

IDF ATLAS REPORTS



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International
Diabetes
Federation



**Diabetes foot-related
complications**



Acknowledgements

Authors: Diabetes foot-related complications

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Gathering and selection of data sources

The data used in this section have been extracted from studies (prioritising systematic reviews published within the past five years) that assessed the frequency of diabetes-related foot complications as the main outcome. Only data from studies published between 2012 and 2022 are included (see tables one to three). We also include available information from the Organization for Economic Cooperation and Development (OECD) database for data on major lower-limb amputations (LLA) – one of the indicators for population health and health-system performance addressed in the 2019 Health at a Glance report.¹



Diabetes-related peripheral neuropathy and peripheral arterial disease



Key messages

- In most countries, where data are available, the incidence of lower-limb amputation due to diabetes seems to be decreasing.
- There is still a dearth of systematic reviews quantifying diabetes-related foot complications.
- International databases using similar definitions should be promoted to enable direct comparisons between and within countries.

In a review focused on the African continent,² the prevalence of diabetes-related peripheral neuropathy (DPN) ranged mostly between 30.0% and 70.0%. In the largest study, which was undertaken in Senegal and included 37,173 people living with diabetes, DPN was present in 72.0%. For peripheral arterial disease (PAD), the most frequent prevalence values ranged from 20.0% to 55.0%.

Data from two systematic reviews ascertained the prevalence of DPN in Iran from both hospital-based and clinical-based studies, using questionnaires and physical examinations to report prevalence values, of 26.0% to 46.0%.^{3,4} The sample sizes in these reviews ranged from 146 to 600 subjects.

In Australia, within a community dwelling diabetes population, the prevalence of DPN ranged from 10.0% to 58.0%, and the prevalence of PAD from 10.0% to 29.0%.⁵

In South America, in the six studies conducted within the general population or in primary-care centres, DPN prevalence varied from 6.0% to 81.0%.⁶ For reference centres, however, the prevalence was either around or above 30.0%.⁶

The annual incidence of PAD in a national database study from South Korea was 0.19% in 2012 and 0.20% in 2016.⁷ In that same study, the prevalence of PAD was 0.4% and 0.5% in 2011 and 2016, respectively.⁷



In African countries, the prevalence of diabetic foot ulcers (DFU) varied mostly between 10.0% and 30.0%, and the prevalence of LLA, between 3.0% and 35.0%, according to information collected from hospital medical records^{2,8,10}. In contrast, in the IDF South-East Asia Region, the proportion of people with diabetes that developed a DFU was typically under 15.0% and the share that encountered a recurrence less than 14.0%.^{7,11,12}

In some high-income regions, such as Europe, the prevalence of DFU varied from 1.0% (Denmark) to 17.0% (Belgium), and the recurrence from 7.0% (Germany and Italy in 2012) to 42% (Italy in 2017).¹¹⁻¹⁴ However, this data was derived from various settings. In the United States of America, according to data gathered from a number of different settings, the frequency of DFU recurrence ranged from 8.0% in 2013 to 52.0% in 2018.¹³

In the IDF Middle East and North Africa Region, DFU prevalence ranged mainly between 5.0% and 20.0%. The prevalence of DFU recurrence varied between 31.0% (Egypt) and 43.0% (Turkey). Whereas the prevalence of LLA ranged from 0.2% (Saudi Arabia) to 60.0% (Jordan), with values usually under 30.0%.^{11-13,15,16} Higher values for LLA prevalence in this region were reported by studies with sample sizes below 300 participants, which may indicate specialty clinics or inpatient high-risk settings, rather than community settings where a larger sample size would be typical.

In Brazil the prevalence of DFU was 21.0%,¹¹ and LLA prevalence varied from 10.0% to 13.0%.¹⁷

Only one study provided data on the incidence of DFU in South Korea.⁷ For LLA incidence, the OECD database¹ and some national data studies were used.^{5,7,18-22} With the exception of several countries within the IDF South and Central America Region, we can see that the incidence of LLA diminished for most countries between 2012 and 2017. No information for the IDF African Region was found.



