

Supplementary Materials for

**Incidence of type 1 diabetes may be under-estimated in Chinese population:
evidence from 21.7 million people between 2007 and 2017**

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2 figures and 8 tables.

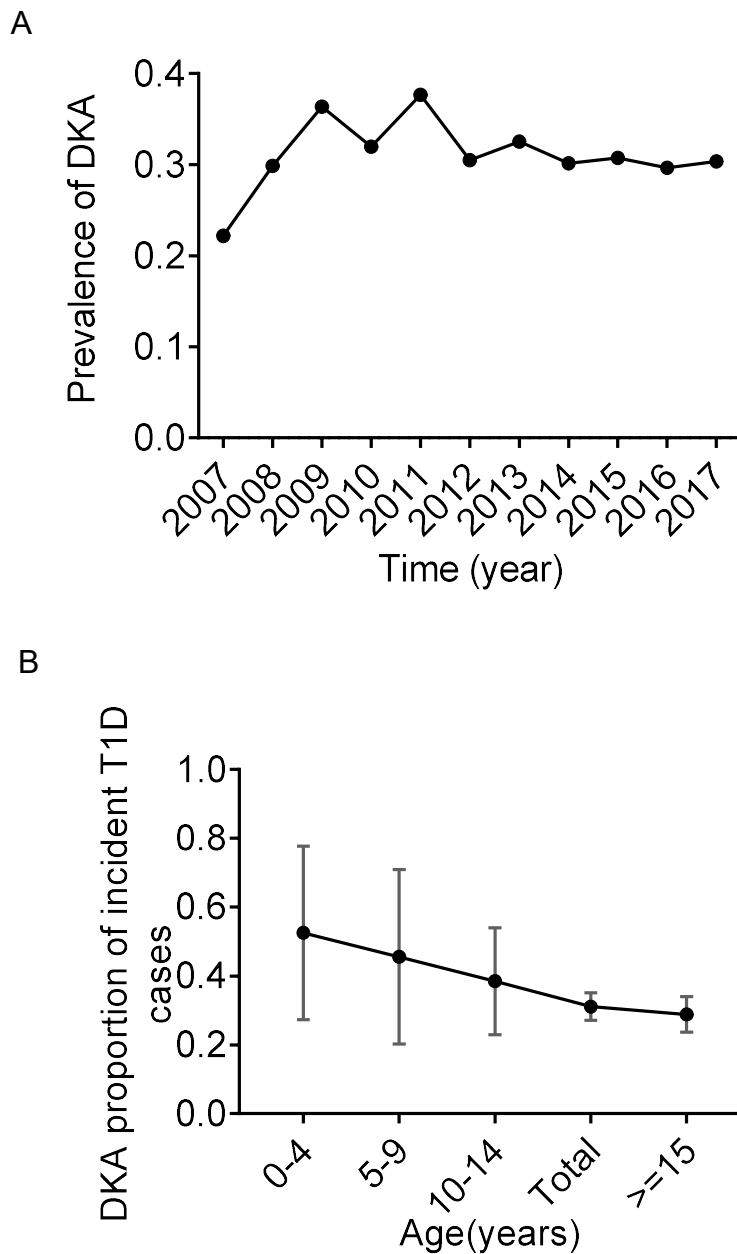


Figure S1. Prevalence of DKA at T1D onset by year and age group. (A) The black circles show the prevalence of DKA at T1D onset by year. (B) Age-specific prevalence trends of DKA at T1D onset by age group. The circles indicate the average proportion by age group and in all cases. Bars indicate maximum (top) and minimum (bottom) proportion during 2007-2017.

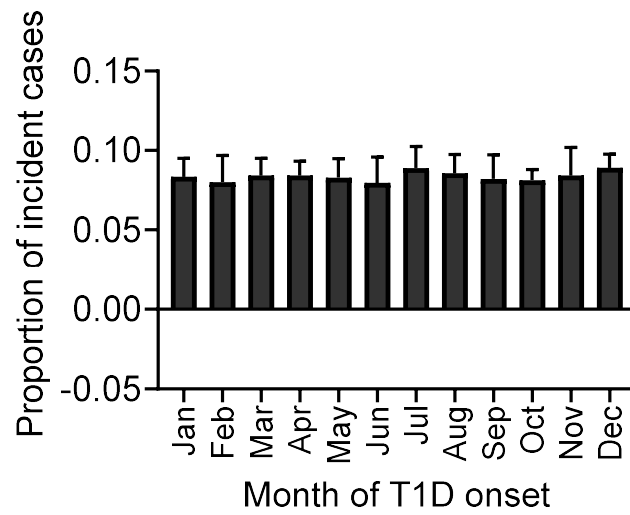


Figure S2. Proportion of T1D cases by month (2007-2017). The bar indicates the maximum proportion during the period.

Table S1. Hospitals Included (n=153).

1.	Airport Hospital, Shunyi District, Beijing (Community Health Service Center, Houshayu Town, Shunyi District, Beijing)
2.	Amcare Women's and Children's Hospital
3.	Aviation General Hospital
4.	Beijing Aerospace General Hospital
5.	Beijing Anding Hospital Affiliated to Capital Medical University
6.	Beijing Anorectal Hospital
7.	Beijing Anzhen Hospital Affiliated to Capital Medical University
8.	Beijing Asian Games Village Meizhong Yihe Women's and Children's Hospital
9.	Beijing Baiziwang Hemei Women's and Children's Hospital
10.	Beijing Bo'ai Hospital
11.	Beijing Boren Hospital
12.	Beijing Cancer Hospital
13.	Beijing Capital International Airport Hospital
14.	Beijing Changfeng Hospital
15.	Beijing Chaoyang District Hospital of Traditional Chinese Medicine
16.	Beijing Chaoyang Emergency Rescue Center
17.	Beijing Chaoyang Hospital Affiliated to Capital Medical University
18.	Beijing Chest Hospital Affiliated to Capital Medical University
19.	Beijing Children's Hospital Affiliated to Capital Medical University
20.	Beijing Chuiyangliu Hospital
21.	Beijing Daxing District Integrated Traditional Chinese and Western Medicine Hospital
22.	Beijing Daxing District People's Hospital
23.	Beijing Daxing District People's Hospital
24.	Beijing Ditan Hospital Affiliated to Capital Medical University
25.	Beijing Dongcheng District First People's Hospital
26.	Beijing Dongyuan Hospital of Traditional Chinese Medicine
27.	Beijing Electric Power Hospital of State Grid Corporation of China
28.	Beijing Fengsheng orthopedic Hospital of Traditional Chinese Medicine
29.	Beijing Fengtai Hospital
30.	Beijing Fengtai integrated Traditional Chinese and Western Medicine Hospital
31.	Beijing Fengtai YouAnMen Hospital
32.	Beijing First Integrated Traditional Chinese and Western Medicine Hospital
33.	Beijing Friendship Hospital Affiliated to Capital Medical University
34.	Beijing Geriatric Hospital
35.	Beijing Geriatric Hospital
36.	Beijing Gulou Hospital of Traditional Chinese Medicine
37.	Beijing Haidian Hospital
38.	Beijing Hemei Women's and Children's Hospital
39.	Beijing Hepingli Hospital
40.	Beijing Hospital
41.	Beijing Hospital of Traditional Chinese Medicine Affiliated to Capital Medical University

