

Supplementary material: Full data models (i.e. including alcohol-licensed outlets for WA and Victoria)

Table S1: Predictors of selling tobacco

Characteristic	Sellers n/N (%)	Odds ratio for current selling (vs. not current selling)	
		Unadjusted OR	Adjusted OR [^]
All retailers with known sell status	800/2928 (27.3)		
Retailer type			
Convenience store / general store	180/262 (68.7)	ref.	ref.
Grocery stores / Fruit and veg stores	259/453 (57.2)	0.61 (0.44, 0.84)	0.72 (0.51, 1.00)
Newsagent / post office	191/450 (42.4)	0.34 (0.24, 0.46)	0.35 (0.25, 0.49)
Bar / Wine bar	24/74 (32.4)	0.22 (0.13, 0.38)	0.29 (0.16, 0.51)
Pub / Brewery / Tavern	76/181 (42.0)	0.33 (0.22, 0.49)	0.37 (0.24, 0.57)
Hotel	45/287 (15.7)	0.08 (0.06, 0.13)	0.08 (0.05, 0.12)
Club / Night club	6/98 (6.1)	0.03 (0.01, 0.07)	0.03 (0.01, 0.08)
Accommodation	16/975 (1.6)	0.01 (0.00, 0.01)	0.01 (0.00, 0.01)
Sports club (golf, football club etc.)	3/148 (2.0)	0.01 (0.00, 0.03)	0.01 (0.00, 0.03)
<i>p-value</i>		<0.001	<0.001
Socio-economic status of location			
1 - Lowest SES	161/529 (30.4)	ref.	ref.
2	199/726 (27.4)	0.86 (0.67, 1.10)	0.92 (0.67, 1.28)
3	143/549 (26.0)	0.81 (0.62, 1.05)	0.99 (0.70, 1.40)
4	129/490 (26.3)	0.82 (0.62, 1.07)	1.21 (0.84, 1.74)
5 - Highest SES	168/634 (26.5)	0.82 (0.64, 1.06)	1.14 (0.79, 1.63)
<i>p-value</i>		0.480	0.630
<i>p-trend</i>		0.156	0.270
Remoteness			
Major city	317/1199 (26.4)	ref.	ref.
Inner regional area	281/1037 (27.1)	1.03 (0.86, 1.25)	2.82 (2.13, 3.73)
Outer regional area	148/535 (27.7)	1.06 (0.85, 1.34)	2.72 (1.93, 3.83)
Remote area	39/101 (38.6)	1.75 (1.15, 2.67)	3.91 (2.13, 7.20)
Very remote	15/56 (26.8)	1.02 (0.56, 1.86)	3.11 (1.31, 7.35)
<i>p-value</i>		0.143	<0.001
<i>p-trend</i>		0.133	<0.001
State			
WA (Annual license fee)	160/626 (25.6)	ref.	ref.
VIC (No fee or listing requirement)	279/1379 (20.2)	0.74 (0.59, 0.92)	0.62 (0.46, 0.84)
NSW (One-off listing requirement)	361/923 (39.1)	1.87 (1.50, 2.34)	0.84 (0.61, 1.16)
<i>p-value</i>		<0.001	0.003

[^] Adjusted for all characteristics in the table

Note: Licensed premises such as Bars, Wine bars, Pubs, Breweries, Taverns and Hotels were not surveyed in NSW

Table S2: Associations between retailer characteristics and ex-selling (vs current-selling) tobacco

