Healthcare personnel statistics - nursing and caring professionals

Statistics Explained

Highlights Ireland reported that 1.4% of its inhabitants were nurses (1 366 per 100 000 inhabitants in 2023); there were 7 other EU countries where this ratio was in excess of 1 000 per 100 000 inhabitants.

Among EU countries, Ireland recorded the highest number of midwives relative to population size, 80 per 100 000 inhabitants in 2023. The next highest ratios were in Poland, Sweden and Belgium (78, 77 and 74 per 100 000 inhabitants, respectively; 2022 data for Sweden and Belgium).

In 2023, Belgium recorded the highest number of midwifery graduates relative to population size among the EU countries, 6 per 100 000 inhabitants. The highest number of nursing graduates relative to population size was recorded in Finland, 74 per 100 000 inhabitants.

This article presents an overview of European Union (EU) statistics on nursing and caring professionals. It provides information on specialist healthcare personnel , as well as data relating to nursing and midwifery graduates. Nursing and caring professionals provide services directly to patients in hospitals , ambulatory care and patients' homes. Among others, these professionals include

- qualified nurses [1]

- midwives

- caring personnel (personal care workers in health services, working in hospitals, private homes and independent residential settings).

This article is included in a set of statistical articles concerning healthcare resources in the EU which forms part of an online publication on Health in the European Union – facts and figures .

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[1] The data on nurses published by Eurostat constitute the number of professional nurses who fulfil the requirements of Directive 0036/2005/EC on the recognition of professional qualifications

Healthcare personnel

For healthcare personnel, Eurostat collects data for 3 concepts (the last of these isn't collected for caring personnel)

- 'practising' – health care professionals providing services directly to patients (variable 4.1, see illustration below)

- 'professionally active' – 'practising' professionals plus health care professionals for whom their medical education is a prerequisite for the execution of their job

- 'licensed' – health care professionals who are registered and entitled to practise as health care professionals, including those for whom their nursing education isn't a prerequisite for the execution of their job and those who are economically inactive (for example, unemployed or retired).

In this article, preference is given to the concept of 'practising' health care professionals.

Practising nurses and caring personnel, 2023

	Head count (number)			Ratio (per 100 000 inhabitants)		
	Nurses	Midwives	Caring personnel	Nurses	Midwives	Caring personnel
Belgium (¹)	134,496	8,605	75,208	1,151.5	73.7	643.9
Bulgaria	28,570	3,253	822	443.2	50.5	12.8
Czechia	86,086	4,572	29,534	792.4	42.1	271.9
Denmark (²)	62,344	2,667	90,178	1,048.3	44.9	1,527.7
Germany	1,020,000	28,000	688,000	1,224.7	33.6	826.1
Estonia	9,103	523	4,141	664.3	38.2	302.2
Ireland (³)	72,543	4,251	27,995	1,365.8	80.0	527.1
Greece (⁴)	22,796	2,829	6,450	219.0	27.2	62.0
Spain	284,232	13,833	594,200	587.8	28.6	1,228.9
France (⁵)	598,915	25,330	859,956	881.9	37.1	1,266.3
Croatia	9,704	1,522	799	251.6	39.5	20.7
Italy	404,497	17,659	649,265	685.8	29.9	1,100.7
Cyprus	4,988	337	:	520.8	35.2	:
Latvia	7,828	383	2,458	417.0	20.4	130.9
Lithuania	21,455	778	6,412	747.2	27.1	223.3
Luxembourg	:	:	:	:	:	:
Hungary	43,237	2,308	27,321	450.8	24.1	284.8
Malta	4,126	275	5,908	746.5	49.8	1,068.8
Netherlands	198,573	4,615	262,000	1,110.8	25.8	1,465.6
Austria	94,034	2,747	51,998	1,029.8	30.1	569.4
Poland (²)	216,086	28,527	12,390	589.0	77.8	33.7
Portugal (⁶)	80,238	3,300	:	758.5	31.2	:
Romania (⁷)	19,150	2,861	76,078	100.5	15.0	399.1
Slovenia	10,820	411	2,663	510.3	19.4	125.6
Slovakia (⁸)	31,174	1,782	18,367	574.5	32.8	338.5
Finland	70,722	2,204	131,114	1,266.5	39.5	2,348.1
Sweden (¹)	115,024	8,103	:	1,096.8	77.3	:
Iceland (⁹)	3,843	289	:	996.5	74.9	:
Liechtenstein	279	23	920	700.2	57.7	2,308.9
Norway	85,943	2,587	100,201	1,557.1	46.9	1,815.4
Switzerland	106,931	3,138	70,985	1,203.0	35.3	798.6
Montenegro	744	250	:	120.0	40.3	:
Moldova	:	472	11,095	:	19.1	450
North Macedonia (¹⁰)	9,553	858	280	489.2	43.9	14.3
Serbia (¹¹)	46,371	1,145	105	700.1	17.3	1.6
Türkiye (⁸)	248,287	59,750	:	291.0	70.0	:

(¹) 2022.
(²) Caring personnel: 2022.
(³) Nurses and midwives: including midwives that also have nursing qualifications.
(⁴) Only people working in hospitals.
(⁵) Nurses and caring personnel: 2021.
(⁶) Nurses and midwives: professionally active.
(⁷) Caring personnel: only people working in institutions, not home-based personal care workers.
(⁸) Professionally active.
(⁹) Midwives: professionally active
(¹⁰) 2021. Professionally active.
(¹¹) Only includes people in institutions under the Ministry of Health. Excludes the private health sector.
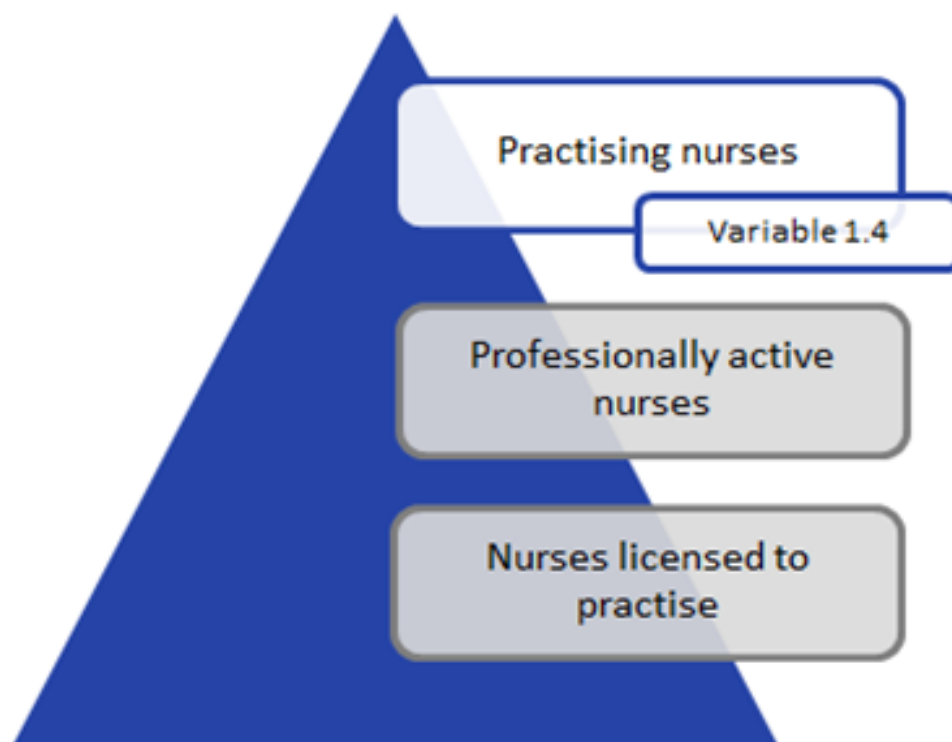Source: Eurostat (online data code: hlth_rs_prs2)

