (2.0)	7.6 (2.0)
No Diabetes	5.6 (0.4)	5.7 (0.4)	5.7 (0.4)	5.7 (0.5)	5.7 (0.4)	5.8 (0.4)

Data are numbers of individuals in the population rows, and means (standard deviations) or percent in the remainder of the table.

Web Table 2. Proportions of US Adults Diagnosed With Incident Diabetes by Means of A1C and Fasting Plasma Glucose Testing Prior to or at Diagnosis, by Age, Sex, Race/Ethnicity, and Body Mass Index: SUPREME-DM Project, 2006–2011

		2006	2007	2008	2009	2010	2011
Overall							
	Had Fasting Glucose Only	18.0%	18.8%	18.9%	18.9%	13.9%	10.1%
	Had A1C Only	11.3%	12.5%	12.0%	11.8%	14.8%	19.7%
	Had Both FPG and A1C	44.6%	46.8%	47.9%	50.4%	54.0%	54.7%
	Any Glycemia Testing	73.9%	78.1%	78.8%	81.1%	82.7%	84.5%
Sex							
Men	Had Fasting Glucose Only	18.3%	19.1%	19.3%	19.0%	14.4%	10.6%
	Had A1C Only	12.1%	12.7%	12.2%	12.1%	14.8%	19.7%
	Had Both FPG and A1C	43.7%	46.4%	47.0%	50.0%	52.9%	53.7%
	Any Glycemia Testing	74.1%	78.2%	78.5%	81.1%	82.1%	84.0%
Women	Had Fasting Glucose Only	17.7%	18.5%	18.6%	18.8%	13.4%	15.1%
	Had A1C Only	10.6%	12.3%	11.7%	11.5%	14.7%	19.6%
	Had Both FPG and A1C	45.6%	47.1%	48.9%	50.9%	55.2%	55.7%
	Any Glycemia Testing	73.9%	77.9%	79.2%	81.2%	83.3%	90.4%
Age Group							
20-34 Years	Had Fasting Glucose Only	13.5%	14.7%	14.5%	14.0%	10.2%	7.8%
	Had A1C Only	14.1%	15.8%	13.3%	15.3%	19.8%	22.8%
	Had Both FPG and A1C	44.8%	44.6%	48.5%	50.2%	50.4%	51.4%
	Any Glycemia Testing	72.4%	75.1%	76.3%	79.5%	80.4%	82.0%
35-44 Years	Had Fasting Glucose Only	15.1%	15.9%	15.8%	15.9%	12.1%	8.5%
	Had A1C Only	14.0%	15.1%	14.5%	13.3%	16.5%	21.8%
	Had Both FPG and A1C	47.5%	49.7%	51.7%	53.7%	56.1%	55.6%
	Any Glycemia Testing	76.6%	80.7%	82.0%	82.9%	84.7%	85.9%
45-54 Years	Had Fasting Glucose Only	16.9%	17.8%	18.3%	17.6%	13.2%	9.1%
	Had A1C Only	12.3%	13.1%	12.8%	12.5%	15.7%	20.2%
	Had Both FPG and A1C	47.8%	50.0%	50.8%	53.7%	56.1%	57.8%
	Any Glycemia Testing	77.0%	80.9%	81.9%	83.8%	85.0%	87.1%

55-64 Years	Had Fasting Glucose Only	19.0%	19.8%	20.0%	19.5%	14.1%	9.8%
	Had A1C Only	9.8%	11.7%	11.1%	11.2%	13.8%	19.2%
	Had Both FPG and A1C	47.6%	49.5%	50.2%	52.5%	56.6%	56.7%
	Any Glycemia Testing	76.4%	81.0%	81.3%	83.2%	84.5%	85.7%
65-74 Years	Had Fasting Glucose Only	20.8%	21.6%	21.0%	21.3%	15.6%	12.0%
	Had A1C Only	10.0%	10.9%	10.6%	10.2%	13.2%	17.8%
	Had Both FPG and A1C	44.3%	46.3%	47.5%	50.1%	54.8%	55.7%
	Any Glycemia Testing	75.1%	78.8%	79.1%	81.6%	83.6%	85.5%
75-84 Years	Had Fasting Glucose Only	19.4%	19.5%	20.1%	21.6%	15.7%	12.3%
	Had A1C Only	11.3%	11.9%	11.6%	11.8%	14.4%	19.2%
	Had Both FPG and A1C	35.3%	38.3%	38.2%	39.6%	45.6%	46.9%
	Any Glycemia Testing	66.0%	69.7%	69.9%	73.0%	75.7%	78.4%
≥85 Years	Had Fasting Glucose Only	12.9%	15.4%	15.6%	17.6%	13.4%	10.6%
	Had A1C Only	12.7%	13.1%	12.9%	12.5%	15.3%	22.1%
	Had Both FPG and A1C	24.1%	25.7%	25.7%	28.7%	32.1%	31.0%
	Any Glycemia Testing	49.7%	54.2%	54.2%	58.8%	60.8%	63.7%
Body Mass Index							
<20 kg/m ²	Had Fasting Glucose Only	14.2%	17.5%	18.2%	15.4%	14.4%	9.9%
	Had A1C Only	11.1%	10.0%	7.9%	10.3%	14.6%	22.3%
	Had Both FPG and A1C	27.8%	28.1%	24.1%	31.2%	34.3%	35.5%
	Any Glycemia Testing	53.1%	55.6%	50.2%	56.9%	63.3%	67.7%
20-24.9 kg/m ²	Had Fasting Glucose Only	18.4%	18.2%	18.6%	19.4%	13.6%	10.5%
	Had A1C Only	10.4%	11.0%	10.2%	10.3%	13.1%	17.3%
	Had Both FPG and A1C	41.7%	43.3%	43.4%	45.3%	51.8%	51.8%
	Any Glycemia Testing	70.5%	72.5%	72.2%	75.0%	78.5%	79.6%
25-29.9 kg/m ²	Had Fasting Glucose Only	18.9%	19.4%	20.4%	20.3%	15.1%	10.9%
	Had A1C Only	12.2%	11.2%	11.1%	10.8%	13.4%	17.7%
	Had Both FPG and A1C	47.0%	50.5%	50.0%	52.5%	57.2%	58.4%
	Any Glycemia Testing	78.1%	81.1%	81.5%	83.6%	85.7%	87.0%

