



2017 data show that in 2.0% of the residents a pressure ulcer of category 2, 3, 4 or undetermined was found. Only in 1.3% of the residents the decubitus developed in the home for the elderly. Prevalence data of 2016 are somewhat higher, however as there is only data over 2 years, no meaningful time analysis can yet be performed.

Key points

- **Flemish data show that in 2.0% of the residents of a home for the elderly a pressure ulcer of category 2, 3, 4 or undetermined was found.**
- **Only in 1.3% of the residents the decubitus developed in the home for the elderly.**

References

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2. Vlaams Agentschap voor Zorg en Gezondheid. Vlaams Indicatorenproject Woonzorgcentra: Kwaliteitsindicatoren 2017 Deel 1. Sectorrapport. Available from: <https://www.zorg-en-gezondheid.be/sites/default/files/atoms/files/Rapport%20VIP%20WZC%202017deel1.pdf>
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12.8. Prevalence of MRSA carriage in long-term care facilities (ELD-9)

12.8.1. Documentation sheet

Description	Prevalence of MRSA (Methicillin-resistant <i>Staphylococcus aureus</i>) colonisation in a sample of Belgian nursing homes (NH). ¹
Calculation	Weighted prevalence referred to the prevalence adjusted for the participation rate in each NH. Weighted mean MRSA prevalence: % MRSA carriers / screened residents.
Rationale	Considering the important proportion of MRSA present at admission in acute-care facilities, especially among admitted NH residents, it is important to investigate the extent and the evolution of the reservoir of MRSA carriers in long-term care facilities. The better understanding of the MRSA reservoir in nursing homes should allow the readjustment of the MRSA control policies in Belgian hospitals and in long-term care facilities.
Primary data source	Sciensano, Service healthcare-associated infections & antimicrobial resistance (www.nsih.be) National Reference Centre for <i>Staphylococcus aureus</i> , ULB-Hospital Erasme, Brussels, Belgium
Source of results	National prevalence study of carriage of antibiotic-resistant bacteria among residents of 29 nursing homes in Belgium in 2015. ¹ National prevalence study of carriage of antibiotic-resistant bacteria among residents of 60 nursing homes in Belgium in 2011. ² National prevalence study of carriage of antibiotic-resistant bacteria among residents of 60 nursing homes in Belgium in 2005. ³
Technical definitions	Dry screening swabs from anterior nares, throat, perineum and wounds were collected and sent for analysis to the National Reference Center. The swab collection in each nursing home was performed in one day.



International comparability	Comparison with other countries is difficult/impossible because of important differences in methodology, aims and study population of the few existing nationwide and representative NH-prevalence studies performed in European countries.
Limitation	Limited periodicity; No international comparisons possible.
Dimensions	Quality (safety)
Related indicators	Prevalence of healthcare-associated infections, Incidence of hospital acquired MRSA infections

12.8.2. Results

Belgium

So far, three Methicillin-resistant *Staphylococcus aureus* (MRSA) carriage surveys have been conducted in Belgian nursing homes, i.e., in 2005, 2011 and 2015 (Table 117).