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Table 1: Practising nurses and caring personnel, 2023 Source: Eurostat (hlth_rs_prs2)

Based on a sum of the available data (see Table 1 for more information concerning the data coverage for individual EU countries), in 2023 there were approximately 3.7 million practising nurses (no data for Luxembourg) and 172 000 practising midwives (also no data for Luxembourg) in the EU. There were 3.6 million practising caring personnel (no data for Cyprus, Luxembourg, Portugal and Sweden).

Practising nurses

Nursing professionals assume responsibility for the planning and management of patient care, including the supervision of other healthcare workers, working autonomously or in teams with medical doctors and others in the application of preventive and curative care. Although nurses have traditionally provided care to patients under the guidance of a physician , they are increasingly permitted in many EU countries to practise independently as professionals. This however depends to some extent on their qualifications and level of training. Nursing professionals in the EU are required to complete a university course of at least 3 years.

Illustration: Variables collected by Eurostat related to nurses

The number of nurses may vary between EU countries according to differences in healthcare systems and how nurses are classified. Equally, the number of nurses compared with other personnel (such as physicians) also varies between different providers of healthcare, for example between hospitals and long-term nursing care facilities.

In 2023, Germany had the highest number of practising nurses among EU countries, at just over 1 million; this was considerably higher than the 2nd highest count, recorded in France (598 915; 2021 data); see Table 1. In turn, the
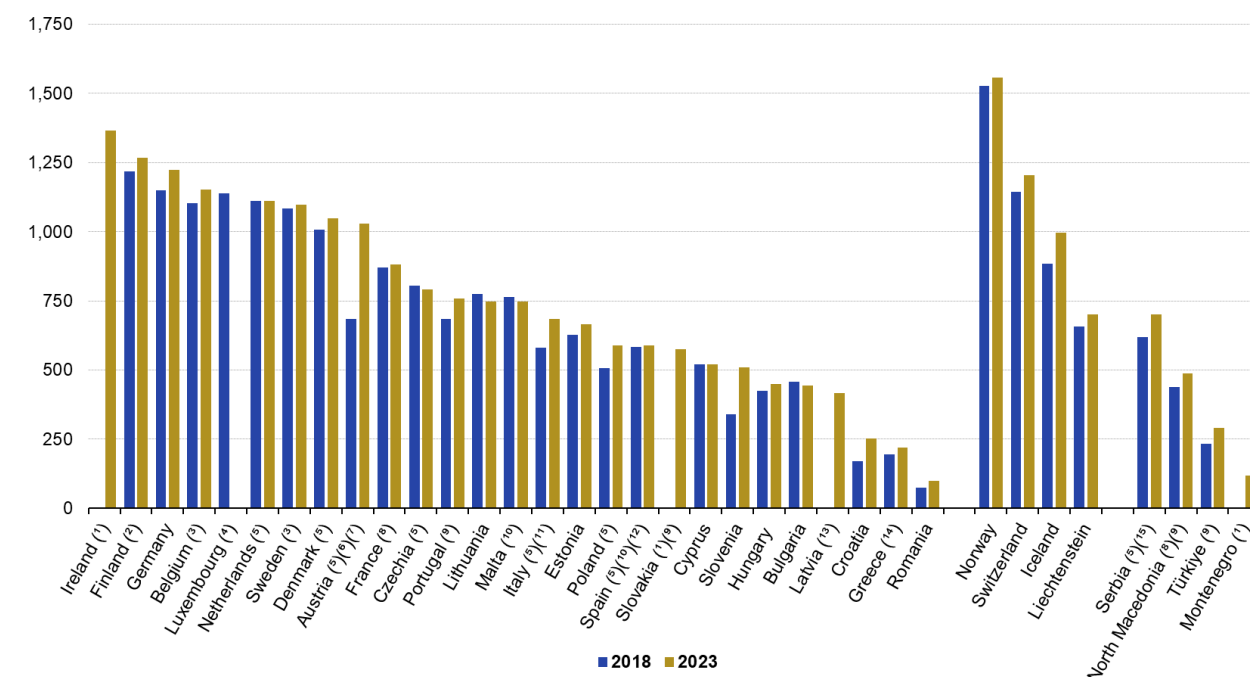
number of nurses in France was considerably higher than the next highest value, 404 497 recorded in Italy, while Spain (284 232) was the only other EU country to report more than 250 000 nurses. Malta and Cyprus recorded the smallest number of nurses, both fewer than 5 000.

Ireland had the highest number of nurses per inhabitant in the EU

Ireland had 1 366 practising nurses per 100 000 inhabitants; this figure includes midwives who also have a nursing qualifications, which accounts for around 43% of the midwives also registered as nurses and indicated to be practising in both fields. Ireland was followed by Finland with 1 267 nurses per 100 000 inhabitants and Germany with 1 225 nurses per 100 000 inhabitants. Belgium (2022 data), the Netherlands, Sweden (2022 data), Denmark and Austria all recorded more than 1 000 practising nurses per 100 000 inhabitants. In other words, there were 8 EU countries where at least 1.0% of the population were nurses.