Characteristic	Ex-sellers /Ever-sellers (current and ex-sellers) n/N (%)	OR for ex-selling (vs current selling)	
		Unadjusted OR (95% CI)	Adjusted OR [^] (95% CI)
All retailers with known sell status	390/1190 (32.8)		
Retailer type			
Convenience store / Ggeneral store	22/202 (10.9)	ref.	ref.
Grocery stores e.g. member of IGA, Foodland, Farmer Jacks / Fruit and veg stores	26/285 (9.1)	0.82 (0.45, 1.49)	0.73 (0.40, 1.34)
Newsagent / post office	159/350 (45.4)	6.81 (4.17, 11.12)	6.46 (3.93, 10.60)
Bar / Wine bar	8/32 (25.0)	2.73 (1.09, 6.81)	1.97 (0.77, 5.07)
Pub / Brewery / Tavern	38/114 (33.3)	4.09 (2.27, 7.38)	3.04 (1.64, 5.64)
Hotel	54/99 (54.5)	9.82 (5.42, 17.78)	7.86 (4.21, 14.67)
Club / Night club	17/23 (73.9)	23.18 (8.27, 64.97)	16.97 (5.91, 48.73)
Accommodation	42/58 (72.4)	21.48 (10.39, 44.40)	21.52 (10.29, 45.01)
Sports club (golf, football club etc.)	24/27 (88.9)	65.45 (18.21, 235.24)	48.85 (13.35, 178.82)
p-value		<0.001	<0.001
Socio-economic status of location			
1 - Lowest SES	63/224 (28.1)	ref.	ref.
2	102/301 (33.9)	1.31 (0.90, 1.91)	1.15 (0.74, 1.77)
3	62/205 (30.2)	1.11 (0.73, 1.68)	0.89 (0.55, 1.44)
4	70/199 (35.2)	1.39 (0.92, 2.09)	0.87 (0.52, 1.46)
5 - Highest SES	93/261 (35.6)	1.41 (0.96, 2.08)	0.87 (0.52, 1.46)
p-value		0.351	0.734
p-trend		0.108	0.359
Remoteness			
Major city	184/501 (36.7)	ref.	ref.
Inner regional area	124/405 (30.6)	0.76 (0.58, 1.00)	0.61 (0.42, 0.90)
Outer regional area	61/209 (29.2)	0.71 (0.50, 1.01)	0.62 (0.39, 1.00)
Remote area	15/54 (27.8)	0.66 (0.36, 1.23)	0.69 (0.32, 1.49)
Very remote	6/21 (28.6)	0.69 (0.26, 1.81)	0.49 (0.14, 1.71)
p-value		0.172	0.127
p-trend		0.027	0.051
State			
WA (Annual license fee)	88/248 (35.5)	ref.	ref.
VIC (No fee or listing requirement)	186/465 (40.0)	1.21 (0.88, 1.67)	1.14 (0.77, 1.69)
NSW (One-off listing requirement)	116/477 (24.3)	0.58 (0.42, 0.82)	0.68 (0.44, 1.07)
p-value		<0.001	0.019

[^]Adjusted for all characteristics in the table

Note: Licensed premises such as Bars, Wine bars, Pubs, Breweries, Taverns and Hotels were not surveyed in NSW

Table S3: Mean importance, and predictors of importance (on a scale from 1 ('not at all important') to 7 ('very important'))