Figure 1. Estimates of prevalence of risk factors for diabetes-related foot complications published in the last 10 years (2012-2022)
prevalence (%)

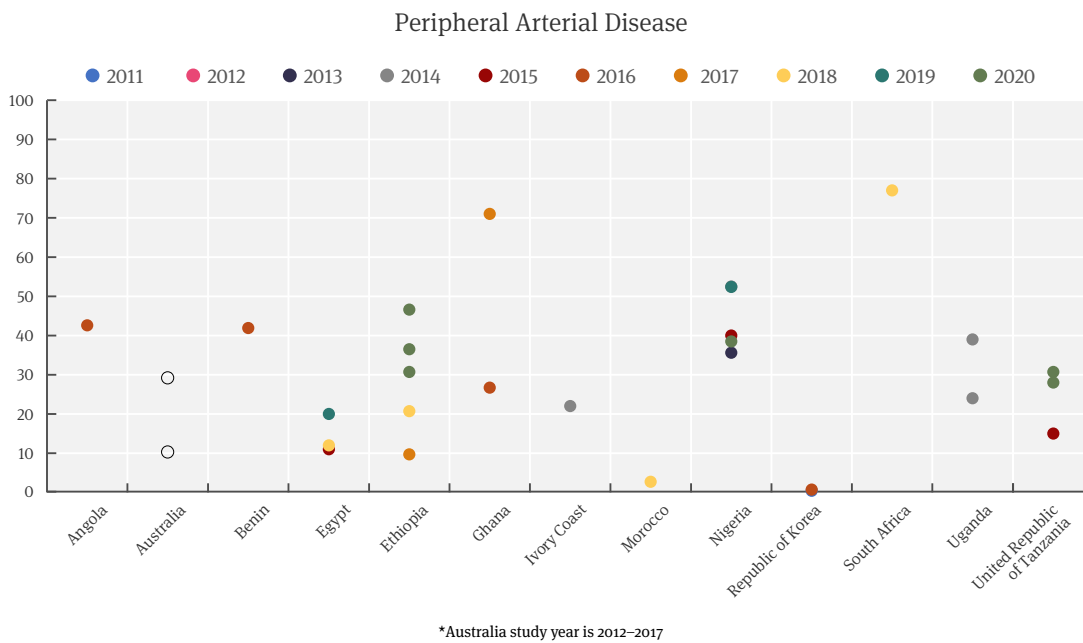
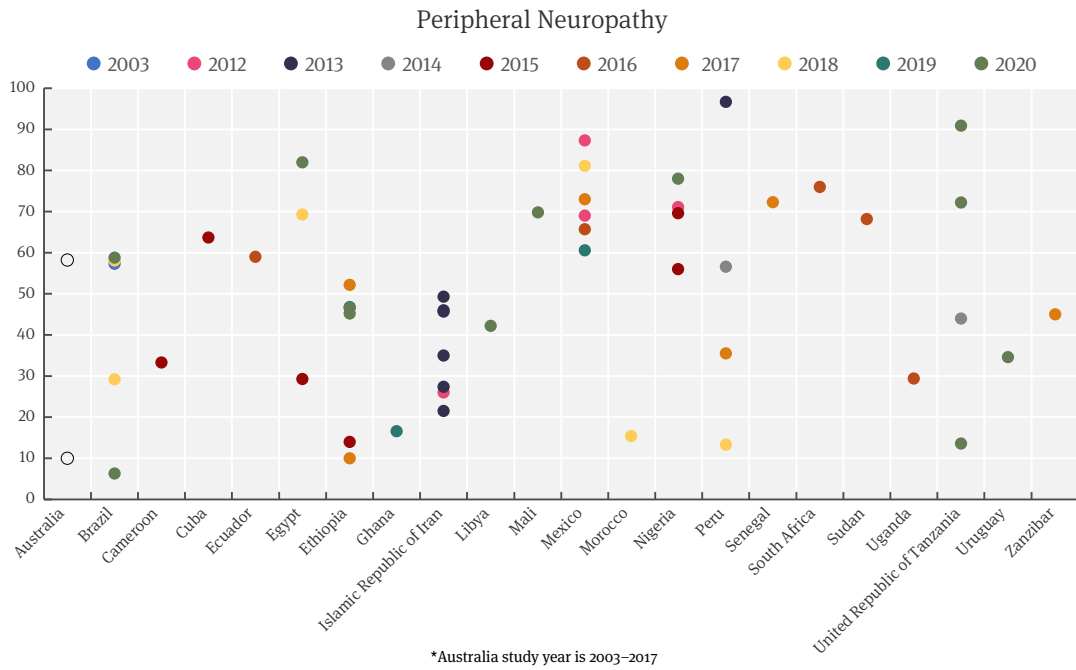




Figure 2. Estimates of the prevalence of diabetes-related foot complications published in the last 10 years (2012-2022)

prevalence (%)





There is wide global variation in diabetes-related foot complications due to different definitions, diagnostic methods, population characteristics, methods used to collect and assess data, and/or the provision/organisation of services.