Practising nurses, 2018 and 2023
(per 100 000 inhabitants)

(¹) 2018: not available. Including midwives that also have nursing qualifications.
(²) 2023: provisional
(³) 2022 instead of 2023.
(⁴) 2017 instead of 2018. 2023: not available.
(⁵) Break in series.
(⁶) 2018: only people working in hospitals.
(⁷) 2023: estimate.
(⁸) 2021 instead of 2023.
(⁹) Professionally active.
(¹⁰) Estimates.
(¹¹) 2018: estimate. 2023: provisional.
(¹²) 2018: includes midwives.
(¹³) 2018: not available.
(¹⁴) Only people working in hospitals.
(¹⁵) Only includes people in institutions under the Ministry of Health. Excludes the private health sector.
Source: Eurostat (online data code: hlth_rs_prs2)

Figure 1: Practising nurses, 2018 and 2023 Source: Eurostat (hlth_rs_prs2)

Elsewhere, the number of practising nurses was generally within the range of 400 to 900 per 100 000 inhabitants in 2023. Croatia (252 per 100 000 inhabitants) and Greece (219 per 100 000 inhabitants; only people working in hospitals) recorded somewhat lower ratios, while the lowest ratio was in Romania, at 100 per 100 000 inhabitants.

A comparison of the latest data shows that there were almost 14 times as many nurses per 100 000 inhabitants in Ireland than in Romania in 2023. Expressed in a different way, each practising nurse in Ireland covered an average of 73 inhabitants, while in Romania the same ratio was 995 inhabitants per nurse.

Among the 23 EU countries for which data are available for 2018 and 2023 (alternative reference years for some countries, see Figure 1 for more details), the number of practising nurses relative to population size fell in 5 countries during the period under consideration. The biggest decreases were reported in Lithuania and Malta, where the number of practising nurses fell by 28 and 19 per 100 000 inhabitants, respectively. There were smaller decreases recorded for Bulgaria (down by 16 per 100 000 inhabitants), Czechia (down by 13 per 100 000 inhabitants; note the break in series) and the Netherlands (down by 2 per 100 000 inhabitants; note the break in series).

The number of nurses per 100 000 inhabitants increased in 18 EU countries. The largest increases were recorded in Austria where the ratio increased by 346 nurses per 100 000 inhabitants (note the break in series) and Slovenia where it increased by 169 per 100 000 inhabitants.

Practising nurses by age and sex

Lithuania had the largest share of practising nurses aged 55 years or over

In 2023, almost half (48.9%) of all practising nurses in Lithuania were aged 55 years or over; the next highest share was recorded in Latvia (40.2%). These were the only EU countries (out of the 21 for which data are available – see Figure 2 for more details) where the share of nurses aged 55 years or over was above 40.0%; Denmark recorded the 3rd highest share, at 30.1%. By contrast, 15 out of 24 EU countries recorded a share over 30.0% for practising doctors aged 55 years or older (see the article on physicians for more information). In 6 EU countries, the share of older nurses was less than 20.0%, with the lowest share in Romania (11.8%). The highest shares of younger nurses (under 35 years) were recorded in Croatia (36.4%), the Netherlands (35.8%), Malta (35.5%) and Spain (34.0%); these were the only countries with a share of younger nurses of more than a third.

Practising nurses, by age, 2023
(%)

Note: Bulgaria, Cyprus, Luxembourg, Poland, Portugal and Sweden, not available. The figure is ranked on the share of nurses aged 55 years or over in the total number of nurses.
(¹) Estimates.
(²) Professionally active.
(³) Provisional.
(⁴) 2022.
(⁵) 2021.
(⁶) Only includes nurses in institutions under the Ministry of Health. Excludes the private health sector.
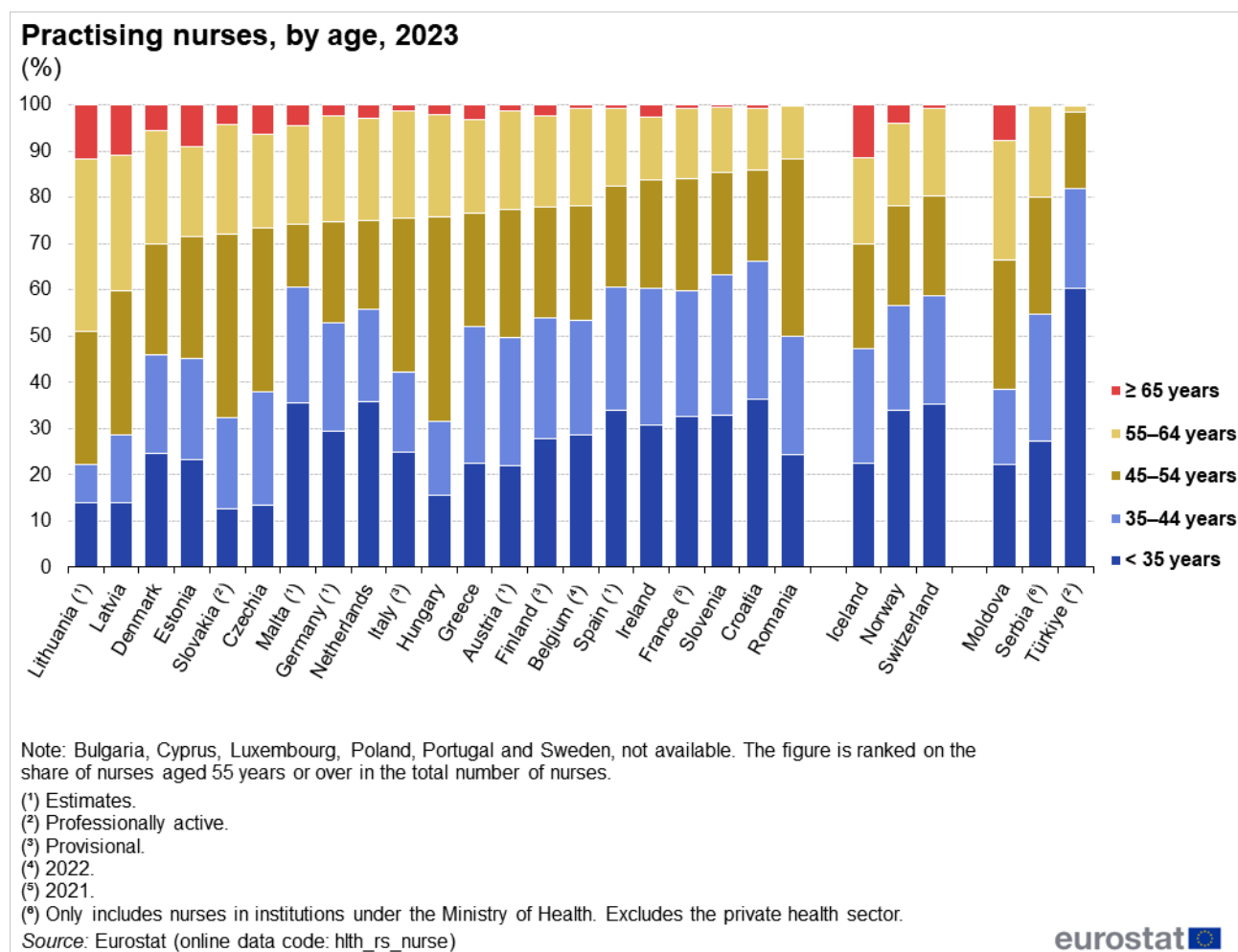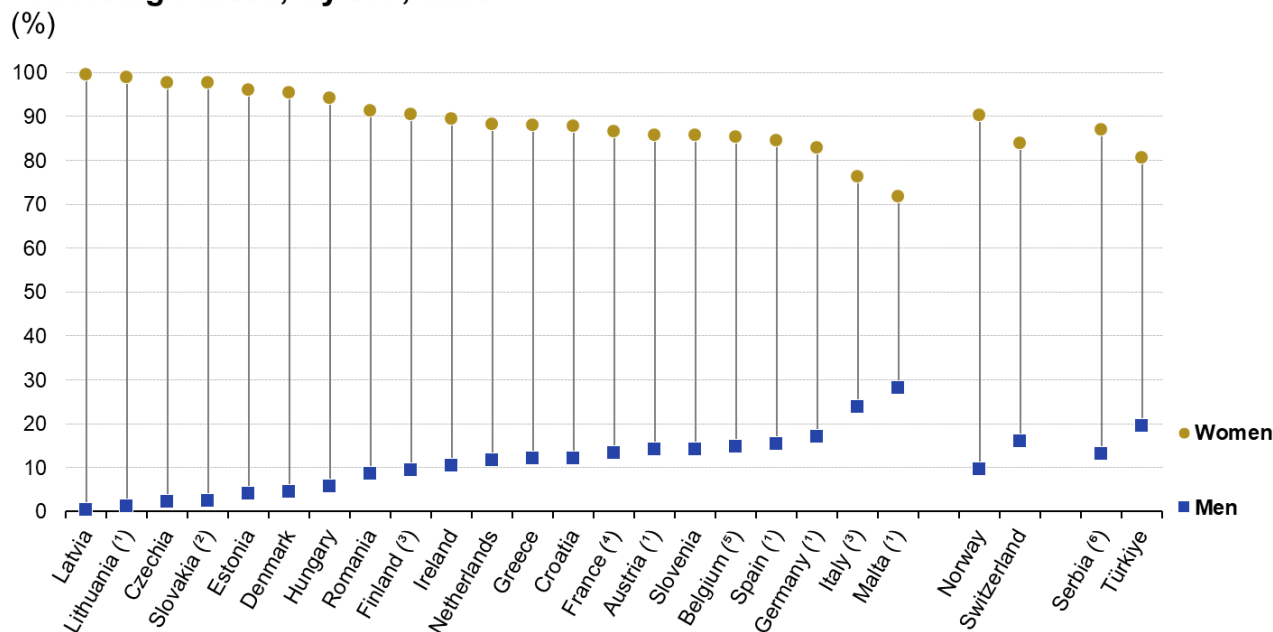*Source*: Eurostat (online data code: hlth_rs_nurse)