30-34.9 kg/m ²	Had Fasting Glucose Only	19.7%	19.5%	19.8%	20.3%	15.3%	11.0%
	Had A1C Only	13.7%	11.6%	11.0%	11.0%	14.2%	19.0%
	Had Both FPG and A1C	49.8%	53.0%	53.2%	54.9%	57.5%	59.2%
	Any Glycemia Testing	83.2%	84.1%	84.0%	86.2%	87.0%	89.2%
≥35 kg/m ²	Had Fasting Glucose Only	17.2%	18.7%	18.7%	19.0%	13.4%	9.5%
	Had A1C Only	14.1%	12.8%	12.6%	12.1%	15.9%	22.0%
	Had Both FPG and A1C	50.6%	52.9%	53.6%	55.6%	58.2%	57.0%
	Any Glycemia Testing	81.9%	84.4%	84.9%	86.7%	87.5%	88.5%
Race/Ethnicity							
Non-Hispanic White	Had Fasting Glucose Only	18.8%	20.5%	20.4%	21.0%	16.0%	11.8%
	Had A1C Only	11.7%	12.1%	11.8%	11.8%	14.7%	19.5%
	Had Both FPG and A1C	43.4%	44.6%	45.7%	47.2%	50.6%	51.2%
	Any Glycemia Testing	73.9%	77.2%	77.9%	80.0%	81.3%	82.5%
Non-Hispanic Black	Had Fasting Glucose Only	16.3%	16.2%	16.2%	15.2%	10.7%	7.8%
	Had A1C Only	10.8%	18.0%	17.2%	17.0%	21.3%	25.4%
	Had Both FPG and A1C	37.1%	40.5%	41.9%	46.5%	48.9%	48.7%
	Any Glycemia Testing	64.2%	74.7%	75.3%	78.7%	80.9%	81.9%
Hispanic	Had Fasting Glucose Only	20.3%	19.5%	19.3%	19.8%	15.0%	10.7%
	Had A1C Only	12.7%	11.9%	11.6%	10.7%	12.8%	16.7%
	Had Both FPG and A1C	47.1%	50.4%	52.4%	55.1%	59.5%	61.5%
	Any Glycemia Testing	80.1%	81.8%	83.3%	85.6%	87.3%	88.9%
Asian	Had Fasting Glucose Only	16.7%	18.2%	18.2%	17.3%	11.1%	8.0%
	Had A1C Only	7.4%	8.4%	8.2%	8.6%	11.7%	18.2%
	Had Both FPG and A1C	59.9%	60.4%	59.9%	62.7%	66.9%	65.6%
	Any Glycemia Testing	84.0%	87.0%	86.3%	88.6%	89.7%	91.8%
Native American/Alaska Native	Had Fasting Glucose Only	22.4%	17.6%	23.0%	21.7%	14.7%	12.0%
	Had A1C Only	10.3%	13.4%	10.0%	14.7%	14.7%	22.8%
	Had Both FPG and A1C	41.4%	46.5%	52.0%	46.5%	58.0%	53.9%
	Any Glycemia Testing	74.1%	77.5%	85.0%	82.9%	87.4%	88.7%

Hawaiian/Pacific Islander	Had Fasting Glucose Only	16.9%	13.9%	13.3%	12.1%	9.8%	4.4%
	Had A1C Only	9.7%	6.9%	9.4%	11.8%	29.1%	41.6%
	Had Both FPG and A1C	58.2%	59.4%	63.3%	65.6%	48.2%	46.2%
	Any Glycemia Testing	84.8%	80.2%	86.0%	89.5%	87.1%	92.2%

Web Appendix

Surveillance, Prevention, and Management of Diabetes Mellitus (SUPREME-DM) Project Personnel

Kaiser Permanente Colorado Institute for Health Research: John F. Steiner, MD, MPH; Andrea R. Paolino, MA; Marsha Raebel, PharmD; Stan Xu, PhD; Emily Schroeder, MD, PhD; William (Troy) Donahoo, MD, FTOS; Michael Shainline, MS, MBA; Christina Clarke, BS; Glenn Goodrich, MS; Jennifer L. Ellis, MBA, MSPH; J. David Powers, MS (B).

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Henry Ford Health System: Abraham Thomas, MD, MPH; Jennifer Elston Lafata, PhD; Renee Atkinson, MBA; Nonna Akkerman, BCS; Aida Li, MCS.

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