We were able to find much more information about DPN prevalence in comparison to PAD. In fact, estimates on PAD were only found for several African (including North African) countries, South Korea and Australia. The IDF Africa Region and the South and Central America Region appear to be regions with higher frequencies of DPN. This data suggests that there are fewer diabetes-related foot complications in the IDF South-East Asia Region when compared to other regions. However, direct comparisons are not possible.

Global databases, like the one from OECD, may facilitate such comparisons and demonstrate that, in most of the included countries, the incidence of LLA has been decreasing, which may reflect the impact of the implementation of more standardised and structured diabetes foot-care.

The paucity of general population data on diabetes foot-related complications, allowing direct comparisons between countries, highlights the need for international consensus and coordination in the collection of these relevant data. We would also like to highlight that several of the studies available on this topic were conducted in high-risk settings, which clearly impairs the generalisability of the estimates provided.

The IDF Africa Region and the South and Central America Region appear to be regions with higher frequencies of DPN



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Appendix

Table 1. Estimates of prevalence of risk factors for diabetes-related foot complications published in the last 10 years (2012-2022)

Year of publication of study	Country	Area or region	Sample size (n)	Prevalence [% (95% CI)]	Diagnostic procedure	SR or database reference
PERIPHERAL NEUROPATHY						
AFRICA						
2015	Cameroon	NR	306	33.3	NR	[2]
2017		NR	279	10	NR	[2]
2015		NR	418	14	NR	[2]
2020	Ethiopia	NR	115	45.2	NR	[2]
2020		NR	277	46.6	NR	[2]
2019		NR	357	46.8	NR	[2]
2017		NR	368	52.2	NR	[2]
2019	Ghana	NR	240	16.6	NR	[2]
2020	Mali	NR	252	69.8	NR	[2]
2015		NR	225	56	NR	[2]
2015	Nigeria	NR	92	69.6	NR	[2]
2012		NR	277	71.1	NR	[2]
2020		NR	336	78	NR	[2]
2017	Senegal	NR	37,173	72.3	NR	[2]
2016	South Africa	NR	200	76	NR	[2]
2017	Uganda	NR	248	29.4	NR	[2]
2020		NR	155	13.6	NR	[2]
2015	United Republic of Tanzania	NR	404	44	NR	[2]
2020		NR	327	72.2	NR	[2]
2020		NR	179	90.9	NR	[2]
2017	Zanzibar	NR	100	45	NR	[2]
MIDDLE EAST AND NORTH AFRICA						
2015	Egypt	NR	2000	29.3	NR	[2]
2018		NR	93	69.3	NR	[2]
2020		NR	180	82	NR	[2]
2012		NR	243 T2D	26.0 (20.0-31.0)	Questionnaire and physical exam	[4]
2013		Isfahan	146 T1D	27.4 (20.3-35.4)	NR	[3]
2013		NR	430 T2D	35.0 (30.0-40.0)	Questionnaire	[4]
	Islamic Republic of Iran	Hamadan	600	45.7 (41.6-49.7)		
2013		NR	79 T1D	21.5 (13.1-32.2)	NR	[3]
				521 T2D	49.3 (44.9-53.7)	
2013		NR	600 T2D	46.0 (42.0-50.0)	Questionnaire	[4]
2020	Libya	NR	450	42.2	NR	[2]
2018	Morocco	NR	300	15.4	NR	[2]
2017	Sudan	NR	424	68.2	NR	[2]
NORTH AMERICA AND CARIBBEAN						
2019		Reference centre	221 T2D	60.6	Sudomotor dysfunction	[6]
2016		Reference centre	198 T2D	65.7	MNSI	[6]
2012		Primary care	348 T2D	69	MNSI	[6]
2017	Mexico	Reference centre	48 T1D	73	Achilles reflex, ankle strength, tuning fork and monofilament	[6]
2018		Primary care	106 T2D	81.1	MNSI	[6]
2012		Reference centre	150 T2D	87.3	MNSI and nerve conduction	[6]



