



8.7. S-8 Nursing graduates (S-8)

8.7.1. Documentation sheet

Description	Nursing graduates per 100 000 population
Calculation	Numerator: number of students graduating every year from nursing schools (both Bachelor and non-Bachelor: all nursing students who have obtained a recognised qualification required to become a licensed or registered nurse are counted) in Belgium. Denominator: total population
Rationale	Maintaining the number of nurses requires investments in training new nurses as well as investments in the attractiveness of the nursing profession. Many industrialized countries have taken measures to expand the number of students in nursing education programmes in response to concerns about current or anticipated shortages of nurses. Increasing investment in nursing education is particularly important as the nursing workforce is ageing in many countries and the baby-boom generation of nurses approaches retirement. ¹ Also in Belgium several policy measures were taken to increase the number of nursing graduates such as Project 600 which offers employees of the healthcare sector the opportunity to study nursing with maintenance of their salary ⁿⁿ .
Data source	Federal database of health care professionals (“Cadastre/Kadaster”), Federal Public Service Health, Food Chain Safety and Environment OECD Health statistics
Technical definitions	A nurse is a person who has been trained to carry out nursing tasks. Nurses have successfully completed a three-year advanced vocational training course (A2 or HBO-5 leading to obtain a diploma degree) or a Bachelors’ programme Nursing (A1 or bachelor leading to obtain a bachelor degree). The number of nursing graduates is based on the number of “visa/visum” delivered by the Federal Public Service Public Health, which are registered in the federal cadastre. Only the first “visa/visum” delivered to practise nursing is taking into account.
Limitations	Nursing graduates per 100 000 population: this indicator also counts nursing graduates from foreign countries, completing their nursing training in Belgium, but leaving Belgium afterwards.
International comparability	Nursing graduates per 100 000 population: international comparability is partially limited, as educational pathways to become a nurse vary and registration practices for new graduates may differ between countries. Some countries cannot exclude midwife graduates from nurses graduates (e.g. Spain: include midwife graduates)
Dimension	Sustainability of the health system
Related indicators	Number of practising nurses Number of practising nurses above 50+ years old

ⁿⁿ <http://www.vlaanderen.be/nl/onderwijs-en-wetenschap/onderwijsaanbod/verpleegkunde-studeren-met-behoud-van-loon>



8.7.2. Results

Number of new nursing graduates with Belgian diploma^{oo}

In 2017, a total of 6 357 students graduated from nursing schools in Belgium which is an increase of 2 626 in 13 years (Table 78 and Table 79). More students graduated from nursing schools in the Flemish community than in the French Community (57.4% vs 42.6%, see Table 78). In the Flemish Community, as many students graduated with a Bachelor degree (A1) as

there are students who graduated with a Diploma (A2) (around 1 800 per year in 2017, Table 79), whereas in the French Community more students graduated with a Bachelor degree (A1). There is a higher proportion of female graduates with Belgian diploma than male graduates (respectively 85.5% and 14.5%, see Table 78) and these proportions remain stable over the time. While 92.1% of nursing graduates resided in Belgium in 2017, 15.9% of the new graduates had not a Belgian nationality (see Table 78).

Table 78 – Number of new nursing graduates with Belgian diploma, by Community and by characteristics (2013-2017)

Year (SPF 2018)		2013	2014	2015	2016	2017
Belgium		5 130	5 463	5 687	6 243	6 357
Community	French community	2 123 (41.4%)	2 263 (41.4%)	2 352 (41.4%)	2 534 (40.6%)	2 708 (42.6%)
	Flemish community	3 007 (58.6%)	3 200 (58.6%)	3 335 (58.6%)	3 709 (59.4%)	3 649 (57.4%)
Gender	Female	4 356 (84.9%)	4 639 (84.9%)	4 767 (83.8%)	5 286 (84.7%)	5 437 (85.5%)
	Male	773 (15.1%)	824 (15.1%)	920 (16.2%)	957 (15.3%)	920 (14.5%)
	Unknown	1 (0%)	-	-	-	-
Belgian Nationality*	Yes	4 521 (88.1%)	4 750 (86.9%)	4 778 (84%)	5 273 (84.5%)	5 346 (84.1%)
	No	609 (11.9%)	713 (13.1%)	909 (16%)	970 (15.5%)	1 011 (15.9%)
Place of residence (at the end of the visa year)	Residence in Belgium	4 838 (94.3%)	5 116 (93.6%)	5 181 (91.1%)	5 694 (91.2%)	5 855 (92.1%)
	Residence abroad	255 (5%)	302 (5.5%)	412 (7.2%)	492 (7.9%)	454 (7.1%)
	Unknown	37 (0.7%)	45 (0.8%)	94 (1.7%)	57 (0.9%)	48 (0.8%)

