

# Pennsylvania's Historical Synar Results

Pennsylvania has been conducting the Synar survey since 1996. The survey results indicate to State and Federal officials whether the overall level and type of statewide effort to reduce the sale of tobacco to youth is adequate. The results provide a basis for negotiations between the state and the federal government about strategy for the coming year. **Table 5** shows Pennsylvania's statewide survey results and the maximum rates allowed by CSAP since 1996.

**Table 5.** Pennsylvania Maximum Rates allowed and Actual Survey Rates

<i>Year</i>	<i>Original Target Rate</i>	<i>Revised * Target Rate</i>	<i>Survey Rate</i>	<i>Survey Error</i>
1996	Baseline	n/a	50%	± 12%
1997	42%	n/a	30%	± 6%
1998	31%	n/a	31%	± 5%
1999	25%	30%	41%	± 5%
2000	20%	29%	27%	± 4%
2001	20%	25%	28%	3%
2002	20%	20%	15%	3%
2003	20%	20%	11%	2%
2004	20%	20%	7%	2%
2005	20%	20%	8%	2%
2006	20%	20%	7%	2%
2007	20%	20%	7%	2%
2008	20%	20%	5%	2%
2009	20%	20%	6%	2%
2010	20%	20%	6%	2%
2011	20%	20%	10%	2%
2012	20%	20%	9%	2%
2013	20%	20%	11%	2%
2014	20%	20%	13%	2%

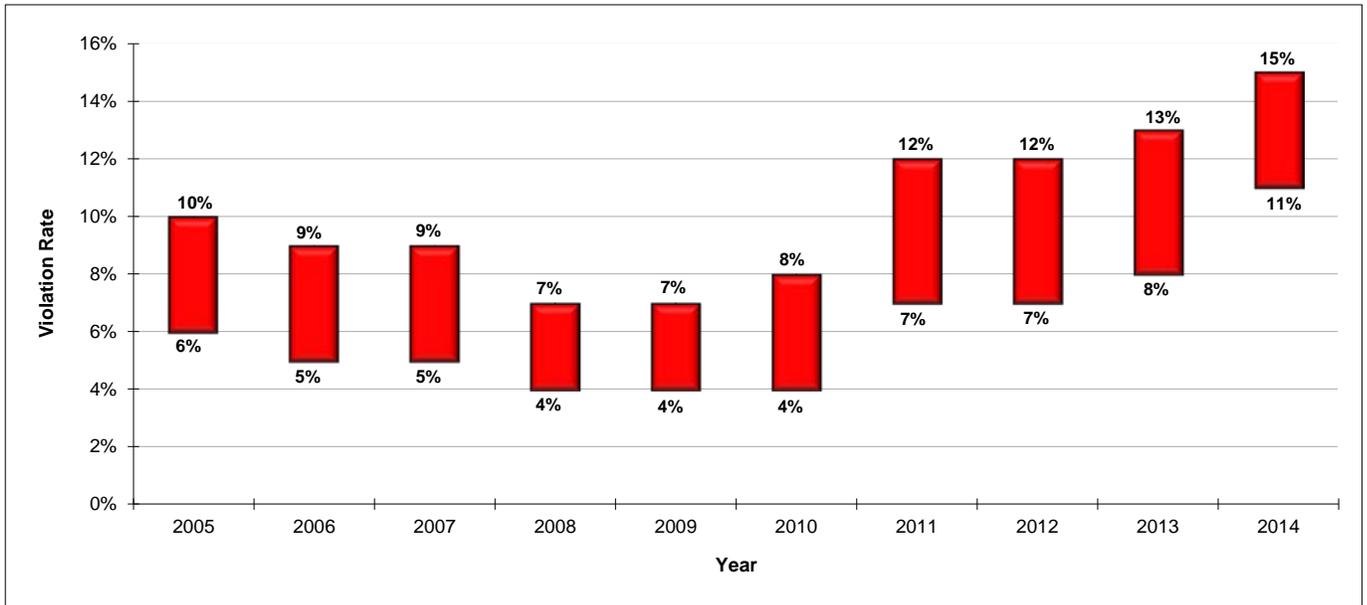
\*Revised 3/8/00

note1: Since 2001, CSAP has required a one-sided 95% C.I.

note2: All rates and errors are rounded to the nearest percent.

In 1999, Pennsylvania was penalized for exceeding the maximum allowable rate set by CSAP. The penalty prompted a massive statewide campaign of enforcement, public awareness and education that still continues today. According to the data obtained from the Synar survey, Pennsylvania’s prevention efforts appear to be successful. The estimated violation rate dropped significantly after the first few years of the campaign and eventually leveled off well below federal maximum rates. Since 2002, the violation rate has been significantly lower than the Federal maximum rate of 20%. Graph1 shows the rates for the past 10 years. Table 6 compares the most recent survey to previous years.