SOUTH AND CENTRAL AMERICA						
2020		Primary care	551	6.3	NSS and NDS	[6]
2018		Reference centre	668 T2D	29.2	NSS and NDS	[6]
2013		Primary care	68 T2D	57.3	TCNS and Monofilament	[6]
2018	Brazil	Reference centre	117	58.1	Achilles reflex, monofilament, vibration, temperature and pain perception	[6]
2020		Reference centre	85 T2D	58.8	IWGDF criteria	[6]
2015	Cuba	Reference centre	224	63.7	Physical exam	[6]
2016	Ecuador	General population	110 T2D	59	MNSI	[6]
2018		General population	301 T2D	13.3	Monofilament and/or tuning fork	[6]
2017	Peru	Reference centre	382 T2D	35.5	Monofilament and/or tuning fork	[6]
2014		Reference centre	129 T2D	56.6	DNS and monofilament	[6]
2013		Reference centre	62 T2D	96.7	Nerve conduction	[6]
2020	Uruguay	Reference centre	81 T2D	34.6	TSS and NDS	[6]
WESTERN PACIFIC						
2003-2017	Australia	Community dwelling diabetes population	5771	10.0-58.2	NR	[5]
PERIPHERAL ARTERIAL DISEASE						
AFRICA						
2016	Angola	NR	115	42.6	NR	[2]
2016	Benin	NR	401	41.9	NR	[2]
2014	Ivory Coast	NR	308	22	NR	[2]
2017		NR	279	9.7	NR	[2]
2018		NR	87	20.7	NR	[2]
2020	Ethiopia	NR	280	30.7	NR	[2]
2020		NR	115	36.5	NR	[2]
2020		NR	277	46.6	NR	[2]
2016	Ghana	NR	485	26.7	NR	[2]
2017		NR	57	71	NR	[2]
2013		NR	288	35.6	NR	[2]
2020		NR	200	38.5	NR	[2]
2015	Nigeria	NR	225	40	NR	[2]
2019		NR	336	52.4	NR	[2]
2014		NR	219	52.5	NR	[2]
2018	South Africa	NR	100	77	NR	[2]
2015	United Republic of Tanzania	NR	404	15	NR	[2]
2020		NR	5,687	28	NR	[2]
2020		NR	179	30.7	NR	[2]
2014	Uganda	NR	229	24	NR	[2]
2014		NR	146	39	NR	[2]
MIDDLE EAST AND NORTH AFRICA						
2015		NR	2000	11	NR	[2]
2018	Egypt	NR	93	12	NR	[2]
2019		NR	180	20	NR	[2]
2018	Morocco	NR	300	2.7	NR	[2]
WESTERN PACIFIC						
2012-2017	Australia	Community dwelling diabetes population	4262	10.3-29.2	NR	[5]
2011	Republic of Korea	National Health Insurance Service	Total population	0.4	NR	[7]
2016			n	0.5		

CI: Confidence interval, DNS: Diabetic Neuropathy Symptom, IWGDF: International Working Group on Diabetic Foot, MNSI: Michigan Neuropathy Screening Instrument, NDS: Neuropathy Disability Score, NR: Not reported in the systematic review or database study, NSS: Neuropathy Symptoms Score, SR: Systematic Review, T1D: Type 1 diabetes, T2D: Type 2 diabetes, TCNS: Toronto Clinical Neuropathy Score, TSS: Total Symptom Score



Table 2. Estimates of the prevalence of diabetes-related foot complications published in the last 10 years (2012-2022)

Year of publication of study	Country	Region or setting	Sample size (n)	Prevalence [% (95% CI)]	Citation
Foot ulcer					
AFRICA					
2017	Cameroon	NR	138	11.8	[2]
2020		Hospital-based	172	22.1 (15.9-28.3)	[8]
2013	Ethiopia	Southern Nation Nationalities and people, NR	216	1.9 (0.1-3.7)	[10]
2013		Tigray, NR	228	12.3 (8.0-16.5)	[10]
2015		Amhara, NR	216	14.8 (10.1-19.6)	[10]
2015		NR	149	15.5	[2, 9]
2015		Addis Ababa, NR	418	31.1 (26.6-35.5)	[2, 10]
2015		NR	NR	39 (34.4-43.7)	[9]
2017		Oromia, NR	236	8.47 (4.9-12.0)	[10]
2017		Amhara, NR	279	13.6 (9.6-17.6)	[2, 10]
2017		Amhara, NR	344	21.2 (16.9-25.5)	[10]
2017		Addis Ababa, NR	198	25.8 (19.7-31.9)	[10]
2019		Addis Ababa, NR	220	1.4 (0.2-2.9)	[10]
2020		NR	277	11.6	[2]
2020		NR	387	17.1	[11]
2021		NR	502	21.1	[11]
2019		Ghana	NR	144	11
2012	Nigeria	NR	NR	16.4 (13.4-19.7)	[9]
2012		NR	170	31	[2]
2016		NR	NR	6.0 (4.9-7.2)	[9]
2019		NR	145	32.5	[2]



