

Community-Based Oral Antibiotic Use in NL: High-Use Groups

Choosing Wisely Canada Recommendation

Multiple recommendations exist for not using antibiotics for upper respiratory infections, sore throat and otitis media that are most likely viral in origin or for asymptomatic bacteriuria in non-pregnant women.

See www.choosingwiselycanada.org/campaign/antibiotics-primary-care.

Practice Points

- NL has the highest outpatient antibiotic prescription rate in Canada based on federal estimates among selected pharmacies.
- In June 2017, the NL Pharmacy Network included prescriptions filled by 100% of pharmacies in NL.

Methods

- Data from the NL Pharmacy Network on prescriptions for antimicrobials given to outpatients were provided by the NL Centre for Health Information from 1 Jul 2017 - 30 Jun 2019.
- Indications for prescriptions were not available.
- Urban and rural areas were defined by using the Forward Sortation Area-Definition.
- 912,435 prescriptions, representing 2,841 unique prescribers, were written between 1 Jul 2017 - 30 Jun 2019. 70,026 non-oral prescriptions (7.7%) were excluded.

Results

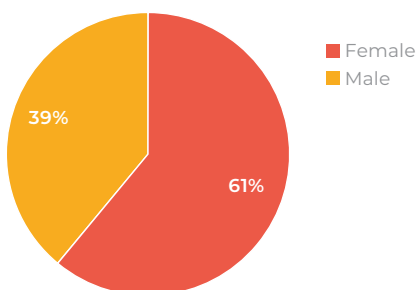


Fig. 1. Prescriptions by Sex

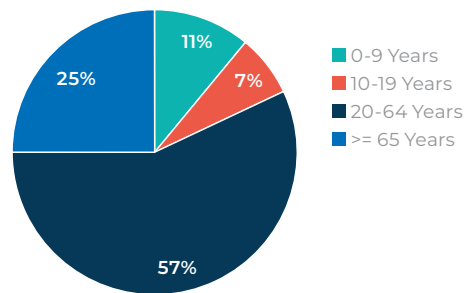


Fig. 2. Prescriptions by Age Group

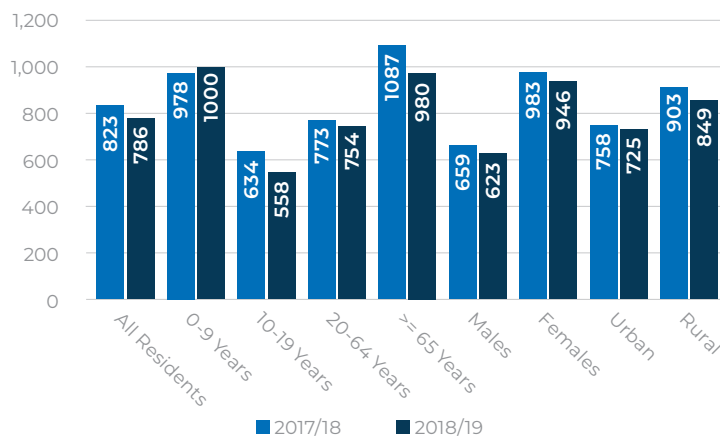


Fig. 3. Prescription Rate/1,000 Residents by Demographic Groups

- The rate per 1,000 residents decreased by 4.5% in 2017/18 compared to 2018/19.
- In 2018/19, females had 52% higher use of antibiotics than males, rural residents had a 17% higher rate than urban residents, and the highest rate were in children 0-9 years (1,000 prescriptions/1,000 children) and in the elderly (980/1,000).

Conclusions

- NL has a lower Antimicrobial Usage (AMU) rate than reported by national publications. AMU rate has decreased modestly; however, it is still very high.
- High use groups include women, children, the elderly and rural residents.
- Different interventions may be needed to decrease antibiotics in high use groups. Future dated prescriptions may be useful for rural residents and children, whereas patient education on not prescribing antibiotics may help females and seniors.