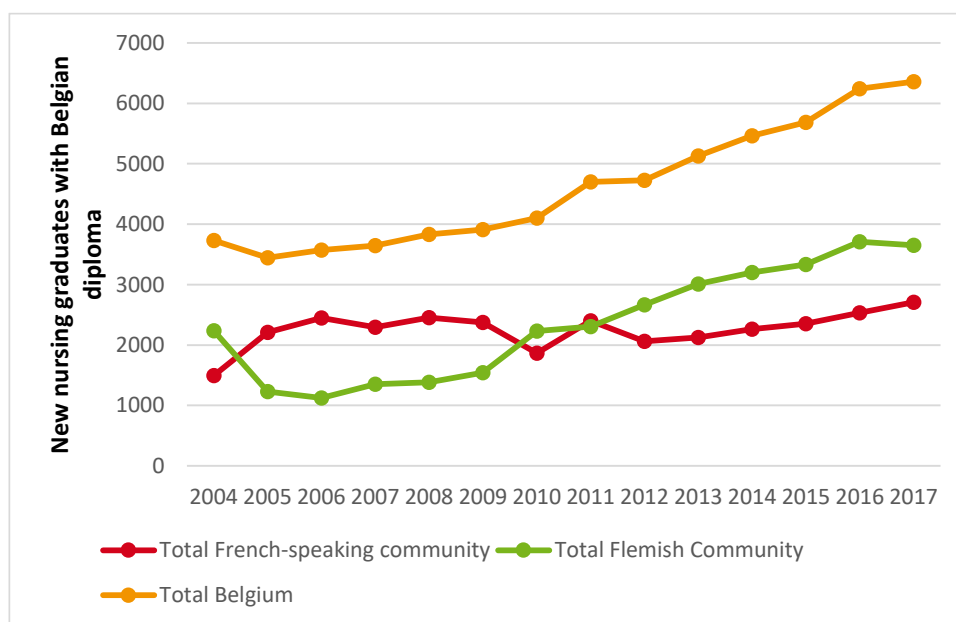
Source: SPF-FOD Cadastre; *Belgian nationality at the time of the data extraction

^{oo} The term diploma is a generic term to refer to a certificate awarded by an educational establishment to show that someone has successfully completed a course of study. When related to a diploma level (in comparison with Bachelor degree), the symbol A2 will systematically be added.


Table 79 – New nursing graduates with Belgian diploma (2004-2017), per community and per diploma level

SPF 2018		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
French-speaking community	Bachelor (A1)	890	566	335	200	595	758	1 064	1 551	1 308	1 286	1 430	1 468	1 629	1 756 (64.8%)
	Diploma (A2)	603	1 646	2 113	2 095	1 856	1 614	803	848	752	837	833	884	905	952 (35.2%)
	Total	1 493	2 212	2 448	2 295	2 451	2 372	1 867	2 399	2 060	2 123	2 263	2 352	2 534	2 708
Flemish Community	Bachelor (A1)	1 115	562	327	534	623	1 125	1 217	1 253	1 452	1 601	1 638	1 772	1 938	1 782 (48.8%)
	Diploma (A2)	1 123	669	797	817	759	415	1 015	1 050	1 214	1 406	1 562	1 563	1 771	1 867 (51.2%)
	Total	2 238	1 231	1 124	1 351	1 382	1 540	2 232	2 303	2 666	3 007	3 200	3 335	3 709	3 649
Total Belgium		3 731	3 443	3 572	3 646	3 833	3 912	4 099	4 702	4 726	5 130	5 463	5 687	6 243	6 357

Source: SPF-FOD Cadastre

Figure 111 – New nursing graduates with Belgian diploma per community (2004-2017)