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42. Beijing Huairou Hospital
 43. Beijing Huaxin Hospital (the First Affiliated Hospital of Tsinghua University)
 44. Beijing Hui People's Hospital
 45. Beijing Integrated Traditional Chinese and Western Medicine Hospital
 46. Beijing Jiangong Hospital
 47. Beijing Jingmei Group General Hospital
 48. Beijing Jishuitan Hospital
 49. Beijing Kangyide Integrated Traditional Chinese and Western Medicine Pulmonary Hospital
 50. Beijing Lianke Traditional Chinese Medicine Nephrosis Hospital
 51. Beijing Liying Maternity Hospital
 52. Beijing Longfu Hospital (Beijing Dongcheng District Geriatric Hospital)
 53. Beijing Luhe Hospital Affiliated to Capital Medical University
 54. Beijing Mary Maternity and Infant Hospital
 55. Beijing Maternity Hospital (New)
 56. Beijing Maternity Hospital Affiliated to Capital Medical University
 57. Beijing Mentougou District Hospital of Traditional Chinese Medicine
 58. Beijing Miyun District Hospital
 59. Beijing Miyun District Hospital of Traditional Chinese Medicine
 60. Beijing New Century Women's and Children's Hospital
 61. Beijing NO. 401 Hospital of China Nuclear Industry
 62. Beijing Pinggu District Hospital
 63. Beijing Pinggu District Hospital of Traditional Chinese Medicine
 64. Beijing Pinggu yuexie Hospital
 65. Beijing Pulen Hospital
 66. Beijing Qinghua Changgeng Hospital
 67. Beijing Red Cross Emergency Rescue Center (Beijing Red Cross Trauma Hospital)
 68. Beijing Red Cross Peace Orthopedic Hospital
 69. Beijing Rehabilitation Hospital Affiliated to Capital Medical University
 70. Beijing Renhe Hospital
 71. Beijing Second Hospital
 72. Beijing Shangdi Hospital
 73. Beijing Shijingshan District Hospital of Traditional Chinese Medicine
 74. Beijing Shijingshan Hospital
 75. Beijing Shijitan Hospital Affiliated to Capital Medical University (Beijing Railway General Hospital)
 76. Beijing Shunyi District Hospital
 77. Beijing Shunyi District Hospital of Traditional Chinese Medicine
 78. Beijing Sijiqing Hospital (community health service center, Sijiqing Town, Haidian District, Beijing)
 79. Beijing Sixth Hospital
 80. Beijing Social Welfare Hospital
 81. Beijing Taihe Maternity Hospital
 82. Beijing Tiantan Hospital Affiliated to Capital Medical University
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83. Beijing Tibetan Hospital, China Tibetan Research Center
 84. Beijing Tongji Oriental Integrated Traditional Chinese and Western Medicine Hospital
 85. Beijing Tongren Hospital Affiliated to Capital Medical University
 86. Beijing Tongrentang Hospital of Traditional Chinese Medicine
 87. Beijing Tongshantang Hospital of Traditional Chinese Medicine
 88. Beijing United Family Hospital
 89. Beijing Wangfu Integrated Traditional Chinese and Western Medicine Hospital
 90. Beijing Wanliu Meizhong Yihe Women's and Children's Hospital
 91. Beijing Water Conservancy Hospital
 92. Beijing Xiaotangshan Hospital
 93. Beijing Xicheng District Ping'an Hospital
 94. Beijing Yangfangdian Hospital
 95. Beijing Yanhua Hospital
 96. Beijing You'an Hospital Affiliated to Capital Medical University
 97. Beijing Zhongguancun Hospital
 98. Cancer Hospital, Chinese Academy of Medical Sciences
 99. Central Hospital of Beijing Prison Administration Bureau
 100. Central Hospital of Beijing Railway Branch
 101. Changping District Hospital of Beijing
 102. Changping District Hospital of Integrated Traditional Chinese and Western Medicine
 103. Changping District Hospital of traditional Chinese Medicine
 104. Children's Hospital Affiliated to Capital Institute of Pediatrics
 105. China Japan Friendship Hospital
 106. Civil Aviation General Hospital
 107. Coal General Hospital
 108. Dongzhimen Hospital, Beijing University of Traditional Chinese Medicine
 109. Fangshan District First Hospital of Beijing
 110. Fangshan District Hospital of Traditional Chinese Medicine
 111. Fuwai Hospital, Chinese Academy of Medical Sciences
 112. Fuxing Hospital Affiliated to Capital Medical University
 113. Guang'anmen Hospital, Chinese Academy of Traditional Chinese Medicine
 114. Guangwai Hospital, Xicheng District, Beijing
 115. Huairou District Hospital of Traditional Chinese Medicine
 116. Huguosi Hospital of Traditional Chinese Medicine Affiliated to Beijing University of Traditional Chinese Medicine
 117. Liangxiang Hospital, Fangshan District, Beijing
 118. Lianhuachi Rehabilitation Hospital of Beijing Fengtai District Elderly Association
 119. Mentougou District Hospital of Beijing
 120. Nankou Hospital of Changping District, Beijing
 121. Nankou Railway Hospital, Changping District, Beijing
 122. Nanyuan Hospital, Fengtai District, Beijing
 123. No. 731 Hospital of China Aerospace Science and Industry Group
 124. Ophthalmic Hospital, Chinese Academy of Traditional Chinese Medicine
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125. Oriental Hospital, Beijing University of Traditional Chinese Medicine
 126. Peking Union Medical College Hospital, Chinese Academy of Medical Sciences
 127. Peking University First Hospital
 128. Peking University Hospital
 129. Peking University International Hospital
 130. Peking University Third Hospital
 131. People's Hospital of Peking University
 132. Rehabilitation Hospital Affiliated to National Rehabilitation Aids Research Center
 133. Shahe Hospital, Changping District, Beijing
 134. Shougang Hospital of Peking University
 135. Shuangqiao Hospital, Chaoyang District, Beijing
 136. Shunyi District, Beijing Ditan Hospital Affiliated to Capital Medical University
 137. Southern District of Guang'anmen Hospital, Chinese Academy of Traditional Chinese Medicine
 138. Space Center Hospital
 139. The Third Affiliated Hospital of Beijing University of Traditional Chinese Medicine
 140. Tieying Hospital, Fengtai District, Beijing
 141. Tongzhou District Hospital of Integrated Traditional Chinese and Western Medicine
 142. Tongzhou District Hospital of Traditional Chinese Medicine
 143. Tsinghua University Hospital
 144. Tsinghua University Yuquan Hospital
 145. Wangjing Hospital, Chinese Academy of Traditional Chinese Medicine
 146. Women and Children's Hospital
 147. Xinhua Hospital, Beijing Friendship Hospital, Capital Medical University
 148. Xiyuan Hospital, Chinese Academy of Traditional Chinese Medicine
 149. Xuanwu Hospital of Capital Medical University
 150. Xuanwu Hospital of Traditional Chinese Medicine
 151. Yanqing District Hospital of Beijing
 152. Yanqing Hospital of Beijing Hospital of Traditional Chinese Medicine
 153. Zhanlu Hospital, Xicheng District, Beijing
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Table S2. Characterization of Hospital Grade, Type, and Ability to Diagnose T1D.