Characteristic	N (%)	Mean score (SD)	Difference in mean importance scores (95% CI)	
			Unadjusted mean difference	Adjusted mean difference [^]
All retailers with known sell status	800 (100.0)	4.47 (2.05)		
Retailer type				
Convenience store / General store	180 (22.5)	5.23 (1.73)	ref.	ref.
Grocery stores / Fruit and veg stores	259 (32.4)	5.56 (1.55)	0.33 (-0.01, 0.66)	0.49 (0.12, 0.86)
Newsagent / post office	191 (23.9)	3.48 (1.94)	-1.75 (-2.11, -1.39)	-1.65 (-2.04, -1.26)
Bar / Wine bar	24 (3.0)	2.71 (1.71)	-2.53 (-3.28, -1.77)	-2.24 (-3.05, -1.43)
Pub / Brewery / Tavern	76 (9.5)	3.09 (1.86)	-2.14 (-2.61, -1.67)	-1.85 (-2.40, -1.30)
Hotel	45 (5.6)	3.31 (1.94)	-1.92 (-2.50, -1.35)	-1.71 (-2.35, -1.08)
Club / Night club	6 (0.8)	3.67 (1.51)	-1.57 (-3.00, -0.13)	-1.74 (-3.20, -0.28)
Accommodation	16 (2.0)	2.88 (1.86)	-2.36 (-3.26, -1.46)	-2.22 (-3.14, -1.30)
Sports club (golf, football club etc.)	3 (0.4)	4.00 (3.00)	-1.23 (-3.24, 0.78)	-0.90 (-2.95, 1.15)
<i>p-value</i>			<0.001	<0.001
Socio-economic status of location				
1 - Lowest SES	161 (20.1)	4.85 (1.94)	ref.	ref.
2	199 (24.9)	4.60 (2.13)	-0.25 (-0.68, 0.17)	-0.09 (-0.47, 0.28)
3	143 (17.9)	4.43 (1.99)	-0.42 (-0.88, 0.04)	-0.25 (-0.66, 0.16)
4	129 (16.1)	4.36 (2.05)	-0.49 (-0.97, -0.02)	-0.23 (-0.68, 0.23)
5 - Highest SES	168 (21.0)	4.07 (2.07)	-0.78 (-1.22, -0.34)	-0.43 (-0.89, 0.03)
<i>p-value</i>			0.009	0.435
<i>p-trend</i>			<0.001	0.064
Remoteness				
Major city	317 (39.6)	4.42 (2.07)	ref.	ref.
Inner regional area	281 (35.1)	4.36 (2.11)	-0.06 (-0.39, 0.27)	-0.34 (-0.69, 0.02)
Outer regional area	148 (18.5)	4.80 (1.90)	0.39 (-0.01, 0.79)	-0.02 (-0.44, 0.40)
Remote area	39 (4.9)	4.31 (1.94)	-0.11 (-0.79, 0.57)	-0.80 (-1.45, -0.16)
Very remote	15 (1.9)	4.80 (2.31)	0.38 (-0.68, 1.45)	-0.33 (-1.30, 0.64)
<i>p-value</i>			0.190	0.040
<i>p-trend</i>			0.221	0.157
Number of staff				
1	118 (14.8)	4.58 (2.01)	ref.	ref.
2	221 (27.6)	4.65 (1.99)	0.06 (-0.40, 0.52)	0.16 (-0.24, 0.57)
3-4	258 (32.3)	4.53 (2.03)	-0.05 (-0.50, 0.39)	-0.22 (-0.63, 0.19)
5+	201 (25.1)	4.12 (2.16)	-0.47 (-0.93, 0.00)	-0.30 (-0.77, 0.17)
Don't know/can't say	2 (0.3)	5.50 (2.12)	n/a	n/a
<i>p-value</i>			0.055	0.073
<i>p-trend</i>			0.795	0.105
Distance to nearest tobacco retailer				
Less than 100m	285 (35.6)	4.09 (2.08)	ref.	ref.
100-199m	94 (11.8)	4.34 (2.12)	0.25 (-0.22, 0.72)	0.32 (-0.10, 0.73)
200-499m	103 (12.9)	4.38 (2.03)	0.29 (-0.17, 0.74)	0.30 (-0.10, 0.70)
500-999m	89 (11.1)	4.58 (2.05)	0.49 (0.01, 0.98)	0.25 (-0.19, 0.68)
1000m (1km) or more	226 (28.3)	4.96 (1.89)	0.87 (0.52, 1.23)	0.37 (0.03, 0.71)
Don't know / can't say	3 (0.4)	7.00 (0.00)	n/a	n/a
<i>p-value</i>			<0.001	0.218
<i>p-trend</i>			<0.001	0.108
State				
WA (Annual license fee)	160 (20.0)	4.41 (1.98)	ref.	ref.
VIC (No fee or listing requirement)	279 (34.9)	4.18 (2.12)	-0.23 (-0.63, 0.16)	-0.24 (-0.62, 0.14)
NSW (One-off listing requirement)	361 (45.1)	4.72 (2.01)	0.31 (-0.07, 0.69)	-0.19 (-0.58, 0.20)
<i>p-value</i>			0.004	0.452

[^] Adjusted for all characteristics in the table

Note: Licensed premises such as Bars, Wine bars, Pubs, Breweries, Taverns and Hotels were not surveyed in NSW

Table S4: Predictors of selling tobacco: Comparability of adjusted ORs and 95% CIs derived using ordinary standard errors with those derived using clustered robust standard errors with the cluster variable being the postcode of outlet location:

Characteristic	Sellers n/N (%)	Odds ratio for current selling (vs. not current selling)	
		Adjusted OR using ordinary standard errors [^]	Adjusted OR using clustered robust standard errors ^{^^}
All retailers with known sell status	646/2140 (30.2)		
Retailer type			
Convenience store / general store	180/262 (68.7)	ref.	ref.
Grocery stores, Fruit and veg stores	259/453 (57.2)	0.73 (0.52, 1.02)	0.73 (0.52, 1.02)
Newsagent / post office	191/450 (42.4)	0.35 (0.25, 0.49)	0.35 (0.25, 0.49)
Accommodation	16/975 (1.6)	0.01 (0.00, 0.01)	0.01 (0.00, 0.01)
p-value		<0.001	<0.001
Socio-economic status of location			
1- Lowest SES	145/434 (33.4)	ref.	ref.
2	163/585 (27.9)	0.80 (0.56, 1.16)	0.80 (0.57, 1.14)
3	117/399 (29.3)	1.05 (0.70, 1.58)	1.05 (0.71, 1.57)
4	95/330 (28.8)	1.19 (0.77, 1.82)	1.19 (0.77, 1.83)
5- Highest SES	126/392 (32.1)	1.10 (0.73, 1.66)	1.10 (0.72, 1.69)
p-value		0.402	0.355
p-trend		0.290	0.290
Remoteness			
Major city	250/795 (31.4)	ref.	ref.
Inner regional area	234/808 (29.0)	3.49 (2.52, 4.85)	3.49 (2.54, 4.80)
Outer regional area	117/420 (27.9)	2.88 (1.93, 4.29)	2.88 (1.95, 4.24)
Remote area	34/77 (44.2)	5.73 (2.67, 12.30)	5.73 (2.52, 13.03)
Very remote	11/40 (27.5)	5.71 (1.60, 20.44)	5.71 (1.93, 16.94)
p-value		<0.001	<0.001
p-trend		<0.001	<0.001
State			
WA (Annual license fee)	361/923 (39.1)	ref.	ref.
VIC (No fee or listing requirement)	103/381 (27.0)	1.17 (0.80, 1.70)	1.17 (0.83, 1.64)
NSW (One-off listing requirement)	182/836 (21.8)	0.74 (0.56, 0.97)	0.74 (0.56, 0.97)
p-value		0.030	0.030

[^] Adjusted ORs using ordinary standard errors are shown in Table 1 and are redisplayed here for convenience.

^{^^} Adjusted ORs using clustered robust standard errors with the cluster variable being the postcode of outlet location.

Table S5: Predictors of stopping selling tobacco: Comparability of adjusted ORs and 95% CIs derived using ordinary standard errors with those derived using clustered robust standard errors with the cluster variable being the postcode of outlet location:

Characteristic	Ex-sellers/ (current and ex-sellers) n/N (%)	OR for ex-selling (vs current selling)	
		Adjusted OR using ordinary standard errors [^]	Adjusted OR using clustered robust standard errors ^{^^}
All retailers with known sell status	249/895 (27.8)		
Retailer type			
Convenience store / general store	22/202 (10.9)	ref.	ref.
Grocery stores, Fruit and veg stores	26/285 (9.1)	0.73 (0.40, 1.34)	0.73 (0.39, 1.37)
Newsagent / post office	159/350 (45.4)	6.35 (3.86, 10.45)	6.35 (3.88, 10.39)
Accommodation	42/58 (72.4)	23.27 (10.95, 49.42)	23.27 (10.72, 50.50)
p-value		<0.001	<0.001
Socio-economic status of location			
1- Lowest SES	44/189 (23.3)	ref.	ref.
2	70/233 (30.0)	1.38 (0.83, 2.29)	1.38 (0.86, 2.21)
3	41/158 (25.9)	0.96 (0.55, 1.70)	0.96 (0.56, 1.65)
4	38/133 (28.6)	0.87 (0.47, 1.64)	0.87 (0.47, 1.63)
5- Highest SES	56/182 (30.8)	0.89 (0.49, 1.62)	0.89 (0.47, 1.67)
p-value		0.473	0.435
p-trend		0.365	0.365
Remoteness			
Major city	119/369 (32.2)	ref.	ref.
Inner regional area	77/311 (24.8)	0.52 (0.33, 0.83)	0.52 (0.34, 0.82)
Outer regional area	43/160 (26.9)	0.68 (0.39, 1.18)	0.68 (0.40, 1.16)
Remote area	8/42 (19.0)	0.48 (0.18, 1.27)	0.48 (0.17, 1.37)
Very remote	2/13 (15.4)	0.26 (0.03, 1.96)	0.26 (0.05, 1.34)
p-value		0.058	0.040
p-trend		0.041	0.041
State			
WA (Annual license fee)	116/477 (24.3)	ref.	ref.
VIC (No fee or listing requirement)	37/140 (26.4)	1.34 (0.79, 2.29)	1.34 (0.81, 2.24)
NSW (One-off listing requirement)	96/278 (34.5)	1.76 (1.21, 2.57)	1.76 (1.20, 2.58)
p-value		0.013	0.014

[^] Adjusted ORs using ordinary standard errors are shown in Table 2 and are redisplayed here for convenience.

^{^^} Adjusted ORs using clustered robust standard errors with the cluster variable being the postcode of outlet location.

