## Restricting Minors’ Access to Tobacco Products

### Summary Evidence Tables

#### Stronger Sales Laws Directed at Retailers

<table>
<thead>
<tr>
<th>Author &amp; year (study period)</th>
<th>Intervention and comparison elements</th>
<th>Study population description</th>
<th>Effect measure</th>
<th>Reported baseline</th>
<th>Reported effect</th>
<th>Value used in summary</th>
<th>Follow-up time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidell 2000 ^1 (1994–1997)</td>
<td>Location: 3 communities in Santa Barbara County, CA</td>
<td>Retailers selling tobacco products in study communities n = 332</td>
<td>Proportion of retailers selling tobacco on youth test purchase attempts (post-only concurrent comparison)</td>
<td>17.5%</td>
<td>14.3%</td>
<td>−3.2 pct points</td>
<td>10 mo</td>
</tr>
<tr>
<td></td>
<td>Design: Before-and-after comparison</td>
<td></td>
<td>a) No ban or restriction</td>
<td>40.4%</td>
<td>14.3%</td>
<td>−26.1 pct points</td>
<td>10 mo</td>
</tr>
<tr>
<td></td>
<td>Intervention: Local ordinance banning self-service tobacco displays</td>
<td></td>
<td>b) Before-and-after comparison by community</td>
<td>40.0%</td>
<td>0%</td>
<td>−40.0 pct points</td>
<td>2.5 yrs</td>
</tr>
<tr>
<td></td>
<td>Comparison: No ban or restriction</td>
<td></td>
<td>Santa Barbara (ban)</td>
<td>64.3%</td>
<td>11.1%</td>
<td>−53.2 pct points</td>
<td>2.5 yrs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carpinteria (ban)</td>
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<td></td>
<td></td>
<td></td>
<td>Goleta (restriction)</td>
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</tr>
</tbody>
</table>

#### Active Enforcement of Sales Laws Directed at Retailers

<table>
<thead>
<tr>
<th>Author &amp; year (study period)</th>
<th>Intervention and comparison elements</th>
<th>Study population description</th>
<th>Effect measure</th>
<th>Reported baseline</th>
<th>Reported effect</th>
<th>Value used in summary</th>
<th>Follow-up time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gemson 1998 ^2 (1993–1994)</td>
<td>Location: New York City (Central Harlem), NY</td>
<td>Licensed tobacco-selling retailers in the community N = 181 at BL N = 152 at F/U</td>
<td>Proportion of retailers selling tobacco products (single cigs or packs) on youth test purchase attempts</td>
<td>100%</td>
<td>46.9%</td>
<td>−47.7 pct points p &lt;0.05</td>
<td>12 mo</td>
</tr>
<tr>
<td></td>
<td>Design: Enforcement group</td>
<td></td>
<td>Enforcement group</td>
<td>94.5%</td>
<td>89.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design: Comparison group</td>
<td></td>
<td>Comparison group</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Retailer Education Without Reinforcement

<table>
<thead>
<tr>
<th>Author &amp; year (study period)</th>
<th>Design suitability (design)</th>
<th>Quality of execution (# of Limitations)</th>
<th>Evaluation setting</th>
<th>Intervention and comparison elements</th>
<th>Study population description Sample size</th>
<th>Effect measure</th>
<th>Reported baseline</th>
<th>Reported effect</th>
<th>Value used in summary *</th>
<th>Follow-up time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gemson 1998 ² (1993–1994)</td>
<td>Greatest (group randomized trial)</td>
<td>Fair (2 limitations)</td>
<td>Community-wide</td>
<td>Location: New York City (Central Harlem), NY Intervention (one of 2 arms) Retailer education Comparison: No education or enforcement (usual care)</td>
<td>Licensed tobacco-selling retailers in the community N = 181 at BL N = 152 at F/U</td>
<td>Proportion of retailers selling tobacco products (single cigs or packs) on youth test purchase attempts Education group 100% Comparison group 94.5%</td>
<td>77.1%</td>
<td>89.1%</td>
<td>–27.5 pct points p &lt;0.05</td>
<td>12 mo</td>
</tr>
<tr>
<td>Schofield 1997 ³ (1992)</td>
<td>Greatest (group randomized trial)</td>
<td>Fair (4 limitations)</td>
<td>Community-wide</td>
<td>Location: Australia, New South Wales, U.K. Intervention: Retailer education 2 arms: A: Letter only B: Letter plus face-to-face meeting Comparison: usual care (included government letter of notification to all retailers about the new legislation)</td>
<td>Tobacco-selling retailers in New South Wales n = 272</td>
<td>1) Proportion of retailers requiring proof of age (ID) at test purchase attempt: Letter only group 12.0% Letter plus meeting 22.3% Comparison 8.6%</td>
<td>38.8%</td>
<td>39.5%</td>
<td>–4.9 pct points –9.6 pct points Ovrl btwn grp diff (x² = 9.5, p = 0.15)</td>
<td>6 mo</td>
</tr>
<tr>
<td>Skretny 1990 ⁴ (Not reported)</td>
<td>Greatest (group randomized trial)</td>
<td>Fair (4 limitations)</td>
<td>Community-wide</td>
<td>Location: Buffalo, NY Components: Retailer education Comparison: No intervention</td>
<td>Tobacco-selling retailers N = 120 I: n = 62 stores C: n = 58 stores</td>
<td>Proportion of retailers selling tobacco products on youth test purchase attempts C = 86%</td>
<td>I = 77% (Note: post-intervention only comparison)</td>
<td>–9.0 pct points p = 0.55</td>
<td>2 weeks</td>
<td></td>
</tr>
</tbody>
</table>