Hospital Grade	Hospital Type	Number of hospitals that can diagnose T1D/ total number of hospitals
Tertiary	<i>General</i>	52/52
	<i>Traditional Chinese Medicine</i>	22/31
	<i>Specialized</i>	6/30
Secondary	<i>General</i>	44/44
	<i>Traditional Chinese Medicine</i>	29/41
	<i>Specialized</i>	0/81
Primary care	<i>General</i>	0/188
	<i>Traditional Chinese Medicine</i>	0/147
	<i>Specialized</i>	0/86

Tertiary and secondary general hospitals have the most licensed doctors and testing equipment for T1D diagnosis and beginning insulin treatment.

Table S3. Poisson regression analyses for gender in 2007-2017.

	IRR	95% CI	P
Gender(men/women)			
Total	1.130	1.079, 1.185	<0.001**
0-29 years	0.885	0.813, 0.952	0.002*
≥30 years	1.272	1.200, 1.350	<0.001**

** p<0.001 * p<0.05

Poisson regression for 0-29 years, ≥30 years, and all T1D cases with gender as the independent variable and women as the reference for the incidence rate ratio (IRR).

Table S4—Incidence of T1D by Age and Gender.

Total				Men			Women		
	Cases	Denominator*	Incidence†	Cases	Denominator*	Incidence†	Cases	Denominator*	Incidence†
0-4	17	860101.9	1.99 (1.24, 3.18)	9	439716.7	2.05 (1.08, 3.90)	8	412207.6	1.96 (1.00, 3.86)
5-9	29	648594.1	4.49 (3.12, 6.44)	13	332658.9	3.83 (2.22, 6.58)	16	312028.7	5.24 (3.25, 8.47)
10-14	41	575694.2	7.15 (5.28, 9.70)	19	297466.3	6.27 (4.00, 9.83)	23	280273.9	8.05 (5.34, 1.21)
15-19	30	834131.8	3.61 (2.53, 5.15)	13	425694.6	3.01 (1.75, 5.17)	17	415000.1	4.16 (2.61, 6.64)
20-24	44	1463977.2	2.98 (2.22, 4.01)	19	749655.7	2.60 (1.67, 4.03)	24	723238.7	3.34 (2.25, 4.97)
25-29	57	1719030.6	3.34 (2.58, 4.33)	29	879984.4	3.32 (2.31, 4.76)	28	838064.2	3.37 (2.34, 4.87)
30-34	55	1587870.6	3.44 (2.64, 4.48)	32	797736.0	3.98 (2.81, 5.62)	23	779077.9	2.93 (1.95, 4.40)
35-39	48	1446139.9	3.29 (2.48, 4.37)	30	734208.8	4.15 (2.91, 5.91)	17	716349.1	2.40 (1.50, 3.83)
40-44	39	1538591.5	2.51 (1.83, 3.43)	24	784161.3	3.10 (2.09, 4.60)	14	757689.8	1.88 (1.13, 3.15)
45-49	53	1758269.6	3.01 (2.30, 3.94)	33	896006.9	3.64 (2.59, 5.13)	20	865032.4	2.34 (1.52, 3.61)
50-54	57	1818142.2	3.13 (2.41, 4.05)	32	919767.0	3.47 (2.46, 4.90)	25	896523.1	2.78 (1.88, 4.11)
55-59	55	1620905.4	3.38 (2.59, 4.40)	28	799545.9	3.55 (2.46, 5.12)	26	812612.6	3.24 (2.22, 4.74)
60-64	39	1267273.3	3.09 (2.26, 4.21)	21	612034.7	3.39 (2.21, 5.19)	18	643124.7	2.86 (1.81, 4.49)
65-69	24	864817.6	2.74 (1.84, 4.09)	11	412339.0	2.65 (1.47, 4.75)	13	448443.4	2.86 (1.67, 4.91)
70-74	18	729115.2	2.52 (1.60, 3.96)	10	344269.2	2.77 (1.49, 5.18)	9	386344.1	2.28 (1.19, 4.37)
≥75	20	1366960.2	1.49 (0.97, 2.29)	10	636185.5	1.50 (0.80, 2.80)	11	712008.7	1.52 (0.85, 2.73)

* Adjusted population size, † Incidence /100,000 person-years (95% CI)

Table S5. Incidence of T1D by Age Group and Year.