2019	Senegal	NR	37,173	46.8	[2]
2016	South Africa	NR	NR	9.3 (6.1-13.0)	[9]
2015	United Republic of Tanzania	NR	404	15	[2, 9]
2014	Uganda	NR	NR	53.9 (47.2-60.5)	[9]

EUROPE

2012	Belgium	NR	NR	17.0 (11.0-22.0)	[12]
2013	Denmark	NR	1377	1.3	[11]
2013	Ireland	NR	NR	4.0 (2.0-6.0)	[12]
2012	Spain	NR	NR	4.0 (4.0-5.0)	[12]
2014		NR	NR	2.0 (2.0-2.0)	[12]
2014	Switzerland	NR	NR	6.0 (2.0-9.0)	[12]
2014	Turkey	NR	NR	3.0 (2.-4.0)	[12]
2013	United Kingdom	NR	15983	4.2	[11]

MIDDLE EAST AND NORTH AFRICA

2015	Diabetic foot screening clinic		2000	6.1	[16]
2015		NR	2000	8.7	[2]
2015	Egypt	NR	NR	19.2 (17.5-20.9)	[9]
2015		NR	NR	23.0 (18.9-27.3)	[9]
2019		NR	93	61.3	[2]
2013	Islamic Republic of Iran	NR	NR	12.0 (10.0-15.0)	[12]
2018		NR	566	5.3	[11]
2018		NR	534	5.6	[11]



2012	Jordan	NR	NR	5.0 (3.0-6.0)	[12]
2015		Diabetes clinics	1000	5.3	[16]
2016	Libya	NR	148	56	[2]
2013	Pakistan	NR	NR	7.0 (4.0-10.0)	[12]
2014		NR	NR	15.0 (14.0-15.0)	[12]
2012	Saudi Arabia	Surgical department	318	19	[16]
2015		NR	NR	2.0 (2.2)	[12]
2017	Sudan	NR	64	12.7	[2]
2017		NR	147	18.1	[2]

NORTH AMERICA AND CARIBBEAN

2015	Canada	NR	2040	0.9	[11]
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SOUTH AND CENTRAL AMERICA

2013	Brazil	NR	496	20.6	[11]
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SOUTH-EAST ASIA

2012	India	NR	NR	14.0 (12.0-17.0)	[12]
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WESTERN PACIFIC

2014	Australia	NR	1292	1.2	[11]
2014-2015		Community dwelling diabetes population	4097	1.2-1.5	[5]



2012		NR	NR	4.0 (3.0-5.0)	[12]
2013		NR	NR	1.0 (1.0-1.0)	[12]
2014	China	NR	NR	2.0 (1.0-3.0)	[12]
2014		NR	NR	7.0 (6.0-9.0)	[12]
2015		NR	NR	11.0 (8.0-15.0)	[12]
2015		NR	1333	33.9	[11]
2018	Japan	NR	4870	1.5	[11]
2011		National Health Insurance Service	Total population	1.4	[7]
2016			n	1.3	
2011	Republic of Korea		Total population	1.7	
2016			n with PAD	1.8	
2014		NR	NR	2.0 (2.0-3.0)	[12]
2012	Taiwan, province of China	NR	NR	12.0 (8.0-18.0)	[12]
2013	Thailand	NR	NR	5.0 (4.0-7.0)	[12]

Foot ulcer recurrence					
EUROPE					
2012	Germany	NR	NR	7.0 (5.0-9.0)	[13]
2012		NR	NR	7.0 (5.0-10.0)	[13]
2012		NR	NR	21.0 (13.0-29.0)	[13]
2015	Italy	NR	NR	11.0 (0.0-23.0)	[13]
2016		NR	NR	11.0 (6.0-17.0)	[13]
2017		NR	NR	42.0 (22.0-61.0)	[13]
2014	Netherlands	NR	NR	28.0 (22.0-33.0)	[13]
2015	Norway	NR	NR	41.0 (26.0-57.0)	[13]



2014	Spain	NR	NR	38.0 (29.0-48.0)	[13]
2017	Sweden	NR	NR	25.0 (22.0-27.0)	[13]
2015	Turkey	NR	NR	43.0 (22.0-64.0)	[13]
2013	United Kingdom	NR	NR	32.0 (21.0-43.0)	[13]
2018		NR	NR	10.0 (5.0-15.0)	[13]

MIDDLE EAST AND NORTH AFRICA

2017	Egypt	NR	NR	31.0 (24.0-37.0)	[13]
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NORTH AMERICA AND CARIBBEAN

2012	USA	NR	NR	10.0 (0.0-22.0)	[13]
2012		NR	NR	27.0 (18.0-36.0)	[13]
2013		NR	NR	8.0 (6.0-10.0)	[13]
2014		NR	NR	14.0 (8.0-19.0)	[13]
2015		NR	NR	9.0 (4.0-14.0)	[13]
2018		NR	NR	52.0 (44.0-60.0)	[13]