Figure 2: Practising nurses, by age, 2023 Source: Eurostat (hlth_rs_nurse)

In all EU countries for which data are available, more than 70% of all practising nurses were women

The analysis presented in Figure 3 shows that, in 2023, more than 70% of practising nurses were women in every EU country for which data are available. Around half of the EU countries (9 out of 21) for which data are available reported that more than 90% of nurses were women. The highest share was in Latvia, where 99.5% of nurses were women. The highest shares of male nurses were recorded in Malta and Italy, at 28.2% and 23.8%, respectively. Conversely, the share of female practising physicians in 2023 ranged from 40% to 74%.

Practising nurses, by sex, 2023
(%)

Note: Bulgaria, Cyprus, Luxembourg, Poland, Portugal and Sweden, not available. The figure is ranked according to the proportion of female nurses.

(¹) Estimates.
(²) Professionally active.
(³) Provisional.
(⁴) 2021.
(⁵) 2022.
(⁶) Only includes nurses in institutions under the Ministry of Health. Excludes the private health sector.
Source: Eurostat (online data code: hlth_rs_nurse)

Figure 3: Practising nurses, by sex, 2023 Source: Eurostat (hlth_rs_nurse)

Midwives

As with nurses, practising midwives plan, manage, provide and evaluate care services. Midwives do so before, during and after pregnancy and childbirth, providing delivery care for reducing health risks to women and new-born children; they may work autonomously or in teams with other healthcare providers.

The distribution of midwives across the EU countries was somewhat different to that for nurses: the highest number of practising midwives in 2023 was recorded in Poland (28 527), followed by Germany (28 000) and France (25 330), with the lowest number (fewer than 300) recorded in Malta.