Age group (years)	Year	Total			Men			Women		
		Cases	Denominator	Incidence*	Cases	Denominator	Incidence*	Cases	Denominator	Incidence*
0-4	2007	4	446437	0.90 (0.35, 2.30)	2	230888	0.87 (0.24, 3.16)	2	215549	0.93 (0.25, 3.38)
	2008	11	555459	1.98 (1.11, 3.55)	7	287242	2.44 (1.18, 5.03)	4	268217	1.49 (0.58, 3.83)
	2009	4	630689	0.63 (0.25, 1.63)	3	325764	0.92 (0.31, 2.71)	1	304924	0.33 (0.06, 1.86)
	2010	7	706791	0.99 (0.48, 2.04)	2	364579	0.55 (0.15, 2.00)	5	342212	1.46 (0.62, 3.42)
	2011	13	789551	1.65 (0.96, 2.82)	7	407398	1.72 (0.83, 3.55)	6	382153	1.57 (0.72, 3.43)
	2012	25	863667	2.89 (1.96, 4.27)	12	445810	2.69 (1.54, 4.71)	13	417856	3.11 (1.82, 5.32)
	2013	16	931485	1.72 (1.06, 2.79)	7	480559	1.46 (0.71, 3.01)	9	450925	2.00 (1.05, 3.79)
	2014	13	1039363	1.25 (0.73, 2.14)	6	536171	1.12 (0.51, 2.44)	7	503192	1.39 (0.67, 2.87)
	2015	32	1080928	2.96 (2.10, 4.18)	18	557504	3.23 (2.04, 5.10)	14	523424	2.67 (1.59, 4.49)
	2016	29	1188648	2.44 (1.70, 3.50)	19	613436	3.10 (1.98, 4.84)	10	575212	1.74 (0.94, 3.20)
	2017	34	1228098	2.77 (1.98, 3.87)	16	633810	2.52 (1.55, 4.10)	18	594288	3.03 (1.92, 4.79)
5-9	2007	22	469148	4.69 (3.10, 7.10)	14	241557	5.80 (3.45, 9.73)	8	227590	3.52 (1.78, 6.94)
	2008	18	460304	3.91 (2.47, 6.18)	6	236957	2.53 (1.16, 5.52)	12	223348	5.37 (3.07, 9.39)
	2009	20	488888	4.09 (2.65, 6.32)	10	252101	3.97 (2.15, 7.30)	10	236786	4.22 (2.29, 7.77)
	2010	31	510474	6.07 (4.28, 8.62)	17	263428	6.45 (4.03, 10.34)	14	247046	5.67 (3.38, 9.51)
	2011	25	546084	4.58 (3.10, 6.76)	6	281854	2.13 (0.98, 4.64)	19	264230	7.19 (4.60, 11.23)
	2012	18	605146	2.97 (1.88, 4.70)	9	312307	2.88 (1.52, 5.48)	9	292839	3.07 (1.62, 5.84)
	2013	23	704887	3.26 (2.17, 4.90)	8	363722	2.20 (1.11, 4.34)	15	341164	4.40 (2.66, 7.25)
	2014	32	755132	4.24 (3.00, 5.98)	11	389749	2.82 (1.58, 5.05)	21	365383	5.75 (3.76, 8.79)
	2015	52	793740	6.55 (5.00, 8.59)	24	409602	5.86 (3.94, 8.72)	28	384137	7.29 (5.04, 10.53)
	2016	37	864721	4.28 (3.10, 5.90)	18	446574	4.03 (2.55, 6.37)	19	418147	4.54 (2.91, 7.10)
	2017	42	936006	4.49 (3.32, 6.06)	17	483709	3.51 (2.19, 5.63)	25	452297	5.53 (3.74, 8.16)
10-14	2007	53	596367	8.89 (6.80, 11.62)	24	306640	7.83 (5.26, 11.65)	29	289727	10.01 (6.97, 14.37)
	2008	38	589739	6.44 (4.69, 8.84)	21	303541	6.92 (4.53, 10.58)	17	286198	5.94 (3.71, 9.51)
	2009	34	583933	5.82 (4.17, 8.14)	14	300403	4.66 (2.78, 7.82)	20	283529	7.05 (4.57, 10.90)
	2010	26	593529	4.38 (2.99, 6.42)	16	305381	5.24 (3.23, 8.51)	10	288147	3.47 (1.89, 6.39)