SOUTH-EAST ASIA

2012	India	NR	NR	13.0 (0.0-30.0)	[13]
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WESTERN PACIFIC

2013	China	NR	NR	56.0 (39.0-73.0)	[13]
2014		NR	NR	14.0 (0.0-29.0)	[13]
2016		NR	NR	13.0 (3.0-23.0)	[13]



Lower limb amputations					
AFRICA					
2015	Ethiopia	NR	418	3	[2, 9]
2017		Medical records of hospital	87	8.0 (2.3-13.8)	[8]
2016	Ghana	Medical records of hospital	94	27.4 (18.4-36.3)	[8]
2019		Survey of people with DM from 3 hospitals	100	99.5 (98.1-100)	[8]
2019	Malawi	NR	NR	76.8	[2]
2012	Nigeria	NR	NR	9.2 (3.9-16.3)	[9]
2012		NR	NR	63	[2]
2013		NR	NR	26.2 (15.9-38.1)	[9]
2015		Medical records of hospital	69	14.5 (6.2-22.8)	[8]
2015		NR	NR	19.4	[2, 9]
2015		Medical records of hospital	158	30.3 (23.3-37.3)	[8]
2016		Medical records of hospital	67	22.4 (12.4-32.4)	[8]
2017		NR	NR	21	[2]
2017		Medical records of hospital	116	23.2 (15.4-31.0)	[8]
2018		Medical records of hospital	163	56.4 (48.8-64.1)	[8]
2019	NR	336	35.4	[2]	
2020	Survey people with DM from national orthopaedic centre	132	22.1 (15.9-28.8)	[8]	
2019	Senegal	NR	37,173	43.3	[2]
2016	South Africa	NR	NR	3.8	[9]
2018		NR	90	81	[2]
2019		Medical records of 4 hospitals	941	37.3 (BKA)	[8]



EUROPE					
2016	Germany	National-wide data (sub-analysis on diabetic foot syndrome)	6996	32.0 (31.0-33.0)◊	[17]
2012	Ireland	Multicentre study in people with DM	>1000	60.0 (58.0-61.0)	[17]

MIDDLE EAST AND NORTH AFRICA					
2015	Egypt	NR	2000	4.4 (4.0-5.0)	[15]
2013		NR	873	28.2 (25.0-31.0)◊	[15]
2015	Islamic Republic of Iran	NR	1658	16.3 (15.0-18.0)◊	[15]
2018		NR	605	1.0 (0.0-2.0)	[15]
2019		NR	4436	8.6 (8.0-10.0)	[15]
2016		NR	1000	1.7 (1.0-3.0)	[15]
2017		NR	230	1.3 (0.0-4.0)	[15]
2018	Jordan	NR	225	12.0 (8.0-16.0)◊	[17]
2018		NR	225	52.9 (46.0-60.0)◊	[15]
2018		NR	202	59.9 (53.0-60.0)◊	[15]
2018	Kuwait	NR	230	26.0 (21.0-32.0)◊	[15]
2016	Libya	NR	NR	10.0 (7.6-10.6)	[9]
2016		NR	NR	34.2	[2]
2015	Morocco	NR	NR	79	[2]
2017		NR	127	15.7 (10.0-23.0)◊	[15]
2017		NR	72	18.1 (10.0-29.0)◊	[15]
2018	Pakistan	NR	135	6.7 (3.0-12.0)	[15]
2019		NR	7994	7.5 (7.0-8.0)◊	[15]
2019		NR	226	22.6 (17.0-29.0)◊	[15]



2013		NR	88	39.8 (29.0-51.0)◊	[15]
2014		NR	598	3.5 (2.0-5.0)	[15]
2015	Saudi Arabia	NR	91	29.7 (21.0-40.0)◊	[15]
2018		NR	360	0.2 (0.0-0.2)	[15]
2018		NR	252	48.8 (42.0-55.0)◊	[15]
2012		NR	NR	5.3 (4.4-6.3)	[9]
2012	Sudan	NR	NR	15.8	[2]
2012		NR	NR	22.9 (15.0-31.9)	[9]
2015		NR	NR	4.0 (0.9-8.9)	[9]
2018	Tunisia	NR	NR	24	[2]
2019		NR	NR	41	[2]