Table S6: Mean importance, and predictors of importance: Comparability of adjusted mean differences and 95% CIs derived using ordinary standard errors with those derived using clustered robust standard errors with the cluster variable being the postcode of outlet location:

Characteristic	N (%)	Mean score (SD)	Difference in mean importance scores (95% CI)	
			Adjusted mean difference using ordinary standard errors [^]	Adjusted mean difference using clustered robust standard errors ^{^^}
All retailers with known sell status	646 (100.0)	4.79 (1.97)		
Retailer type				
Convenience store / general store	180 (27.9)	5.23 (1.73)	ref.	ref.
Grocery stores, Fruit and veg stores	259 (40.1)	5.56 (1.55)	0.37 (0.00, 0.74)	0.37 (0.04, 0.71)
Newsagent / post office	191 (29.6)	3.48 (1.94)	-1.75 (-2.14, -1.36)	-1.75 (-2.14, -1.36)
Accommodation	16 (2.5)	2.88 (1.86)	-2.25 (-3.16, -1.34)	-2.25 (-3.16, -1.34)
p-value			<0.001	<0.001
Socio-economic status of location				
1- Lowest SES	145 (22.4)	4.97 (1.92)	ref.	ref.
2	163 (25.2)	4.89 (2.05)	-0.07 (-0.47, 0.32)	-0.07 (-0.47, 0.32)
3	117 (18.1)	4.61 (1.99)	-0.35 (-0.79, 0.08)	-0.35 (-0.81, 0.10)
4	95 (14.7)	4.82 (1.94)	-0.27 (-0.76, 0.22)	-0.27 (-0.80, 0.27)
5- Highest SES	126 (19.5)	4.59 (1.92)	-0.41 (-0.90, 0.09)	-0.41 (-0.93, 0.11)
p-value			0.378	0.422
p-trend			0.069	0.067
Remoteness				
Major city	250 (38.7)	4.85 (1.95)	ref.	ref.
Inner regional area	234 (36.2)	4.63 (2.03)	-0.38 (-0.77, 0.00)	-0.38 (-0.78, 0.01)
Outer regional area	117 (18.1)	5.04 (1.89)	-0.18 (-0.64, 0.28)	-0.18 (-0.63, 0.27)
Remote area	34 (5.3)	4.38 (1.95)	-1.06 (-1.75, -0.37)	-1.06 (-1.67, -0.45)
Very remote	11 (1.7)	5.36 (1.91)	-0.50 (-1.61, 0.61)	-0.50 (-1.86, 0.87)
p-value			0.025	0.010
p-trend			0.029	0.028
Number of staff				
1	113 (17.5)	4.60 (2.01)	ref.	ref.
2	206 (31.9)	4.69 (1.99)	0.19 (-0.22, 0.60)	0.19 (-0.23, 0.61)
3-4	220 (34.1)	4.71 (1.98)	-0.19 (-0.62, 0.24)	-0.19 (-0.62, 0.24)
5+	106 (16.4)	5.31 (1.79)	0.02 (-0.50, 0.54)	0.02 (-0.50, 0.54)
Don't know / can't say	1 (0.2)	7.00 (0.00)	n/a	n/a
p-value			0.188	0.199
p-trend			0.651	0.652
Distance to nearest cigarette retailer				
Less than 100m	235 (36.4)	4.39 (2.06)	ref.	ref.
100-199m	73 (11.3)	4.88 (1.96)	0.48 (0.02, 0.94)	0.48 (0.00, 0.96)
200-499m	80 (12.4)	4.75 (1.96)	0.27 (-0.18, 0.71)	0.27 (-0.16, 0.69)
500-999m	65 (10.1)	4.92 (1.91)	0.06 (-0.43, 0.55)	0.06 (-0.36, 0.47)
1000m (1km) or more	190 (29.4)	5.18 (1.79)	0.24 (-0.14, 0.61)	0.24 (-0.13, 0.60)
Don't know / can't say	3 (0.5)	7.00 (0.00)	n/a	n/a
p-value			0.262	0.239
p-trend			0.517	0.517
State				
WA (Annual license fee)	103 (15.9)	5.10 (1.71)	ref.	ref.
VIC (No fee or listing requirement)	182 (28.2)	4.75 (2.01)	-0.38 (-0.84, 0.09)	-0.38 (-0.80, 0.04)
NSW (One-off listing requirement)	361 (55.9)	4.72 (2.01)	-0.28 (-0.71, 0.15)	-0.28 (-0.66, 0.10)
p-value			0.280	0.199

[^] Adjusted mean differences using ordinary standard errors are shown in Table 2 and are redisplayed here for convenience.

^{^^} Adjusted mean differences using clustered robust standard errors with the cluster variable being the postcode of outlet location.