	2011	30	575425	5.21 (3.65, 7.44)	11	296029	3.72 (2.07, 6.65)	19	279396	6.80 (4.35, 10.62)
	2012	42	570168	7.37 (5.45, 9.96)	17	293300	5.80 (3.62, 9.28)	25	276867	9.03 (6.12, 13.33)
	2013	39	539245	7.23 (5.29, 9.89)	23	277264	8.30 (5.53, 12.45)	16	262010	6.11 (3.76, 9.92)
	2014	40	551535	7.25 (5.33, 9.87)	18	284156	6.33 (4.01, 10.01)	22	267378	8.23 (5.43, 12.46)
	2015	64	546765	11.71 (9.17, 14.95)	28	281917	9.93 (6.87, 14.35)	36	264848	13.59 (9.82, 18.82)
	2016	46	568561	8.09 (6.07, 10.79)	19	293349	6.48 (4.15, 10.12)	27	275212	9.81 (6.74, 14.27)
	2017	41	617364	6.64 (4.90, 9.01)	14	318662	4.39 (2.62, 7.37)	27	298701	9.04 (6.21, 13.15)
15-19	2007	38	1039273	3.66 (2.66, 5.02)	18	532055	3.38 (2.14, 5.35)	20	507217	3.94 (2.55, 6.09)
	2008	40	975180	4.10 (3.01, 5.59)	18	498826	3.61 (2.28, 5.70)	22	476354	4.62 (3.05, 6.99)
	2009	33	899754	3.67 (2.61, 5.15)	12	457515	2.62 (1.50, 4.58)	21	442239	4.75 (3.11, 7.26)
	2010	36	841179	4.28 (3.09, 5.92)	12	426911	2.81 (1.61, 4.91)	24	414268	5.79 (3.89, 8.62)
	2011	38	860814	4.41 (3.22, 6.06)	20	434704	4.60 (2.98, 7.11)	18	426110	4.22 (2.67, 6.68)
	2012	19	840049	2.26 (1.45, 3.53)	7	424121	1.65 (0.80, 3.41)	12	415928	2.89 (1.65, 5.04)
	2013	32	821337	3.90 (2.76, 5.50)	13	412265	3.15 (1.84, 5.40)	19	409071	4.64 (2.97, 7.25)
	2014	19	778322	2.44 (1.56, 3.81)	11	390479	2.82 (1.57, 5.04)	8	387843	2.06 (1.05, 4.07)
	2015	21	753729	2.79 (1.82, 4.26)	12	378392	3.17 (1.81, 5.54)	9	375337	2.40 (1.26, 4.56)
	2016	31	713218	4.35 (3.06, 6.17)	12	358802	3.34 (1.91, 5.85)	19	354416	5.36 (3.43, 8.37)
	2017	24	652589	3.68 (2.47, 5.47)	6	330322	1.82 (0.83, 3.96)	18	322267	5.59 (3.53, 8.83)
20-24	2007	37	1560760	2.37 (1.72, 3.27)	16	809693	1.98 (1.22, 3.21)	21	751067	2.80 (1.83, 4.27)
	2008	47	1636322	2.87 (2.16, 3.82)	26	845548	3.07 (2.10, 4.51)	21	790774	2.66 (1.74, 4.06)
	2009	55	1724589	3.19 (2.45, 4.15)	18	887696	2.03 (1.28, 3.21)	37	836892	4.42 (3.21, 6.09)
	2010	63	1808424	3.48 (2.72, 4.46)	24	925312	2.59 (1.74, 3.86)	39	883112	4.42 (3.23, 6.04)
	2011	55	1723726	3.19 (2.45, 4.15)	30	878669	3.41 (2.39, 4.87)	25	845057	2.96 (2.00, 4.37)
	2012	43	1588759	2.71 (2.01, 3.65)	18	806931	2.23 (1.41, 3.53)	25	781828	3.20 (2.17, 4.72)
	2013	39	1450975	2.69 (1.97, 3.67)	19	733249	2.59 (1.66, 4.05)	20	717726	2.79 (1.80, 4.30)
	2014	46	1301102	3.54 (2.65, 4.72)	25	653507	3.83 (2.59, 5.65)	21	647594	3.24 (2.12, 4.96)
	2015	27	1171512	2.30 (1.58, 3.35)	11	585118	1.88 (1.05, 3.37)	16	586394	2.73 (1.68, 4.43)
	2016	34	1109213	3.07 (2.19, 4.28)	10	552924	1.81 (0.98, 3.33)	24	556288	4.31 (2.90, 6.42)
	2017	34	1028362	3.31 (2.37, 4.62)	17	512978	3.31 (2.07, 5.31)	17	515383	3.30 (2.06, 5.28)
25-29	2007	53	1454054	3.64 (2.79, 4.77)	25	752343	3.32 (2.25, 4.91)	28	701711	3.99 (2.76, 5.77)
	2008	43	1601960	2.68 (1.99, 3.62)	22	828565	2.66 (1.75, 4.02)	21	773395	2.72 (1.78, 4.15)

	2009	52	1705971	3.05 (2.32, 4.00)	23	879147	2.62 (1.74, 3.93)	29	826823	3.51 (2.44, 5.04)
	2010	60	1798245	3.34 (2.59, 4.29)	36	925159	3.89 (2.81, 5.39)	24	873086	2.75 (1.85, 4.09)
	2011	54	1825057	2.96 (2.27, 3.86)	23	936852	2.46 (1.64, 3.68)	31	888204	3.49 (2.46, 4.95)
	2012	69	1824073	3.78 (2.99, 4.79)	36	933418	3.86 (2.79, 5.34)	33	890655	3.71 (2.64, 5.20)
	2013	69	1846194	3.74 (2.95, 4.73)	28	941789	2.97 (2.06, 4.30)	41	904404	4.53 (3.34, 6.15)
	2014	50	1864458	2.68 (2.03, 3.54)	26	951464	2.73 (1.86, 4.00)	24	912994	2.63 (1.77, 3.91)
	2015	62	1840664	3.37 (2.63, 4.32)	30	936271	3.20 (2.24, 4.57)	32	904392	3.54 (2.51, 4.99)
	2016	63	1670742	3.77 (2.95, 4.82)	40	848557	4.71 (3.46, 6.42)	23	822185	2.80 (1.86, 4.20)
	2017	57	1477914	3.86 (2.98, 5.00)	32	749240	4.27 (3.03, 6.03)	25	728674	3.43 (2.32, 5.06)
30-34	2007	38	1066154	3.56 (2.60, 4.89)	23	542391	4.24 (2.83, 6.36)	15	523763	2.86 (1.74, 4.73)
	2008	43	1110887	3.87 (2.87, 5.21)	23	565336	4.07 (2.71, 6.11)	20	545551	3.67 (2.37, 5.66)
	2009	56	1213868	4.61 (3.55, 5.99)	31	619112	5.01 (3.53, 7.11)	25	594756	4.20 (2.85, 6.21)
	2010	45	1375519	3.27 (2.45, 4.38)	26	700819	3.71 (2.53, 5.44)	19	674700	2.82 (1.80, 4.40)
	2011	47	1545701	3.04 (2.29, 4.04)	25	785425	3.18 (2.16, 4.70)	22	760275	2.89 (1.91, 4.38)
	2012	61	1759764	3.47 (2.70, 4.45)	33	891798	3.70 (2.64, 5.20)	28	867965	3.23 (2.23, 4.66)
	2013	73	1868991	3.91 (3.11, 4.91)	48	945891	5.07 (3.83, 6.73)	25	923099	2.71 (1.83, 4.00)
	2014	63	1911169	3.30 (2.58, 4.22)	37	963291	3.84 (2.79, 5.29)	26	947877	2.74 (1.87, 4.02)
	2015	60	1910887	3.14 (2.44, 4.04)	37	961834	3.85 (2.79, 5.30)	23	949053	2.42 (1.61, 3.64)
	2016	74	1875961	3.94 (3.14, 4.95)	39	942814	4.14 (3.03, 5.65)	35	933147	3.75 (2.70, 5.22)
	2017	40	1827671	2.19 (1.61, 2.98)	27	916631	2.95 (2.02, 4.29)	13	911039	1.43 (0.83, 2.44)
35-39	2007	39	1460518	2.67 (1.95, 3.65)	26	742262	3.50 (2.39, 5.13)	13	718255	1.81 (1.06, 3.10)
	2008	53	1468337	3.61 (2.76, 4.72)	30	746789	4.02 (2.81, 5.73)	23	721548	3.19 (2.12, 4.78)
	2009	55	1446689	3.80 (2.92, 4.95)	29	734558	3.95 (2.75, 5.67)	26	712131	3.65 (2.49, 5.35)
	2010	34	1409915	2.41 (1.73, 3.37)	23	714941	3.22 (2.14, 4.83)	11	694973	1.58 (0.88, 2.83)
	2011	53	1337297	3.96 (3.03, 5.18)	38	676839	5.61 (4.09, 7.71)	15	660457	2.27 (1.38, 3.75)
	2012	45	1279586	3.52 (2.63, 4.71)	27	647033	4.17 (2.87, 6.07)	18	632552	2.85 (1.80, 4.50)
	2013	47	1294323	3.63 (2.73, 4.83)	33	654338	5.04 (3.59, 7.08)	14	639984	2.19 (1.30, 3.67)
	2014	39	1362302	2.86 (2.09, 3.91)	26	689758	3.77 (2.57, 5.52)	13	672544	1.93 (1.13, 3.31)
	2015	41	1468118	2.79 (2.06, 3.79)	26	742195	3.50 (2.39, 5.13)	15	725923	2.07 (1.25, 3.41)
	2016	53	1600386	3.31 (2.53, 4.33)	38	806980	4.71 (3.43, 6.46)	15	793406	1.89 (1.15, 3.12)
	2017	65	1780063	3.65 (2.87, 4.65)	39	895022	4.36 (3.19, 5.96)	26	885041	2.94 (2.00, 4.30)