SOUTH AND CENTRAL AMERICA

2013	Brazil	NR	496	10.0 (8.0-13.0)	[17]
2017		NR	165	13.0 (8.0-18.0)	[17]

WESTERN PACIFIC

2016	Australia	NR	129	34.0 (26.0-43.0)◊	[17]
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SOUTH-EAST ASIA

2018	Sri Lanka	Medical records of hospital	3000	2.0 (1.0-2.0)	[17]
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◊ Clearly defined as outcome of diabetic foot ulcers, BKA: Below Knee Amputation, CI: Confidence Interval, DM: Diabetes mellitus, NR: Not reported in the systematic review or database study, SR: Systematic Review, USA: United States of America



Table 3. Estimates of the annual incidence of diabetes-related foot complications published in the last 10 years (2012-2022)

Year of publication of study	Country	Setting	Sample size (n)	Annual incidence * [% (95% CI)]	SR or database reference
Foot ulcer					
WESTERN PACIFIC					
2012	Republic of Korea	National Health Insurance Service	Total population	0.43	[7]
2016				0.34	
2012				0.58	
2013		National Health Insurance Service	Total Population with DFU with PAD	0.5	
2014				0.46	
2015				0.49	
2016				0.49	
Lower limb amputations					
EUROPE					
2012	Austria	Nation-wide hospital admissions	Country population with DM	21.6 per 100,000 ^{f§}	[1]
2017				13.2 per 100,000 ^{f§}	
2012	Belgium	Nation-wide hospital admissions	Country population with DM	4.5 per 100,000 ^{f§}	[1]
2012				National Insurance Service	
2013		896,126 people with DM	29.9 per 100,000 person-years		
2014		Nation-wide hospital admissions	Country population with DM	3.4 per 100,000 ^{f§}	[1]
2012	Denmark	Nation-wide hospital admissions	Country population with DM	7.2 per 100,000 ^{f§}	[1]
2017				7.8 per 100,000 ^{f§}	
2014	Estonia	Nation-wide hospital admissions	Country population with DM	8.2 per 100,000 ^{f§}	[1]
2017				7.8 per 100,000 ^{f§}	
2011	Germany	Nation-wide hospital admissions	Country population with DM	10.5 per 100,000 ^{f§}	[1]
2017				8.2 per 100,000 ^{f§}	
2012	Finland	Nation-wide hospital admissions	Country population with DM	3.2 per 100,000 ^{f§}	[1]
2017				3.6 per 100,000 ^{f§}	
2012	France	Nation-wide hospital admissions	Country population with DM	4.2 per 100,000 ^{f§}	[1]
2015				4.3 per 100,000 ^{f§}	
2012	Iceland	Nation-wide hospital admissions	Country population with DM	1.5 per 100,000 ^{f§}	[1]
2016				0.9 per 100,000 ^{f§}	
2012	Ireland	Nation-wide hospital admissions	Country population with DM	3.1 per 100,000 ^{f§}	[1]
2017				3.1 per 100,000 ^{f§}	
2012	Israel	Nation-wide hospital admissions	Country population with DM	18.7 per 100,000 ^{f§}	[1]
2017				16.8 per 100,000 ^{f§}	
2012	Italy	Nation-wide hospital admissions	Country population with DM	2.9 per 100,000 ^{f§}	[1]
2017				1.6 per 100,000 ^{f§}	
2014	Latvia	Nation-wide hospital admissions	Country population with DM	6.5 per 100,000 ^{f§}	[1]
2017				6.0 per 100,000 ^{f§}	
2012	Lithuania	Nation-wide hospital admissions	Country population with DM	6.8 per 100,000 ^{f§}	[1]
2017				6.5 per 100,000 ^{f§}	
2012	Luxembourg	Nation-wide hospital admissions	Country population with DM	6.2 per 100,000 ^{f§}	[1]
2015				5.7 per 100,000 ^{f§}	
2011	Netherlands	Nation-wide hospital admissions	Country population with DM	4.7 per 100,000 ^{f§}	[1]
2016				4.1 per 100,000 ^{f§}	
2012	Norway	Nation-wide hospital admissions	Country population with DM	7.6 per 100,000 ^{f§}	[1]
2017				5.9 per 100,000 ^{f§}	
2012	Poland	Nation-wide hospital admissions	Country population with DM	6.6 per 100,000 ^{f§}	[1]
2016				7.4 per 100,000 ^{f§}	
2013	Portugal	Nation-wide hospital admissions	Country population with DM	11.8 per 100,000 ^{f§}	[1]
2017				10.4 per 100,000 ^{f§}	
2012	Spain	Nation-wide hospital admissions	Country population with DM	7.1 per 100,000 ^{f§}	[1]
2012				0.84 per 100,000 [§]	
2013		National Hospital Discharges	Country population with T2DM	0.82 per 100,000 [§]	[22]
2014				0.81 per 100,000 [§]	
2015				0.80 per 100,000 [§]	
2017	Nation-wide hospital admissions	Country population with DM	6.4 per 100,000 ^{f§}	[1]	
2012	Sweden	Nation-wide hospital admissions	Country population with DM	4.1 per 100,000 ^{f§}	[1]
2017				3.9 per 100,000 ^{f§}	