**Graph 1.** Synar Violation Rates for Past 10 years (2005 – 2014)



**Table 6.** 2014 Compared to Past Years

Year	Rate	Year	Rate	Significantly Different	Magnitude of Difference
2014	13	2013	11	NO	n/a
2014	13	2012	9	Yes	1.4
2014	13	2011	10	Yes	1.4
2014	13	2010	6	Yes	2.3
2014	13	2009	5	Yes	2.6
2014	13	2008	5	Yes	2.8
2014	13	2007	7	Yes	2.0
2014	13	2006	7	Yes	2.0
2014	13	2005	8	Yes	1.7

**Note:** Magnitude is the Odds Ratio

## 2014 Synar Survey Results

**Table 7.** 2014 Stratum Results

Region	Abbr.	Outlets Selected	Outlets Completed	Total Violations	Weighted Rate	Standard Error	Lower Limit	Upper Limit
Statewide	State	2113	1166	132	13	1.2	11	15
North Central	NC	123	79	16	21	5.5	10	31
North East	NE	301	156	13	8	2.8	3	14
North West	NW	131	78	4	5	1.6	2	8
South Central	SC	249	130	10	8	2.6	3	13
South East	SE	388	208	16	8	2.1	4	12
South West	SW	248	145	6	4	1.9	0	8
Allegheny	AL	130	61	9	15	4.6	6	24
Delaware	DE	147	79	15	19	4.4	10	28
Erie	ER	112	60	5	8	3.6	1	15
Philadelphia	PH	284	170	38	22	3.2	16	29

### 2014 Odds ratio for stratum with significant differences

- NC outlets were 2.8 times more likely to sell than NE
- DE outlets were 2.6 times more likely to sell than NE
- PH outlets were 3.2 times more likely to sell than NE
- NC outlets were 4.8 times more likely to sell than NW
- AL outlets were 3.2 times more likely to sell than NW
- DE outlets were 4.3 times more likely to sell than NW
- PH outlets were 5.3 times more likely to sell than NW
- NC outlets were 3.1 times more likely to sell than SC
- DE outlets were 2.8 times more likely to sell than SC
- PH outlets were 3.5 times more likely to sell than SC
- NC outlets were 3.1 times more likely to sell than SE
- DE outlets were 2.8 times more likely to sell than SE
- PH outlets were 3.5 times more likely to sell than SE
- NC outlets were 5.9 times more likely to sell than SW
- AL outlets were 4.0 times more likely to sell than SW
- DE outlets were 5.4 times more likely to sell than SW
- PH outlets were 6.6 times more likely to sell than SW
- PH outlets were 3.2 times more likely to sell than ER

**Table 8. 2014 Outlet Type Results**

<b>Outlet Type</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
Bar/Tavern	19	3	n/a	n/a	n/a
Beer Distributor	62	4	5	0	9
Convenience-gas	350	36	11	8	15
Convenience-Grocery-nogas	259	49	21	15	26
Dollar Store	82	4	4	0	9
Pharmacy/Drug Store	102	6	7	1	12
News Outlet	25	3	n/a	n/a	n/a
Restaurant/deli	70	13	22	11	34
Supermarket	121	4	3	0	7
Tobacco	50	7	14	4	25
EMP-LOT-PVR-UNL	0	0	n/a	n/a	n/a
Other	26	3	n/a	n/a	n/a

Note: The rate was marked n/a if "Total Visited" was below 40.

#### 2014 Odds ratio for outlet types with significant differences

- Convenience-Grocery-nogas outlets were 5.4 times more likely to sell than Beer Distributor
- Restaurant/deli outlets were 6.1 times more likely to sell than Beer Distributor
- Convenience-Grocery-nogas outlets were 2.1 times more likely to sell than Convenience-gas
- Restaurant/deli outlets were 2.3 times more likely to sell than Convenience-gas
- Convenience-Grocery-nogas outlets were 5.6 times more likely to sell than Dollar Store
- Restaurant/deli outlets were 6.2 times more likely to sell than Dollar Store
- Tobacco outlets were 3.6 times more likely to sell than Dollar Store
- Convenience-Grocery-nogas outlets were 3.6 times more likely to sell than Pharmacy/Drug
- Restaurant/deli outlets were 4.0 times more likely to sell than Pharmacy/Drug Store
- Convenience-gas outlets were 3.7 times more likely to sell than Supermarket
- Convenience-Grocery-nogas outlets were 7.7 times more likely to sell than Supermarket
- Restaurant/deli outlets were 8.6 times more likely to sell than Supermarket
- Tobacco outlets were 4.9 times more likely to sell than Supermarket

**Table 9. 2014 Buyer Gender Results**

<b>Gender</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
M	689	62	10	7	13
F	477	70	17	13	21

#### 2014 Odds ratio for buyer gender with significant differences

- Females were 1.8 times more likely to be sold cigarettes than males

**Table 10.** 2014 Buyer Age Results

<b>AGE</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
15	233	11	5	2	8
16	586	73	15	11	18
17	347	48	17	5	28

**2014 Odds ratio for buyer age with significant differences**

- 16 year olds were 3.5 times more likely to be sold cigarettes than 15 year olds.
- 17 year olds were 3.4 times more likely to be sold cigarettes than 15 year olds.

**Table 11.** 2014 Buyer Race Results

<b>Race</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
White	830	74	9	7	11
Black	269	57	22	17	28
Asian	0	0	0	0	0
Other	67	1	2	0	5

**2014 Odds ratio for buyer race with significant differences**

- Black youth were 2.8 times more likely to be sold cigarettes than white youth.
- White youth were 6.4 times more likely to be sold cigarettes than youth who could not be placed in the white, black or Asian category.
- Black youth were 17.8 times more likely to be sold cigarettes than youth who could not be placed in the white, black or Asian category.

**Table 12.** 2014 Buyer Ethnicity Results

<b>Gender</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
Hispanic	62	8	12	5	19
NonHispanic	1104	124	13	11	15

There were no significant differences between Hispanic and Non-Hispanic.

**Table 13.** 2014 Gender of Clerk Results

<b>Gender</b>	<b>Total Visited</b>	<b>Violations</b>	<b>Weighted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
M	509	80	17	2	14
F	651	51	9	1	6

**2014 Odds ratio for gender of clerk with significant differences**

- Male Clerks were 2.1 times more likely to sell cigarettes to minors.