40-44	2007	26	1575278	1.65 (1.13, 2.42)	13	807559	1.61 (0.94, 2.75)	13	767719	1.69 (0.99, 2.90)
	2008	28	1491451	1.88 (1.30, 2.71)	23	761498	3.02 (2.01, 4.53)	5	729953	0.68 (0.29, 1.60)
	2009	26	1490596	1.74 (1.19, 2.56)	15	758746	1.98 (1.20, 3.26)	11	731849	1.50 (0.84, 2.69)
	2010	34	1577953	2.15 (1.54, 3.01)	19	801504	2.37 (1.52, 3.70)	15	776448	1.93 (1.17, 3.19)
	2011	49	1643171	2.98 (2.26, 3.94)	33	835098	3.95 (2.81, 5.55)	16	808072	1.98 (1.22, 3.22)
	2012	50	1720900	2.91 (2.20, 3.83)	34	874889	3.89 (2.78, 5.43)	16	846010	1.89 (1.16, 3.07)
	2013	44	1675688	2.63 (1.96, 3.52)	27	852436	3.17 (2.18, 4.61)	17	823252	2.06 (1.29, 3.31)
	2014	36	1597622	2.25 (1.63, 3.12)	21	811390	2.59 (1.69, 3.96)	15	786232	1.91 (1.16, 3.15)
	2015	48	1486898	3.23 (2.44, 4.28)	30	754278	3.98 (2.79, 5.68)	18	732619	2.46 (1.55, 3.88)
	2016	43	1375044	3.13 (2.32, 4.21)	25	696408	3.59 (2.43, 5.30)	18	678635	2.65 (1.68, 4.19)
	2017	40	1289902	3.10 (2.28, 4.22)	27	652419	4.14 (2.84, 6.02)	13	637483	2.04 (1.19, 3.49)
45-49	2007	28	1540852	1.82 (1.26, 2.63)	13	788420	1.65 (0.96, 2.82)	15	752431	1.99 (1.21, 3.29)
	2008	49	1754218	2.79 (2.11, 3.69)	28	898890	3.11 (2.16, 4.50)	21	855328	2.46 (1.61, 3.75)
	2009	54	1878365	2.87 (2.20, 3.75)	39	964325	4.04 (2.96, 5.53)	15	914039	1.64 (0.99, 2.71)
	2010	46	1933297	2.38 (1.78, 3.17)	35	992170	3.53 (2.54, 4.91)	11	941126	1.17 (0.65, 2.09)
	2011	57	1970007	2.89 (2.23, 3.75)	31	1010435	3.07 (2.16, 4.35)	26	959572	2.71 (1.85, 3.97)
	2012	63	1838677	3.43 (2.68, 4.38)	39	938387	4.16 (3.04, 5.68)	24	900290	2.67 (1.79, 3.97)
	2013	69	1692973	4.08 (3.22, 5.16)	46	859225	5.35 (4.01, 7.14)	23	833747	2.76 (1.84, 4.14)
	2014	52	1641203	3.17 (2.42, 4.15)	30	828899	3.62 (2.54, 5.17)	22	812303	2.71 (1.79, 4.10)
	2015	50	1661753	3.01 (2.28, 3.97)	32	836089	3.83 (2.71, 5.40)	18	825664	2.18 (1.38, 3.45)
	2016	53	1690418	3.14 (2.40, 4.10)	30	849436	3.53 (2.47, 5.04)	23	840982	2.73 (1.82, 4.10)
	2017	61	1739198	3.51 (2.73, 4.50)	36	872066	4.13 (2.98, 5.71)	25	867131	2.88 (1.95, 4.26)
50-54	2007	29	1560627	1.86 (1.29, 2.67)	17	775127	2.19 (1.37, 3.51)	12	785500	1.53 (0.87, 2.67)
	2008	56	1665827	3.36 (2.59, 4.36)	32	832624	3.84 (2.72, 5.43)	24	833202	2.88 (1.94, 4.29)
	2009	43	1698491	2.53 (1.88, 3.41)	27	853453	3.16 (2.17, 4.60)	16	845038	1.89 (1.17, 3.08)
	2010	51	1775622	2.87 (2.18, 3.78)	25	895790	2.79 (1.89, 4.12)	26	879832	2.96 (2.02, 4.33)
	2011	44	1719850	2.56 (1.91, 3.43)	23	871034	2.64 (1.76, 3.96)	21	848816	2.47 (1.62, 3.78)
	2012	50	1783175	2.80 (2.13, 3.70)	22	909091	2.42 (1.60, 3.66)	28	874084	3.20 (2.22, 4.63)
	2013	53	1967342	2.69 (2.06, 3.52)	30	1004013	2.99 (2.09, 4.27)	23	963329	2.39 (1.59, 3.58)
	2014	72	2032368	3.54 (2.81, 4.46)	45	1039018	4.33 (3.24, 5.79)	27	993350	2.72 (1.87, 3.95)
	2015	67	1998449	3.35 (2.64, 4.26)	42	1020998	4.11 (3.04, 5.56)	25	977451	2.56 (1.73, 3.78)