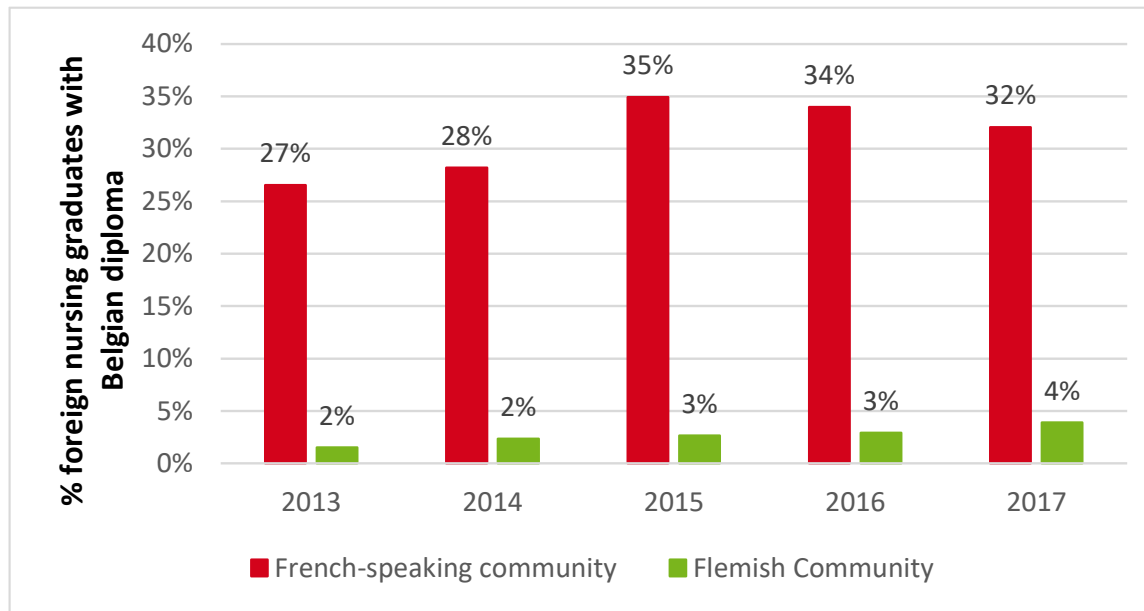
Source: SPF-FOD Cadastre; KCE calculations



The pattern of nursing graduates combining a foreign nationality and a Belgian diploma highly differs by community: a stable proportion around 3-4% for the Flemish Community, and a percentage around 30% for the French Community (32% in 2017; see Figure 112). When the place of

residence is under scrutiny, one can observe that around 16%^{pp} of the nursing graduates in the French Community reside in another country. This is true for around only 1%^{qq} of the nursing graduates in the Flemish Community, see Figure 112.

Figure 112 – Percentage of nursing graduates with foreign nationality and Belgian diploma, by Community (2013-2017)



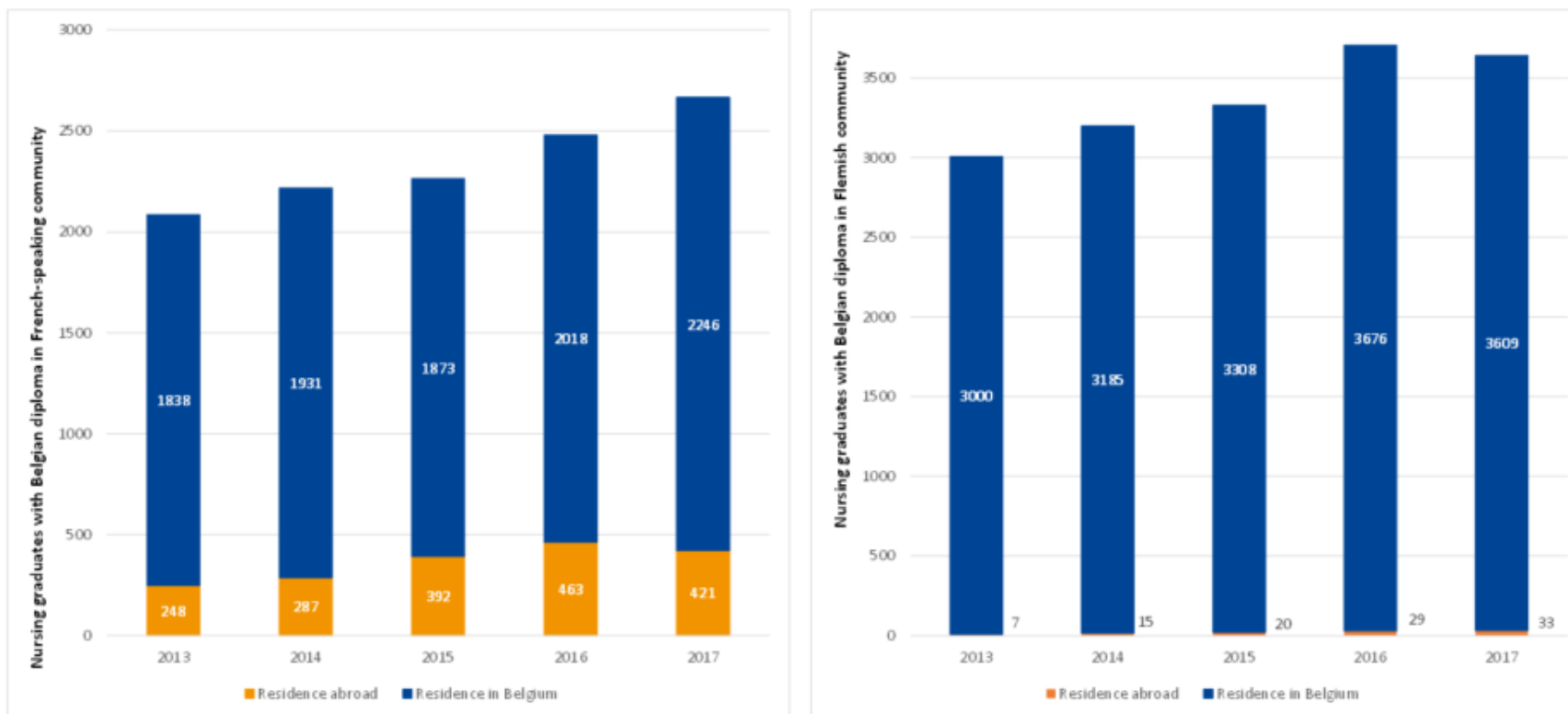
Source: SPF-FOD Cadastre; KCE calculations