Among the EU countries, Ireland had the highest ratio of midwives relative to its population size, 80 per 100 000 inhabitants in 2023 – see Figure 4 for more information concerning the data coverage for individual EU countries. Poland (78 per 100 000), Sweden (77 per 100 000; 2022 data) and Belgium (74 per 100 000; 2022 data) were the only other EU countries to record ratios of more than 50 practising midwives per 100 000 inhabitants. At the other end of the range, the lowest ratio of the number of midwives to population was recorded in Romania, where there were, on average, 15 practising midwives per 100 000 inhabitants in 2023. The highest ratio (in Ireland) was 5.3
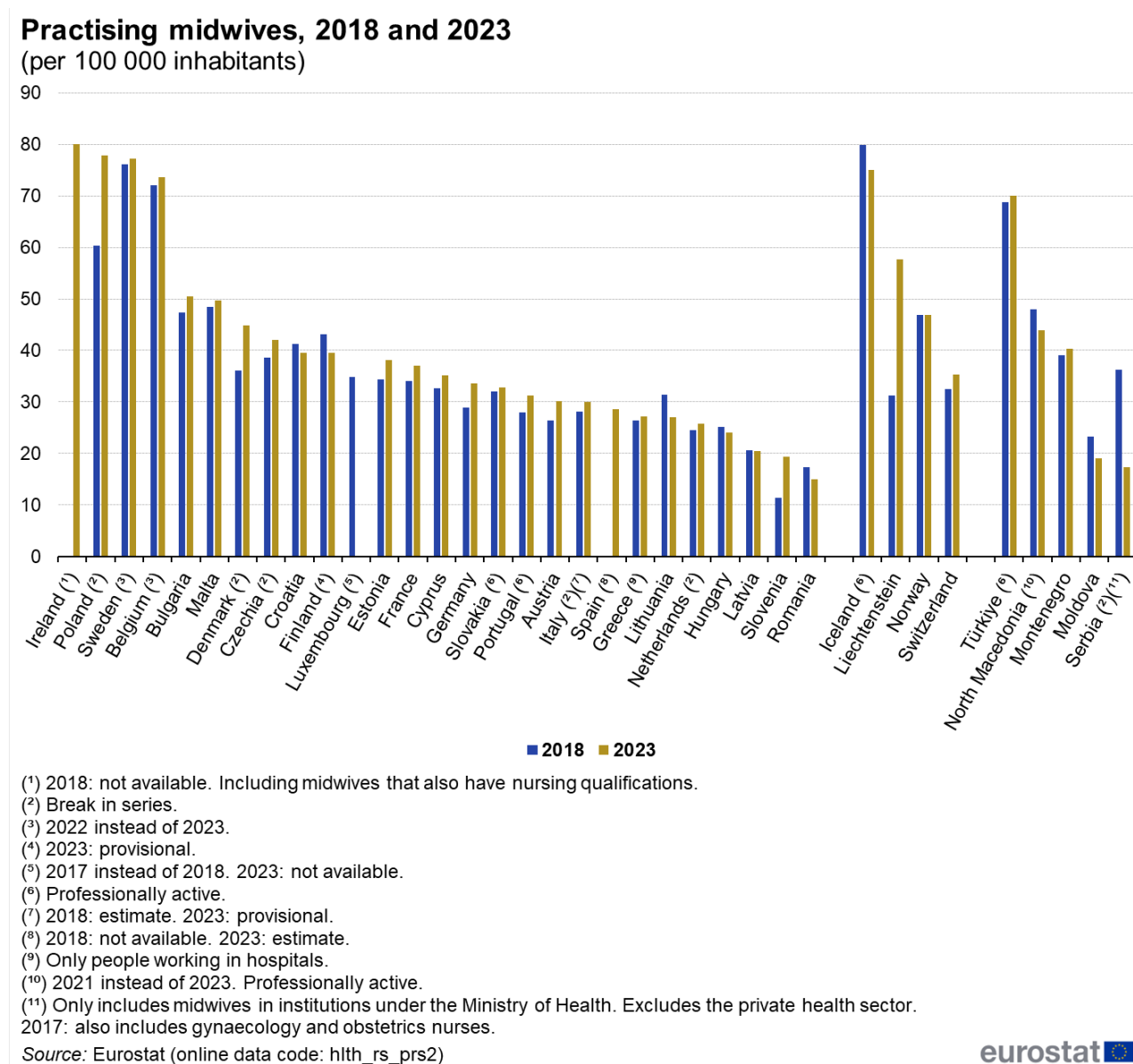
times as high as the lowest ratio (in Romania).

Practising midwives, 2018 and 2023
(per 100 000 inhabitants)

(¹) 2018: not available. Including midwives that also have nursing qualifications.
(²) Break in series.
(³) 2022 instead of 2023.
(⁴) 2023: provisional.
(⁵) 2017 instead of 2018. 2023: not available.
(⁶) Professionally active.
(⁷) 2018: estimate. 2023: provisional.
(⁸) 2018: not available. 2023: estimate.
(⁹) Only people working in hospitals.
(¹⁰) 2021 instead of 2023. Professionally active.
(¹¹) Only includes midwives in institutions under the Ministry of Health. Excludes the private health sector.
2017: also includes gynaecology and obstetrics nurses.
Source: Eurostat (online data code: hlth_rs_prs2)

Figure 4: Practising midwives, 2018 and 2023 Source: Eurostat (hlth_rs_prs2)

Caring personnel

Caring personnel include:

- Health care assistants in institutions who provide direct personal care and assistance with activities of daily living to patients and residents in a variety of health care settings such as hospitals, clinics and residential nursing care facilities. They generally work under the direct supervision of medical, nursing or other health professionals or associate professionals.

- Home-based personal care workers who provide routine personal care and assistance with activities of daily living to people who need such care due to the effects of ageing, illness, injury, or other physical or mental conditions and are living in private homes and other independent residential settings.

Subject to data availability (see Table 1 for more information concerning the data coverage for individual EU countries), France (859 956; 2021 data), Germany (688 000), Italy (649 265) and Spain (594 200) had the highest number of caring personnel in 2023, followed at some distance by the Netherlands (262 000). The smallest

numbers were recorded in Croatia and Bulgaria (both fewer than 900).

The number of caring personnel per 100 000 inhabitants in Finland was considerably higher than in the other EU countries

Finland had 2 348 caring personnel per 100 000 inhabitants in 2023, which was by far the highest ratio among the EU countries (see Table 1 for more information concerning the data coverage for individual EU countries). Denmark (1 528 per 100 000 inhabitants in 2022) and the Netherlands (1 466 per 100 000 inhabitants) were the only other EU countries to record at least 1 300 caring personnel per 100 000 inhabitants. In 4 EU countries, this ratio was below 100 per 100 000 inhabitants in 2023: Greece (62 per 100 000 inhabitants; only people working in hospitals), Poland (34 per 100 000 inhabitants; 2022 data), Croatia (21 per 100 000 inhabitants) and Bulgaria (13 per 100 000 inhabitants).

Employment in hospitals

Table 2 focuses on nurses, midwives and health care assistants employed in hospitals. This coverage of healthcare personnel differs from Table 1 in that it includes the narrower concept of health care assistants[2] rather than caring personal.

Among the EU countries, Germany recorded the highest absolute number of nurses and midwives employed in hospitals (559 000), while France (386 163) and Italy (286 051) were the only other EU countries (for which recent data are available) to record more than 200 000 nurses and midwives in hospitals in 2023. A similar analysis for health care assistants working in hospitals reveals the highest counts were in France (251 750) and Spain (151 474); none of the other EU countries for which there are recent data recorded more than 75 000 health care assistants working in hospitals.

The availability of data converted into full-time equivalent units indicates that employment in hospitals was generally close to full-time. For nurses and midwives, the number in full-time equivalents was equal to at least 80% of the number in head counts for 10 of the 13 EU countries for which data are available. Falling just below this range were the Netherlands (78.5%), Estonia (77.3%) and Germany (74.1%). For health care assistants, both measures are available for 12 EU countries, 10 of which recorded ratios between full-time equivalents and head counts of at least 75%. By contrast, in Denmark (68.4%) and the Netherlands (66.3%), a smaller proportion of health care assistants employed in hospitals appeared to work on a full-time basis.

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[2] Number of healthcare assistants (ISCO-08 code: 5321) employed by a hospital.