	2016	68	1985966	3.42 (2.70, 4.34)	39	1013504	3.85 (2.82, 5.26)	29	972461	2.98 (2.08, 4.28)
	2017	92	1811842	5.08 (4.14, 6.23)	49	917426	5.34 (4.04, 7.06)	43	894415	4.81 (3.57, 6.48)
55-59	2007	25	1073079	2.33 (1.58, 3.44)	10	527049	1.90 (1.03, 3.49)	15	546029	2.75 (1.66, 4.53)
	2008	33	1243901	2.65 (1.89, 3.73)	18	611760	2.94 (1.86, 4.65)	15	632141	2.37 (1.44, 3.92)
	2009	49	1423882	3.44 (2.60, 4.55)	27	698936	3.86 (2.66, 5.62)	22	724946	3.03 (2.00, 4.60)
	2010	64	1596091	4.01 (3.14, 5.12)	36	783797	4.59 (3.32, 6.36)	28	812294	3.45 (2.39, 4.98)
	2011	60	1711245	3.51 (2.72, 4.51)	30	840940	3.57 (2.50, 5.09)	30	870305	3.45 (2.41, 4.92)
	2012	61	1799610	3.39 (2.64, 4.35)	32	887906	3.60 (2.55, 5.09)	29	911704	3.18 (2.21, 4.57)
	2013	50	1858894	2.69 (2.04, 3.55)	20	922951	2.17 (1.40, 3.35)	30	935943	3.21 (2.25, 4.58)
	2014	49	1831129	2.68 (2.02, 3.54)	25	913312	2.74 (1.85, 4.04)	24	917817	2.61 (1.76, 3.89)
	2015	63	1826857	3.45 (2.70, 4.41)	40	914838	4.37 (3.21, 5.95)	23	912019	2.52 (1.68, 3.78)
	2016	72	1723935	4.18 (3.32, 5.26)	36	866056	4.16 (3.00, 5.75)	36	857878	4.20 (3.03, 5.81)
	2017	76	1741330	4.36 (3.49, 5.46)	38	877225	4.33 (3.16, 5.95)	38	864105	4.40 (3.20, 6.04)
60-64	2007	18	709524	2.54 (1.60, 4.01)	12	341435	3.51 (2.01, 6.14)	6	368088	1.63 (0.75, 3.56)
	2008	21	786305	2.67 (1.75, 4.08)	9	379364	2.37 (1.25, 4.51)	12	406941	2.95 (1.69, 5.15)
	2009	18	894043	2.01 (1.27, 3.18)	9	434442	2.07 (1.09, 3.94)	9	459601	1.96 (1.03, 3.72)
	2010	29	1007230	2.88 (2.00, 4.13)	15	492285	3.05 (1.85, 5.03)	14	514945	2.72 (1.62, 4.56)
	2011	31	1111484	2.79 (1.96, 3.96)	18	544236	3.31 (2.09, 5.23)	13	567248	2.29 (1.34, 3.92)
	2012	41	1250385	3.28 (2.42, 4.45)	27	612257	4.41 (3.03, 6.42)	14	638128	2.19 (1.31, 3.68)
	2013	44	1409804	3.12 (2.33, 4.19)	21	690793	3.04 (1.99, 4.65)	23	719011	3.20 (2.13, 4.80)
	2014	46	1560199	2.95 (2.21, 3.93)	20	762227	2.62 (1.70, 4.05)	26	797972	3.26 (2.22, 4.77)
	2015	50	1671858	2.99 (2.27, 3.94)	22	816469	2.69 (1.78, 4.08)	28	855388	3.27 (2.26, 4.73)
	2016	58	1749254	3.32 (2.57, 4.29)	34	853830	3.98 (2.85, 5.56)	24	895424	2.68 (1.80, 3.99)
	2017	74	1789914	4.13 (3.29, 5.19)	41	871295	4.71 (3.47, 6.38)	33	918619	3.59 (2.56, 5.04)
65-69	2007	19	667247	2.85 (1.82, 4.45)	10	310872	3.22 (1.75, 5.92)	9	356374	2.53 (1.33, 4.80)
	2008	11	667796	1.65 (0.92, 2.95)	5	311812	1.60 (0.68, 3.75)	6	355984	1.69 (0.77, 3.68)
	2009	11	680072	1.62 (0.90, 2.90)	2	320344	0.62 (0.17, 2.28)	9	359727	2.50 (1.32, 4.76)
	2010	16	725299	2.21 (1.36, 3.58)	6	342923	1.75 (0.80, 3.82)	10	382375	2.62 (1.42, 4.81)
	2011	21	766193	2.74 (1.79, 4.19)	12	365014	3.29 (1.88, 5.75)	9	401178	2.24 (1.18, 4.26)
	2012	29	809640	3.58 (2.49, 5.14)	13	388082	3.35 (1.96, 5.73)	16	421557	3.80 (2.34, 6.17)
	2013	23	872059	2.64 (1.76, 3.96)	11	419802	2.62 (1.46, 4.69)	12	452257	2.65 (1.52, 4.64)