### Community Mobilization When Coordinated with Additional Interventions

<table>
<thead>
<tr>
<th>Author &amp; year (study period)</th>
<th>Design suitability (design)</th>
<th>Quality of execution (# of Limitations)</th>
<th>Evaluation setting</th>
<th>Intervention and comparison elements</th>
<th>Study population description Sample size</th>
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<th>Value used in summary *</th>
<th>Follow-up time</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Design</th>
<th>Suitability</th>
<th>Setting</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Location</th>
<th>Outcomes</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altman 1991</td>
<td>1988</td>
<td>Moderate</td>
<td>Fair</td>
<td>Community-wide</td>
<td>Community mobilization plus retailer education</td>
<td>Before-and-after</td>
<td>7 towns in Santa Clara County, CA</td>
<td>Proportion of retailers selling tobacco products</td>
<td>N = 442 stores and vending machines</td>
</tr>
<tr>
<td>Altman 1999</td>
<td>1991-1994</td>
<td>Greatest</td>
<td>Fair</td>
<td>Community-wide</td>
<td>Community mobilization plus retailer education</td>
<td>Usual care</td>
<td>Monterey County, CA</td>
<td>A: Students in grades 7, 9, and 11</td>
<td>N = 1274 (median [eligible] students per grade)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B: Retailers selling tobacco products</td>
<td>N = NR</td>
</tr>
<tr>
<td>Altman 2000</td>
<td>1995-1996</td>
<td>Greatest</td>
<td>Fair</td>
<td>Community-wide</td>
<td>Community mobilization plus retailer education</td>
<td>School-based education only</td>
<td>16 communities in Oregon</td>
<td>A: Rural communities in OR</td>
<td>N = 16</td>
</tr>
<tr>
<td>Biglan 2000</td>
<td>1995-1996</td>
<td>Also Biglan 1995, Biglan 1996</td>
<td>Fair</td>
<td>Community-wide</td>
<td>Community mobilization plus retailer education plus school-based education</td>
<td></td>
<td></td>
<td>A: Rural communities</td>
<td>4 communities</td>
</tr>
<tr>
<td>Chapman 1994</td>
<td>1992-1993</td>
<td>Greatest</td>
<td>Fair</td>
<td>Community-wide</td>
<td>Community mobilization plus retailer education</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| Feighery 1991  
Fair (3 limitations)  
Community-wide | Location: 4 communities in northern California  
Intervention: 2 arms  
A: Community mobilization plus retailer education  
B: Community mobilization plus retailer education plus enforcement  
Comparison: Before-and-after | A: Suburban communities in CA  
N = 4  
B: Tobacco-selling retailers  
N = 104 in F/U sample | Proportion of retailers selling tobacco on youth test purchase attempts  
A: mobilization plus education  
77%  
B: mobilization plus education plus active enforcement  
75%  
Note: Active enforcement was added to the program following the initial intervention evaluation |  
| Forster 1998  
(1993–1996) | Greatest (group randomized trial)  
Fair (3 limitations)  
Community-wide | Location: 14 rural communities in Minnesota  
Intervention: Community mobilization plus city ordinances plus enforcement  
Comparison: Usual care (incl. concurrent media coverage of youth access issues and retailer education efforts conducted by retailers’ organizations and the tobacco industry) | A: communities in MN  
N = 14 (randomized to condition)  
B: Students in grades 8–10  
N = 6014 at BL  
N = 6269 at F/U | 1) Student self-reported monthly tobacco use prevalence  
I = 21.5%  
C = 20%  
2) Student smokers self-reported commercial source of most recent cigarette (by gender)  
I = (M) 28.5%  
(W) 17.3%  
C = (M) 24%  
(W) 18%  
3) Student perception of high availability of cigarettes from commercial sources  
I = 79.8%  
C = 80.1%  
4) Proportion of youth test purchase attempts that were successful  
I = 38.8%  
C = 41.9%  
|  
| Jason 1996a  
Fair (4 limitations)  
Community-wide | Location: Woodbridge, IL  
Intervention: City ordinance plus community mobilization plus retailer education plus enforcement  
Comparison: Before-and-after | A: Tobacco-selling retailers  
N = 19–30  
B: 7–8th grade students in one local school  
N = 680 at BL  
N = 639 at F/U | 1) Student self-reported regular tobacco use  
I = 16%  
C = 5%  
2) Proportion of retailers selling tobacco on youth test purchase attempts  
I = 79%  
C = 11%  
|  
| Junck 1997  
Fair (4 limitations)  
Community-wide | Location: Manley, Australia  
Intervention: Community mobilization plus retailer education  
Comparison: Before-and-after | All tobacco-selling retailers in Manley  
N = 54 | Proportion of retailers selling cigarettes on youth test purchase attempts by level of enforcement  
Note: Results based on a single purchase attempt. Sales rates were higher (85% at baseline) when up to 3 purchase attempts were made  
I = 52%  
C = 14%  
|  
| Wildey 1995  
(1990–1991) | Greatest (group non-randomized trial)  
Fair (3 limitations)  
Community-wide | Location: 6 communities in San Diego, CA  
Intervention: Community mobilization plus retailer education  
Comparison: Community mobilization | A: Communities  
N = 6  
B: Tobacco-selling retailers in study communities  
N = 292 at BL  
N = 236 at F/U | Proportion of retailers willing to sell tobacco on youth test purchase attempts  
I = 69.9%  
C = 65%  
|
This is the value used to summarize the evidence and to develop the recommendation. We converted measurements of “retailers refusing to sell” to measurements of “retailers willing to sell” for consistency.

References