^{pp} 15.55% with a place of residence abroad; 1.51% with an unknown place of residence; and 82.94% with a residence in Belgium

^{qq} 0.9% with a place of residence abroad; 0.2% with an unknown place of residence; and 98.9% with a residence in Belgium



Figure 113 – Nursing graduates with Belgian diploma, by place of residence and by Community (2013-2017)



Source: SPF-FOD Cadastre; KCE calculations

Number of nursing graduates with foreign diploma

In addition to the number of nursing graduates with Belgian diploma (6 357 in 2017), “visa/ visum” are delivered to nurses with foreign diploma. In 2017, a total of 454 nurses with a foreign diploma received a visa to practise in Belgium (see Table 80).

Since 2013, the number of visa delivered to nurses with a foreign diploma is decreasing (see Table 80). The majority of these nurses are foreigners (94.9%) and female (76.4%). More than 60% of them are living in Belgium (see Table 80).

**Table 80 – Number of nursing graduates with foreign diploma (2013-2017)**

Nursing graduates with foreign diploma (SPF)		2013	2014	2015	2016	2017
Belgium		918	828	704	580	454
Gender	Female	702 (76.5%)	650 (78.5%)	546 (77.6%)	445 (76.7%)	347 (76.4%)
	Male	216 (23.5%)	178 (21.5%)	158 (22.4%)	135 (23.3%)	107 (23.6%)
Belgian nationality*	Yes	33 (3.6%)	45 (5.4%)	31 (4.4%)	30 (5.2%)	23 (5.1%)
	No	885 (96.4%)	783 (94.6%)	673 (95.6%)	550 (94.8%)	431 (94.9%)
Place of residence (at the end of the visa year)	Residence in Belgium	673 (73.3%)	563 (68%)	383 (54.4%)	319 (55%)	290 (63.9%)
	Residence abroad	219 (23.9%)	242 (29.2%)	297 (42.2%)	247 (42.6%)	154 (33.9%)
	Unknown	26 (2.8%)	23 (2.8%)	24 (3.4%)	14 (2.4%)	10 (2.2%)

Source: SPF-FOD Cadastre; *Belgian nationality at the time of the data extraction

International comparison

Compared to the density of nurses reported by other European countries (i.e. 42 nursing graduates per 100 000 inhabitants in 2015), Belgium is clearly above this figure (49.7 nursing graduates per 100 000 population, see Figure 114). This density corresponds to the number of nurses who hold a nursing diploma (licensed to practice). This density does not necessarily correspond to the density of practising nurses.

