



# SRNT 2021 ANNUAL MEETING

FEBRUARY 24-27  
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# Retail availability of tobacco and cigarette and e-cigarette use among youth and adults: a scoping review.

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# Current state of research

- Limiting tobacco retailer availability may be an effective tobacco control strategy to reduce smoking and improve public health in the population
- Understanding the relationship between retailer exposure and tobacco use patterns in both youth and adult populations is essential for evidence-based policy making
- Evidence on the associations between tobacco retailer density/proximity and smoking outcomes is mixed
- There are inconsistencies in **measures of retailer exposure** and **tobacco use outcomes** across studies



# Review objectives

- Qualitative analysis of empirical evidence on the association between tobacco retailer density and proximity and tobacco use, by distinguishing between:
  - adult and youth population
  - study locations (homes vs. schools vs. daily activity spaces)
  - measures of retailer exposure (ego-centric buffers vs. administrative units)
  - multiple tobacco use outcomes (e.g. current smoking, lifetime smoking, cessation)
  - cigarette and e-cigarette use



## Methods

- A systematic literature search was conducted through August 27, 2020 across MEDLINE (PubMed), Web of Science and Google Scholar databases with no restrictions.
- Search strings were created via the advanced search builder using text word combinations in the Title or Abstract relating to retail availability (i.e. “retail”, “sale\*”, “density”, “proximity”, “distance”, “availability”) and product use (i.e. “smoking”, “tobacco use”, “cigarette\*”, “e-cigarette\*”).
- Eligibility screening was performed independently by two reviewers.



## Results

- 35 studies, published between 2003 and 2019, were included in the qualitative synthesis
  - 15 studied outcomes in adults and 20 in youth
  - 29 examined cigarette use, 4 focused on e-cigarettes, 2 on alternative/non-combustible tobacco products that included e-cigarettes





## Main outcomes related to smoking behavior

### Retailer density and adult smoking

- Positive association for current smoking and person-centered measures around homes (two of two studies) and in daily activity spaces (one of one)
- Positive association for current smoking and administrative unit measures (two of three)

### Retailer proximity and adult smoking

- Limited evidence for an association with current smoking (one of three)
- Greater retailer proximity to homes was associated with higher cessation (two of three).

### Retailer density and youth smoking

- Positive association of person-centered measures around homes and in daily activity spaces with current smoking (two of two) and lifetime smoking (one of one).
- Positive association for administrative unit measures and lifetime smoking (three of four)
- Positive for density around schools and experimental smoking (one of one) and greater susceptibility to smoke (two of two).

### Retailer proximity and youth smoking

- Retailer proximity to homes or schools was not related to adolescent smoking.





## Main outcomes related to e-cigarette use

Existing studies focused on e-cigarette retailer availability near schools and suggest that youth current e-cigarette use may be related to retailer density (one of three), but not proximity (none of three).



## Conclusions

- Overall, our findings support the view that reducing the number of tobacco retailers may help reduce adult and youth smoking prevalence.
- Different measures of retailer density /proximity were applied (generally consistent with recommendations of the PhenX Toolkit for tobacco regulatory research), and neither measure provided a clear advantage in revealing associations.
- There is need for more research using standardized methodology to allow for better comparability between studies.
- Studies examining associations between retailer availability and e-cigarette use are scarce and further research is warranted.





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