Nurses and caring professionals employed in hospitals, 2023

	Head count (number)		Full-time equivalents (number)		Full-time equivalents (per 100 000 inhabitants)	
	Nurses and midwives	Health care assistants	Nurses and midwives	Health care assistants	Nurses and midwives	Health care assistants
Belgium	:	:	62,163	12,078	527.7	102.5
Bulgaria	20,572	583	:	:	:	:
Czechia	59,336	23,507	53,620	22,938	493.6	211.1
Denmark	42,249	11,833	36,896	8,093	620.4	136.1
Germany	559,000	74,000	414,000	57,000	497.1	68.4
Estonia	6,299	3,632	4,866	2,894	355.1	211.2
Ireland	32,907	7,913	29,744	7,053	560.0	132.8
Greece	25,625	6,450	:	:	:	:
Spain	192,872	151,474	:	:	:	:
France	386,163	251,750	358,119	233,234	523.8	341.1
Croatia	7,797	771	:	:	:	:
Italy	286,051	:	:	:	:	:
Cyprus	4,346	:	4,346	:	453.8	:
Latvia	5,639	2,382	:	:	:	:
Lithuania	13,533	4,811	14,389	4,955	501.1	172.6
Luxembourg	:	:	:	:	:	:
Hungary	24,339	10,707	23,370	10,345	243.6	107.9
Malta	3,552	2,038	3,030	2,009	548.1	363.5
Netherlands	78,226	22,382	61,422	14,837	343.6	83.0
Austria	63,498	9,743	50,806	7,793	556.4	85.3
Poland (¹)	152,645	:	:	:	:	:
Portugal	49,759	38,918	:	:	:	:
Romania	14,444	47,831	14,395	47,774	75.5	250.6
Slovenia	6,277	331	:	:	:	:
Slovakia	:	:	21,801	9,370	401.7	172.7
Finland	38,341	11,606	:	:	:	:
Sweden	:	:	:	:	:	:
Iceland	:	:	:	:	:	:
Liechtenstein	69	27	63	29	158.8	72.2
Norway	46,734	8,018	40,890	5,804	740.8	105.2
Switzerland	69,465	15,275	51,872	10,813	583.6	121.7
Montenegro	733	:	:	:	:	:
Moldova		7,194	:	8,261	:	335
North Macedonia (¹)	4,590	265	:	:	:	:
Serbia (²)	33,389	105	33,385	105	504.1	1.6
Türkiye	266,282	0	:	:	:	:

(¹) 2021.
(²) Only includes midwives in institutions under the Ministry of Health. Excludes the private health sector.
Source: Eurostat (online data code: hlth_rs_prshp2)

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Table 2: Nurses and caring professionals employed in hospitals, 2023 Source: Eurostat (hlth_rs_prshp2)

Relative to population size, among the 15 EU countries for which recent data are available, the number of nurses and midwives (in full-time equivalents) employed in hospitals generally ranged from 244 per 100 000 inhabitants in Hungary to 620 per 100 000 inhabitants in Denmark, with Romania (76 per 100 000 inhabitants) well below this range.

Data in full-time equivalents are available for 14 EU countries in relation to the number of health care assistants employed in hospitals. In 2023, there were fewer than 100 health care assistants in hospitals per 100 000 inhabitants in Austria, the Netherlands and Germany (which had the lowest number at 68 per 100 000 inhabitants, while the majority of the remaining EU countries reported ratios between 103 and 251 health care assistants in hospitals per 100 000 inhabitants. At the top of the range, France and Malta reported, respectively, 341 and 364 health care assistants in full-time equivalents in hospitals per 100 000 inhabitants.

Health graduates

Table 3 focuses on graduates for the 2 most qualified occupations covered by this article, namely nurses and midwives.

Among the EU countries, there were more than 140 300 nurses who graduated in 2023 (this total includes 2022 data for Greece) – see Table 3 for more information concerning the data coverage for individual EU countries. When expressed per 100 000 inhabitants, there were 31 nursing graduates per 100 000 inhabitants in the EU in 2023. In relative terms, the number of nurses graduating in 2023 peaked in Finland (74 per 100 000 inhabitants) and the Netherlands (64 per 100 000 inhabitants). The lowest ratio of nurses graduating per 100 000 inhabitants was recorded in Slovenia (3 per 100 000 inhabitants).

Between 2013 and 2023, there was a mixed development in the number of nurses graduating in EU countries (see Table 3 for more information concerning the data coverage): 11 out of the 25 countries for which data are available recorded increases. Croatia, the Netherlands, Bulgaria (note the break in series) and Lithuania recorded particularly high growth rates, as their numbers of graduates were, respectively, 2.4, 1.8, 1.6 and 1.6 times as high in 2023 (as in 2013). By contrast, the largest de-
clines in the number of nursing professional graduates were recorded in Latvia (note the break in series) and Cyprus.

Graduates – nurses and midwives, 2013 and 2023

| | Head count (number) | | | | Ratio (per 100 000 inhabitants) | | | |
| | Nurses | | Midwives | | Nurses | | Midwives | |
	2013	2023	2013	2023	2013	2023	2013	2023
EU (¹)	:	140,329	:	:	:	31.3	:	:
Belgium (²)	5,305	4,955	521	668	46.3	42.1	4.6	5.7
Bulgaria (³)	307	489	122	183	4.6	7.6	1.8	2.8
Czechia	1,565	1,468	233	207	14.7	13.5	2.2	1.9
Denmark (³)	2,354	2,922	143	195	40.5	49.1	2.5	3.3
Germany	36,705	36,391	625	756	44.2	43.7	0.8	0.9
Estonia	467	413	72	33	35.3	30.1	5.4	2.4
Ireland (³)	1,528	1,700	128	135	30.9	32.0	2.6	2.5
Greece (⁴)	1,608	1,589	153	448	15.0	15.2	1.4	4.3
Spain (⁵)	8,783	11,593	457	495	18.7	24.0	1.0	1.0
France (⁶)	28,990	28,036	914	921	43.1	41.0	1.4	1.4
Croatia	730	1,730	110	74	18.4	44.9	2.8	1.9
Italy	13,075	10,218	881	708	21.9	17.3	1.5	1.2
Cyprus	339	88	0	1	38.1	9.2	0.0	0.1
Latvia (³)	1,865	379	49	35	97.1	20.2	2.6	1.9
Lithuania	502	815	29	44	17.9	28.4	1.0	1.5
Luxembourg	61	68	2	2	9.9	10.2	0.3	0.3
Hungary (²)	1,852	1,851	83	127	19.1	19.3	0.9	1.3
Malta	144	91	13	11	29.2	16.5	2.6	2.0
Netherlands	6,140	11,349	150	143	35.5	63.5	0.9	0.8
Austria	3,136	2,439	137	147	35.4	26.7	1.6	1.6
Poland	10,295	7,350	1,258	1,030	27.1	20.0	3.3	2.8
Portugal	2,666	2,919	:	:	25.8	27.6	:	:
Romania (²)	3,023	1,530	82	36	15.6	8.0	0.4	0.2
Slovenia	:	67	:	20	:	3.2	:	0.9
Slovakia	:	1,393	125	77	:	25.7	2.3	1.4
Finland	3,607	4,138	236	196	65.4	74.1	4.3	3.5
Sweden	3,847	4,348	253	320	37.6	41.3	2.5	3.0
Iceland	125	179	10	15	35.0	46.4	2.8	3.9
Liechtenstein	0	0	0	0	0.0	0.0	0.0	0.0
Norway	3,653	4,623	107	116	68.6	83.8	2.0	2.1
Switzerland	2,751	3,868	150	184	32.2	43.5	1.8	2.1
Montenegro	:	36	:	:	:	5.8	:	:
Moldova	:	5	:	13	:	0.2	:	0.5
North Macedonia (⁷)	:	236	14	53	:	12.1	0.68	2.7
Serbia (³)	3,681	3,583	213	184	52.9	54.1	3.1	2.8
Türkiye	19,842	16,165	2,822	4,056	24.2	18.9	3.4	4.8