2012	Switzerland	Nation-wide hospital admissions	Country population with DM	3.1 per 100,000 ^f	[1]
2015				3.1 per 100,000 ^f	
2017	Turkey	Nation-wide hospital admissions	Country population with DM	3.9 per 100,000 ^f	[1]
2012	United Kingdom	Nation-wide hospital admissions	Country population with DM	2.6 per 100,000 ^f	[1]
2017				3.0 per 100,000 ^f	
NORTH AMERICA AND CARIBBEAN					
2014	Canada	Nation-wide hospital admissions	Country population with DM	7.5 per 100,000 ^f	[1]
2017				7.1 per 100,000 ^f	
2012	USA	Medicare database	6.8 million people with DM	2.8 – 6.3 per 1,000	[19]
2013				2.6 – 6.1 per 1,000	
2014				3.1 – 6.2 per 1,000	
2015				2.9 – 6.0 per 1,000	
2016				3.2 – 6.3 per 1,000	
2017				6.9 million people with DM	
2012	Mexico	Nation-wide hospital admissions	Country population with DM	17.8 per 100,000 ^f	[1]
2017				20.0 per 100,000 ^f	
SOUTH AND CENTRAL AMERICA					
2012	Chile	Nation-wide hospital admissions	Country population with DM	7.8 per 100,000 ^f	[1]
2017				8.7 per 100,000 ^f	
2012	Colombia	Nation-wide hospital admissions	Country population with DM	3.0 per 100,000 ^f	[1]
2017				4.4 per 100,000 ^f	
2012	Costa Rica	Nation-wide hospital admissions	Country population with DM	15.6 per 100,000 ^f	[1]
2017				13.7 per 100,000 ^f	
WESTERN PACIFIC					
2012	Australia	Nation-wide hospital admissions	Country population with DM	4.3 per 100,000 ^f	[1]
2016				3.9 per 100,000 ^f	
2015-2017				Community dwelling diabetes population	
2013	Japan	Nationwide claims database	9,962,459 people with DM	22.8/ 100,000 person-years f(17.3-28.3)	[20]
2014				20.9/ 100,000 person-years f(15.6-26.1)	
2015				20.0/ 100,000 person-years f(13.9-26.1)	
2016				20.0/ 100,000 person-years f(14.7-25.4)	
2021				17,288 people with DM	
2012	New Zealand	Nation-wide hospital admissions	Country population with DM	6.0 per 100,000 ^f	[1]
2014				5.9 per 100,000 ^f	
2012	Republic of Korea	National Health Insurance Service	People with DFU and PAD	0.95	[7]
2013				1.13	
2014				1.16	
2015				1.06	
2016				1.11	
2012				Nation-wide hospital admissions	
2016	2.1 per 100,000 ^f				
Mortality post DFU related LLA					
EUROPE					
2012	Germany	NR	38	15.4 at 1 year 33.1 at 3 years 45.8 at 5 years	[23]
2013	Netherlands	NR	299	77.0 at 5 years ^y	[14]
2018	Spain	NR	203	9.4 at 1 year 27.2 at 3 years 44.5 at 5 years	[23]
2016	United Kingdom	NR	79	15.6 at 1 year 25.0 at 3 years	[23]
2014				27.5 at 5 years 63.7 at 5 years ^y	



NORTH AMERICA AND CARIBBEAN						
2012	USA	NR	189	72.0 at 5 years [‡]	[14]	
2013		NR	391	5.6 at 5 years [‡]	[14]	
WESTERN PACIFIC						
2014	China	NR	245	5.8 at 1 year 15.1 at 3 years 32.7 at 5 years	[23]	

* Unless stated otherwise, *f* age-sex standardised rate, *§* major lower limb amputation, *‡* After major LLA, CI: Confidence Interval, DFU: Diabetic foot ulcer, DM Diabetes, LLA: Lower-Limb Amputation, NR: Not reported in the systematic review or database study, PAD: Peripheral Arterial Disease, T2D: Type 2 diabetes, USA: United States of America



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