	2014	28	957391	2.92 (2.02, 4.23)	16	463989.5	3.45 (2.12, 5.60)	12	493402	2.43 (1.39, 4.25)
	2015	27	1080928	2.50 (1.72, 3.63)	10	504519.3	1.98 (1.08, 3.65)	17	530317	3.21 (2.00, 5.13)
	2016	33	1115246	2.96 (2.11, 4.16)	18	543821.8	3.31 (2.09, 5.23)	15	571424	2.63 (1.59, 4.33)
	2017	43	1213943	3.54 (2.63, 4.77)	17	587040	2.90 (1.81, 4.64)	26	626904	4.15 (2.83, 6.08)
70-74	2007	11	690665	1.59 (0.89, 2.85)	9	337881.2	2.66 (1.40, 5.06)	2	352784	0.57 (0.16, 2.07)
	2008	19	728441	2.61 (1.67, 4.07)	12	351091.1	3.42 (1.96, 5.97)	7	377350	1.86 (0.90, 3.83)
	2009	15	746253	2.01 (1.22, 3.32)	6	353828.5	1.70 (0.78, 3.70)	9	392424	2.29 (1.21, 4.36)
	2010	19	753644	2.52 (1.61, 3.94)	5	353407.3	1.41 (0.60, 3.31)	14	400237	3.50 (2.08, 5.87)
	2011	17	749627	2.27 (1.42, 3.63)	7	348238.5	2.01 (0.97, 4.15)	10	401388	2.49 (1.35, 4.59)
	2012	17	736218	2.31 (1.44, 3.70)	8	340421	2.35 (1.19, 4.64)	9	395797	2.27 (1.20, 4.32)
	2013	20	714119	2.80 (1.81, 4.33)	11	331194	3.32 (1.85, 5.95)	9	382925	2.35 (1.24, 4.47)
	2014	21	702644	2.99 (1.95, 4.57)	16	328086.3	4.88 (3.00, 7.92)	5	374558	1.33 (0.57, 3.13)
	2015	20	717678	2.79 (1.80, 4.30)	8	336244.7	2.38 (1.21, 4.70)	12	381434	3.15 (1.80, 5.50)
	2016	18	737032	2.44 (1.54, 3.86)	10	347329.8	2.88 (1.56, 5.30)	8	389702	2.05 (1.04, 4.05)
	2017	25	743941	3.36 (2.28, 4.96)	13	348540.5	3.73 (2.18, 6.38)	12	395400	3.03 (1.74, 5.31)
≥75	2007	15	837675	1.79 (1.09, 2.95)	9	400123.8	2.25 (1.18, 4.28)	6	437551	1.37 (0.63, 2.99)
	2008	12	965717	1.24 (0.71, 2.17)	8	463547.3	1.73 (0.87, 3.41)	4	502168	0.80 (0.31, 2.05)
	2009	11	1094291	1.01 (0.56, 1.80)	6	528471.1	1.14 (0.52, 2.48)	5	565820	0.88 (0.38, 2.07)
	2010	24	1215103	1.98 (1.33, 2.94)	12	446296.4	2.69 (1.54, 4.70)	12	628358	1.91 (1.09, 3.34)
	2011	22	1334850	1.65 (1.09, 2.50)	8	646012.1	1.24 (0.63, 2.44)	14	688838	2.03 (1.21, 3.41)
	2012	32	1454479	2.20 (1.56, 3.11)	12	703094	1.71 (0.98, 2.98)	20	751385	2.66 (1.72, 4.11)
	2013	14	1567941	0.89 (0.53, 1.50)	7	755082.4	0.93 (0.45, 1.91)	7	812830	0.86 (0.42, 1.78)
	2014	17	1638131	1.04 (0.65, 1.66)	10	782479.2	1.28 (0.69, 2.35)	7	855652	0.82 (0.40, 1.69)
	2015	22	1650586	1.33 (0.88, 2.02)	7	806366.8	0.87 (0.42, 1.79)	15	890309	1.68 (1.02, 2.78)
	2016	26	1720270	1.51 (1.03, 2.21)	12	811565.6	1.48 (0.85, 2.58)	14	908704	1.54 (0.92, 2.59)
	2017	29	1557515	1.86 (1.30, 2.67)	14	707319.5	1.98 (1.18, 3.32)	15	850195	1.76 (1.07, 2.91)

*Incidence /100,000 person-years (95% CI)

Table S6. Predicted Number of T1D Cases Using a Poisson Regression Model.

Year	Total number of cases	Predicted number of cases
2007	455	494
2008	522	516
2009	536	540
2010	585	565
2011	616	591
2012	662	619
2013	655	648
2014	623	678
2015	706	709
2016	738	742
2017	777	776
2018		812
2019		850
2020		889
2021		930
2022		973
2023		1018
2024		1065
2025		1115
2026		1166
2027		1220
2028		1277

Table S7. Predicted Number of T1D Cases Using the GM (1,1) Model.

Year	Total number of cases	Prediction number of cases
2007	455	455
2008	522	530
2009	536	552
2010	585	576
2011	616	600
2012	662	625
2013	655	650
2014	623	678
2015	706	706
2016	738	736
2017	777	766
2018		798
2019		831
2020		866
2021		902
2022		940
2023		979
2024		1020
2025		1062
2026		1107
2027		1153
2028		1201

Model quality control values: $P = 1$, $C = 0.2364$. The prediction accuracy levels are as follows: $P > 0.95$, $C < 0.35$ (High); $P > 0.80$, $C < 0.45$ (Good); $P > 0.70$, $C < 0.50$ (Qualified); and $P \leq 0.70$, $C \geq 0.65$ (Disqualified).

Table S8. Annual Percentage Change (APC) and Average Annual Percentage Change (AAPC) of T1D Incidence from 2008 to 2017 by Age Group and Gender.

Groups	Year	APC	Lower (95% CI)	Upper (95% CI)	P value	AAPC	Lower (95% CI)	Upper (95% CI)	P value
All	2008-2014	0.6	-0.7	1.9	0.286	2.2	1	3.3	<0.001
	2014-2017	5.3	1.8	9	0.011				
Men	2008-2014	0.9	-1.6	3.4	0.408	2.2	0.1	4.4	0.039
	2014-2017	5	-1.7	12.1	0.115				
Women	2008-2015	0.3	-2.2	2.7	0.797	2.1	0	4.2	0.050
	2015-2017	5.8	-0.8	12.7	0.073				
0-14 years	2008-2017	3.1	-1.8	8.2	0.186	3.1	-1.8	8.2	0.186
15-29 years	2008-2017	0.6	-1.6	2.9	0.550	0.6	-1.6	2.9	0.550
≥30 years	2008-2017	2.4	0.8	3.9	0.007	2.4	0.8	3.9	0.007

Note: Number and time of Joinpoints in time trends were selected by Joinpoint regression modeling. The APC and AAPC were statistically significant at $P < 0.05$.