(¹) Includes 2022 data for Greece.
(²) Nurses: break in series.
(³) Break in series.
(⁴) 2022 instead of 2023.
(⁵) Different sources used for nursing and midwifery graduates. Nurses: includes midwife graduates.
(⁶) Nurses: includes health executive nurses.
(⁷) 2021 instead of 2023. 2012 instead of 2013.
Source: Eurostat (online data code: hlth_rs_grd2)

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Table 3: Graduates – nurses and midwives, 2013 and 2023 Source: Eurostat (hlth_rs_grd2)

In 2023, there were considerably fewer midwifery graduates than nursing graduates in the EU: approximately 7 000 across 26 EU countries (no recent data for Portugal). When expressed per 100 000 inhabitants, the number of midwifery graduates in 2023 was highest in Belgium at 6 per 100 000 inhabitants, while the lowest ratio was 0.1 per 100 000 inhabitants in Cyprus.

Between 2013 and 2023, there were 13 EU countries which recorded an increase in the number of midwifery graduates, while Luxembourg had the same number in both years and 11 countries recorded decreases; no data or incomplete data for Portugal and Slovenia. The largest increase was recorded in Greece, where there were 3 times as many graduates in 2022 as in 2013. At the other end of the range, the biggest relative decreases in midwifery graduates between 2013 and 2023 were recorded in Romania and Estonia, both down by more than half.

Workforce migration – nurses

Cross-border migration of health workers is a long-standing and growing phenomenon, within the EU and globally. Many healthcare staff within the EU may have been trained in a country different to where they work; this includes people who trained in an EU country and moved to work in another EU country and people who trained outside the EU and moved to an EU country. An analysis of the place of training of nurses is available for most EU countries (see Table 4 for more details); this analysis distinguishes domestically trained and foreign-trained nurses.

Among the EU countries for which recent data are available, the largest numbers of foreign-trained nurses were recorded in Germany (102 000), Ireland (37 609), Italy (23 311), France (19 876; 2021 data), Austria (15 261) and Belgium (10 670). Elsewhere, the number of foreign-trained nurses was below 5 000, with the lowest number recorded in Estonia (34).

In 16 of the countries for which data are available, more than 95.0% of nurses in 2023 had been domestically trained, with this share peaking at 99.9% in Romania. A slightly lower share was recorded in Italy (94.8%) and somewhat lower shares were recorded in Germany (90.0%) and Austria (86.3%). The share in Ireland was clearly lower, at approximately half (48.2%).

As well as information on the stock of foreign-trained nurses, data are also available for the annual inflow of foreign-trained nurses. In 2023, 27 282 foreign-trained nurses started working in Germany, while 5 225 started in Ireland. In each of the 16 other EU countries for which data are available, the number was below 1 000, with Lithuania, Bulgaria, Lativa and Estonia recording fewer than 20.

The annual inflow of foreign-trained nurses in 2023 was equivalent to 7.2% of the whole stock of nurses in Ireland, which was a much higher ratio than in any other EU country. The second highest ratio was 2.7% in Germany, followed by 0.8% in Austria; the 14 other EU countries for which data are available recorded ratios of at most 0.3%. The annual inflow of foreign-trained nurses in 2023 was equivalent to 38.0% of the stock of foreign-trained nurses in Poland, which was a much higher share than in any other EU country. The next highest shares were 26.7% in Germany and 22.1% in Romania, with shares below 15.0% in the 14 other EU countries for which data are available.

Migration of nurses, 2023

| | Stock of nurses | | | Share of the stock of nurses (¹) | | Annual inflow of foreign-trained nurses | Annual inflow of foreign-trained nurses as a share of the stock of | |
| | Total | Domestically trained nurses | Foreign-trained nurses | Domestically trained nurses | Foreign-trained nurses | | all nurses | foreign-trained nurses |
		(number)		(%)		(number)	(%)	
Belgium	232 934	222 264	10 670	95.4	4.6	687	0.3	6.4
Bulgaria	:	:	:	:	:	13	:	:
Czechia	97 294	84 000	1 595	98.1	1.9	194	0.2	12.2
Denmark	62 344	60 572	1 769	97.2	2.8	213	0.3	12.0
Germany	1 020 000	917 000	102 000	90.0	10.0	27 282	2.7	26.7
Estonia	15 488	15 454	34	99.8	0.2	2	0.0	5.9
Ireland	72 543	34 931	37 609	48.2	51.8	5 225	7.2	13.9
Greece	39 449	38 804	391	99.0	1.0	:	:	:
Spain	:	:	:	:	:	884	:	:
France (²)	654 064	633 982	19 876	97.0	3.0	384	0.1	1.9
Croatia	41 449	40 942	507	98.8	1.2	:	:	:
Italy	446 308	422 984	23 311	94.8	5.2	698	0.2	3.0
Cyprus	:	:	:	:	:	:	:	:
Latvia	7 844	7 617	227	97.1	2.9	13	0.2	5.7
Lithuania	26 769	26 492	129	99.5	0.5	17	0.1	13.2
Luxembourg	:	:	:	:	:	:	:	:
Hungary	53 120	52 095	1 025	98.1	1.9	73	0.1	7.1
Malta	:	:	:	:	:	:	:	:
Netherlands	198 573	195 529	3 044	98.5	1.5	298	0.2	9.8
Austria	111 566	96 305	15 261	86.3	13.7	917	0.8	6.0
Poland	319 018	316 735	2 283	99.3	0.7	868	0.3	38.0
Portugal	:	:	:	:	:	:	:	:
Romania	190 420	190 298	122	99.9	0.1	27	0.0	22.1
Slovenia	10 820	10 589	231	97.9	2.1	:	:	:
Slovakia	:	:	:	:	:	:	:	:
Finland (³)	71 274	70 565	638	99.1	0.9	37	0.1	5.8
Sweden (³)	115 024	110 664	4 266	96.3	3.7	224	0.2	5.3
Iceland	:	:	:	:	:	89	:	:
Norway	85 943	77 369	5 545	93.3	6.7	1 847	2.1	33.3
Switzerland	80 769	50 936	21 484	70.3	29.7	3 070	3.8	14.3
Moldova	:	:	:	:	:	0	:	:

(¹) Calculated as a share of the sum of domestically and foreign-trained nurses, excluding unknown from the total.
(²) 2021.
(³) 2022.
Source: Eurostat (online data code: hlth_rs_wkmg2)

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Table 4: Migration of nurses, 2023 Source: Eurostat (hlth_rs_wkmg2)

Source data for tables and graphs

- Download Excel file

Data sources

Key concepts

Practising nurses, midwives and caring personnel provide services directly to patients. They include professional nurses and midwives, health care assistants and home-based personal care workers. Data on associate professional nurses (ISCO 08 code 3221) aren't included (see below for the full list of the concerned ISCO codes).