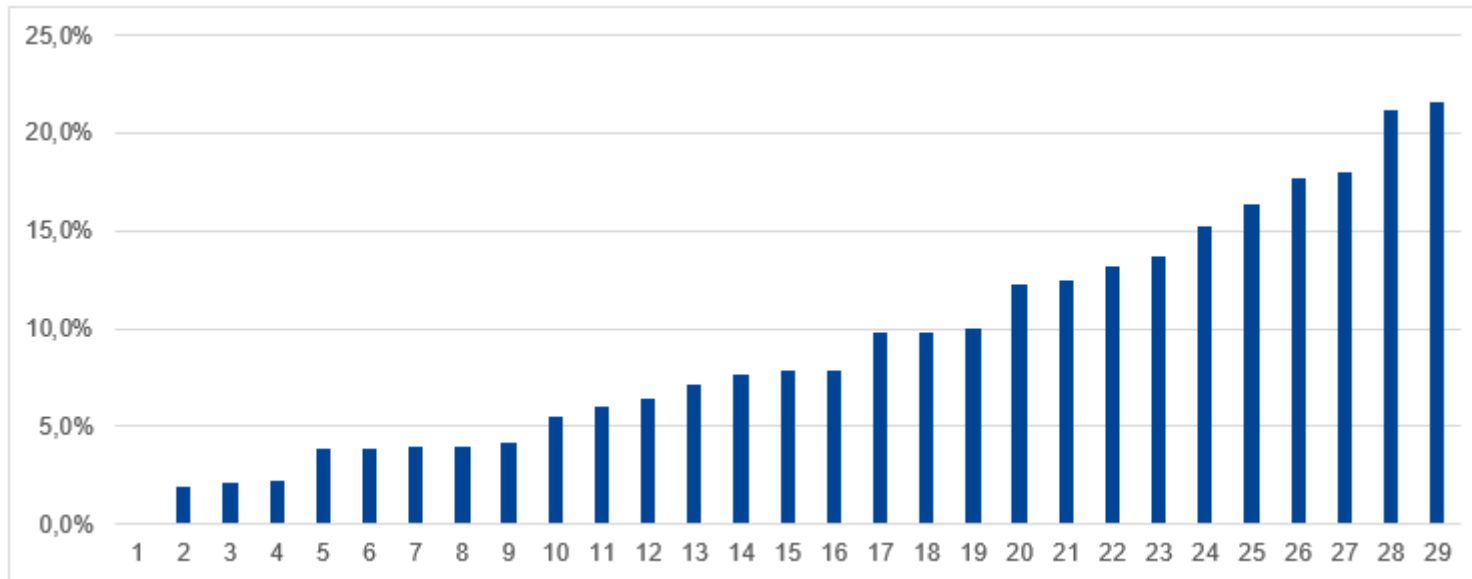
Twenty-nine NHs participated in the 2015 MRSA carriage survey. Of the 1447 residents in whom a sample collection was performed for MRSA screening, 133 (9.2%) were identified as carriers of MRSA. Across NHs, the prevalence ranged from 0% to 21.6% (Figure 1). The weighted average prevalence of MRSA carriage was 9.0% (95%CI 8.1-10.3).

When comparing the results of the three MRSA carriage surveys, a continuous decrease in the prevalence of MRSA carriage in NHs is observed, from 19% in 2005 over 12.2% in 2011 to 9.0% in 2015 (Figure 181). This decrease mirrors the decrease in incidence of MRSA infections in acute care hospitals.

The prevalence of MRSA carriage was not significantly associated with NH type (public, caritative private, commercial private), NH size, or the proportion of high care beds. However, there was a tendency for lower MRSA carriage prevalence in NHs with more (high care) beds, which could be a reflection of the higher levels of resources and expertise in those facilities. Significant resident-level determinants of MRSA carriage were history of carrier status / current or recent MRSA infection (aOR 3.9 [1.6-9.2]; $p < 0.001$), recent treatment (past 3 months) with moxifloxacin (aOR 4.0 [1.3-12.7]; $p = 0.002$), and hospitalization in the last 12 months in different hospital departments (intra-hospital transfers) (aOR 4.4 [1.1-17.9]; $p = 0.007$).

Table 117 – Summary of Belgian MRSA carriage surveys

Survey year	Number of participating nursing homes	Number of swabbed residents	Number of carriers	Percentage of MRSA carriers	Percentage MRSA carriers	Weighted average MRSA carriage prevalence (95% CI)	Source
2015	29	1447	133	9.2%	9.2%	9.0% (8.1-10.3)	Jans et al., 2016 ¹
2011	60	2789	366	13.1%	13.1%	12.2% (11.3-13.1)	Jans et al., 2013 ²
2005	60	2953	588	19.9%	19.9%	19.0% (16.5-21.5)	Denis et al., 2009 ³

**Figure 181 – Percentage of MRSA carriers in 29 participating nursing homes, 2015**

Source: Jans et al., 2016²

Regional comparisons

In the 2015 MRSA carriage survey, 16 of the 29 participating NHs (56.1%) were in Flanders, 11 in Wallonia (37.8%) and 2 in Brussels (6%). Due to the small sample size, the results are not representative at regional level and no valid regional comparisons can be made.

International comparisons

Previous studies performed in other European countries have reported a broad range of prevalence of multidrug resistant microorganisms. Variations in the screening sampling sites and in the microbiological methods, differences in the definitions of criteria for the targeted microorganisms, differences in the population case-mix and in local practices as well as true epidemiological variations may probably altogether explain this large variability across countries.



Key points

- **The weighted mean MRSA prevalence of nursing home residents in 2015 was 9.0% (95%CI 8.1-10.3)**
- **National guidelines to prevent the spread of MRSA in nursing homes have been developed in 2006. When comparing the results of the three available Belgian MRSA carriage surveys, a continuous decrease in the prevalence of MRSA carriage in nursing homes is observed, from 19% in 2005 over 12.2% in 2011 to 9.0% in 2015.**

References

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