After a drop in the number of nursing graduates per 100 000 pop in 2006/2007/2008, the number of nursing graduates per 100 000 population is increasing again, at least until 2017 (see Figure 114).

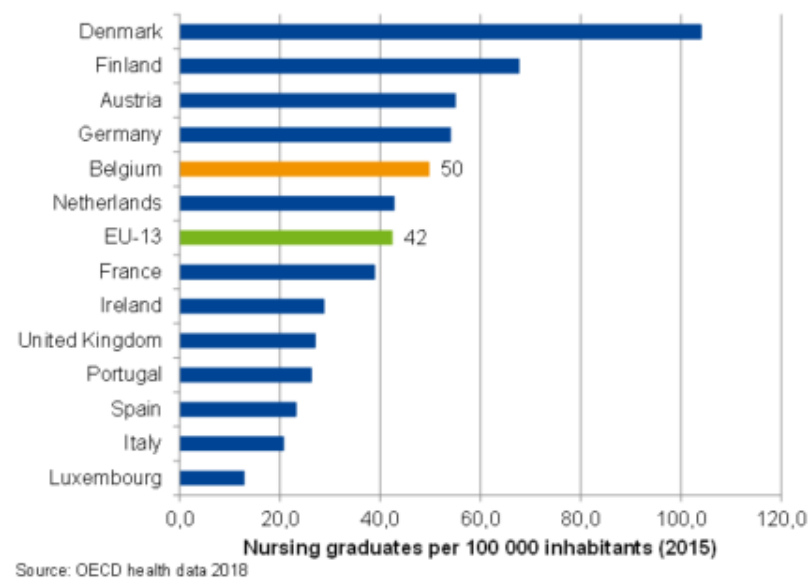
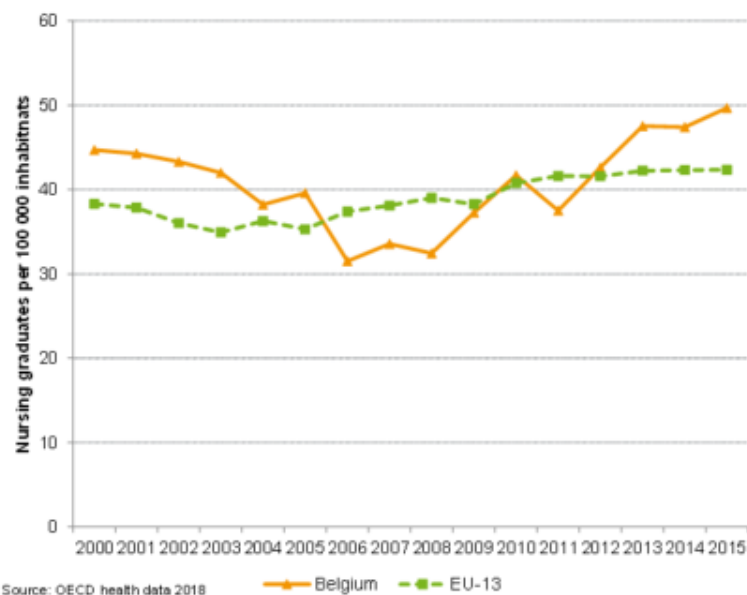
Table 81 – Density of nursing graduates with Belgian diploma (2000-2017) in Belgium

Year (OECD)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Nursing graduates with Belgian diploma (per 100 000 population)	44.7	44.3	43.3	42.0	38.2	39.6	31.5	33.6	32.5	37.3	41.7	37.5	42.6	47.5	47.4	49.7	55.0	57.0

Source: OECD Health Statistics 2018



Figure 114 – Nursing graduates per 100 000 population: international comparison (2000-2015)^{rr}



Source: OECD Health statistics 2018

Key points

- In 2017, a total of 6 357 students were graduated from nursing schools in Belgium.
- The density of 50 nursing graduates per 100 000 inhabitants is above the EU-13 average of 42 per 100 000 inhabitants (based on 2015 data).

- The proportion of foreign students in the French Community is substantial (32% based on nationality and 15.5% based on the place of residence). A very small proportion of students have a foreign nationality in the Flemish Community (<5%).

References

1. OECD. Health at a Glance 2017: OECD Indicators. Paris: 2017. Available from: http://dx.doi.org/10.1787/health_glance-2017-en

^{rr} Because of the lack of data from other European countries, 2015 is taken as the reference in the calculation.