Employment data cover the number of health care staff (head counts) and the number of people in full-time equivalents directly employed in hospitals (both general and specialised hospitals); self-employed people working in hospitals are also included, for example, those working with service contracts as health professionals.

Data on graduates for any given year cover the number of students who have graduated in either nursing or midwifery, so they may become a professional or associate professional nurse or midwife; the data for associate professional nurses aren't shown in this article. The data exclude those who have graduated in other fields of studies which don't provide a recognised foundation for the practice of nursing or midwifery. Within the EU, Directive 2005/36/EC of the European Parliament and of the Council defines the training of nurses responsible for

general care as comprising at least 3 years of study or 4 600 hours of theoretical and clinical training.

Data on workforce migration cover the stock of domestically and foreign-trained nurses, as well as the annual inflow of foreign-trained nurses. Data on the stock of nurses is broken down into domestically trained and foreign-trained people; these data include people who are native-born but foreign-trained (by country of 1st qualification). Data on the annual inflow of nurses cover the nurses who have obtained a recognised qualification in nursing in another country and who in a given year are receiving a new authorisation to practice in the receiving country.

Healthcare resources

Statistics on healthcare resources (such as personnel and medical equipment) are documented in a background article on the methodology of healthcare non-expenditure statistics . This provides information on the scope of the data, its legal basis, the methodology employed, as well as related concepts and definitions.

Common definitions have been agreed between Eurostat , the OECD and the World Health Organization (WHO) with respect to the employment of various health care professionals. There are 3 main concepts which are used to present these data. Eurostat gives preference to the concept of 'practising' nurses, midwives and caring personnel

- 'practising' – health care professionals providing services directly to patients

- 'professionally active' – 'practising' professionals plus health care professionals for whom their medical education is a prerequisite for the execution of their job

- 'licensed' – health care professionals who are registered and entitled to practise as health care professionals.

Data on nurses, midwives and caring personnel are classified according to the International Standard Classification of Occupations (ISCO); they are defined under ISCO 08 as codes 222, 322 and 532

- 222 nursing and midwifery professionals

  - 2221 nursing professionals
  - 2222 midwifery professionals

- 322 nursing and midwifery associate professionals

  - 3221 nursing associate professionals
  - 3222 midwifery associate professionals

- 532 personal care workers in health services

  - 5321 health care assistants
  - 5322 home-based personal care workers
  - 5329 personal care workers in health services not elsewhere classified.

For country specific notes on these data collections, please refer to the annexes at the end of the national metadata reports accessible from links at the beginning of the European metadata report .

In particular, note that

- data for Cyprus assume that all private sector nurses are practicing

- data for personnel employed in hospitals in Lithuania are in full-time equivalents compiled relative to the number of contractual hours; some personnel may work 1.25 or 1.5 times the contractual hours and consequently the data in full-time equivalents may exceed data based on head counts

- data for graduates for Poland count graduates at each level of ISCED

- data for nurses for Portugal include nurses who hold a post/job for which a nursing education isn't required.

Symbols

In tables, a colon ':' is used to show where data aren't available. Data in italics are estimates or provisional.

Context

There are concerns about a shortage of nursing and caring professionals in the EU. These may become exacerbated as the population continues to age and nurses and caring professionals move from employment into retirement or leave for other reasons.

A consequence of future demographic developments is that the number of elderly people (aged 65 years or more) in the EU is forecast to increase by 33% between 2024 and 2050 (Eurostat baseline projections 2023); during this period, the share of the elderly in the total population is projected to increase from 21.5% in 2024 to 29.0% by 2050. This ageing of the EU's population is likely to result in considerable demands for a range of care services, as an increasing proportion of the population becomes frail and suffers from declining physical and mental health. European healthcare systems will therefore need to anticipate future skills requirements for health professionals – in particular, nurses and caring professionals – so these may be matched against the demands of an increasingly aged society, for example, a likely shift away from care in hospitals towards care in the home.

On 7 September 2022, the European Commission proposed a European care strategy . The Commission proposed actions to support EU countries in improving working conditions and work-life balance for carers and to ensure quality, affordable and accessible care services across the European Union.

Footnotes

Explore further

Other articles

Online publications

- Health in the European Union – facts and figures

- Disability statistics

Healthcare human and physical resources

- Physicians

- Dentists, pharmacists and physiotherapists

- Beds

- Medical technology

Methodology

- Healthcare non-expenditure

General health statistics articles

- Health statistics introduced

- Regional health statistics

Database

- Health (hlth)

   Health care (hlth_care)

       Health care resources (hlth_res)

         Health care staff (hlth_staff)

           Health graduates (hlth_rs_grd2)

           Health personnel (hlth_rs_prs2)

           Health workforce migration (hlth_rs_wkmg2)

           Hospital employment (hlth_rs_prshp2)

           Nurses by age and sex (hlth_rs_nurse)

Thematic section

- Health

Selected datasets

- Health (t_hlth)

Health care (t_hlth_care)

Methodology

Manuals and guidelines

- Healthcare non-expenditure statistics manual and guidelines for completing the Joint questionnaire on non-monetary healthcare statistics – 2025 edition

Metadata

- Health care resources (ESMS metadata file – hlth_res)

External links

European Union, OECD and WHO

- Council Recommendation (2022/C 476/01) on access to affordable high-quality long-term care

- European Commission – Public health , see

  – A European care strategy

  – European core health indicators (ECHI)

  – Health workforce

- OECD / European Commission report 'Health at a Glance: Europe'

- OECD – The future of health systems

- World Health Organization (WHO) , see

  – World Health Organization (WHO) – Health workforce

  – WHO Global Health Observatory (GHO) – Global health workforce statistics database

Other external links

- European Federation of Nurses Associations

- European Midwives Association

- European Specialist Nurses Organisations