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Nevada Clean Indoor Air Act

No on 4 YES ON 5
Clear The Smoke From Children's Lives

- Nevadans voted on November 7, 2006 to enact the Nevada Clean Indoor Air Act (Question 5) in order to protect themselves and their families from the dangers of ETS.
- Question 5 received over 54 percent of the vote and became law on December 8, 2006.



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Smoking tobacco in any form is now prohibited in places like:

<ul style="list-style-type: none">• Public/private school buildings and on public/private school grounds• Child care facilities with ≥five children• All areas of grocery stores, convenience stores, and drug stores• All indoor areas within restaurants, including those in casinos	<ul style="list-style-type: none">• Bars, taverns and saloons that serve food• Shopping malls and retail stores.• Video arcades• Movie theaters• Government buildings and public places
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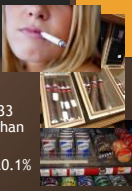
Nevada Clean Indoor Air Act

No on 4 YES ON 5
Clear The Smoke From Children's Lives

- During the 2011 legislative session lawmakers passed **Assembly Bill 571** which made changes to the voter-approved act.
- Based on these revisions to the statute, stand-alone bars, taverns and saloons in which patrons under 21 years of age are prohibited from entering, may allow smoking.

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Tobacco Use



- Tobacco is the leading cause of preventable death worldwide (>5 million per year)
- More than \$289 billion a year, including at least \$133 billion in direct medical care for adults and more than \$156 billion in lost productivity
- In 2012, 18.1% of all adults (42.1 million people): 20.1% of males, 14.5% of females smoked cigarettes
- Tobacco use predicted to kill more than 8 million people worldwide by 2030 and 1 billion by the end of the century.

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Lifetime Prevalence of Marijuana Use



- Marijuana use has been linked to adverse health conditions and greater concentrations of carcinogens than tobacco.

Group	2009	2012
8th graders	15.7%	16.4%
10th graders	32.3%	34.5%
12th graders	42.0%	45.5%
College students*	47.5%	46.6%
Young adults (19-28)*	56.0%	56.3%

*Numbers may overlap in results.

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Purpose of Study

To determine significant associations between tobacco/marijuana use and precancerous oral conditions (oral lesions and enlarged lymph nodes) in Nevada adolescents.

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Background

- Ongoing statewide school-based dental health screening initiative (2002 to 2010) known as *Crackdown on Cancer*
- Public and private middle and high-schools invited to participate.
- Funded by Master Settlement Agreement allocated to the Trust Fund for Public Health and the Fund for a Healthy Nevada.

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Methods

- 31,306 screenings of adolescents between 13-19 from 2006/2010 (The year the Nevada Clean Air Act went into Law)

	Year 1	Year 2	Year 3	Year 4
Year and Total	2006-2007	2007-2008	2008-2009	2009-2010
N-value	N = 7,290	N = 7,378	N = 7,064	N = 7,163
	n (%)	n (%)	n (%)	n (%)
Total Identified	288 (0.04)	632 (0.09)	365 (0.05)	428 (0.06)

Note: N=1713, with 71 overlapping cases; 826 with oral lesions and 887 with enlarged lymph nodes.

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Methods

- Examinations conducted by licensed/calibrated dentists, hygienists, and dental hygiene students.
- UNLV IRB approved this initiative to assure participant confidentiality and protection.
- Precancerous lesions were defined as any oral lesion and any enlarged lymph nodes not related to known disease.
- Tobacco use and ETS were self-reported.

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Methods

- Descriptive (frequency/percentage).
- **Percent Change (PC)** - when comparing an old value and a new value. Used to see changes from year-to-year.
- **Percent Mean Difference (PMD)** used to assess differences in percentages within each year on various demographic variables.

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RESULTS

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Tobacco and Marijuana Use 2006-2010, By Type

	Year 1	Year 2	Year 3	Year 4
Year and Total	2006-2007	2007-2008	2008-2009	2009-2010
N-value	N = 7,290	N = 7,378	N = 7,064	N = 7,163
	n (%)	n (%)	n (%)	n (%)
Total Identified	288 (0.04)*	632 (0.09)*	365 (0.05)*	428 (0.06)*
No Tobacco	25 (0.8)**	39 (0.6)**	74 (20.3)**	109 (25.5)**
Tobacco [†]	133 (46.1)**	139 (21.9)**	147 (40.3)**	173 (40.4)**
Marijuana	130 (45.1)**	454 (71.8)**	144 (39.4)**	146 (34.1)**

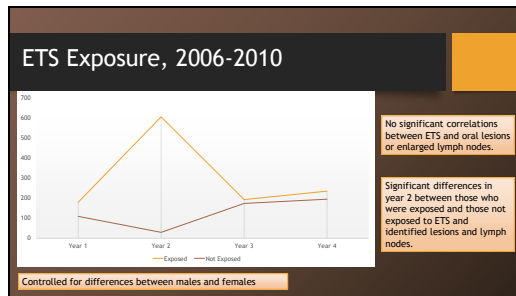
*Percentage of total screened; **Percentage of those identified with lesions/enlarged lymph nodes; [†]Tobacco includes cigarettes, cigars, and chew.

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	Year 1	Year 2	Year 3	Year 4
Year and Total N-value	2006-2007 N = 7,290	2007-2008 N = 7,378	2008-2009 N = 7,064	2009-2010 N = 7,163
	n (%)	n (%)	n (%)	n (%)
Total Identified	288 (0.04)*	632 (0.09)*	365 (0.05)*	428 (0.06)*
Exposed	179 (62.2)**	603 (95.4)**	192 (52.6)**	234 (54.7)**
Not Exposed	109 (37.8)**	29 (0.05)**	173(47.4)**	194 (45.3)**

*Percentage of total screened; **Percentage of those identified with lesions/enlarged lymph nodes; SHS exposure was self-reported

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DISCUSSION AND RECOMMENDATIONS

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Discussion

- Approximately 42,440 Americans will be diagnosed with oral or pharyngeal cancer this year.
- Cause over 8,390 deaths, killing roughly 1 person per hour, 24 hours per day.
- Each year in the United States, more than 21,000 men and 9,000 women are diagnosed with oral cancer. Most are over 60 years old.
- Because of the HPV Virus, it is becoming more prevalent in adolescence. Depending on the source - it has or will surpass tobacco as a risk factor.

Source: National Cancer Institute and CDC, 2014

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Questions to Ask Patients Regarding Tobacco and Marijuana Use

1. Do you use any form of tobacco or marijuana?
2. How much do you use?
 - a) Tobacco (Number of cigarettes in a day/week)
 - b) Marijuana (Number of joints in a day/week)
3. How long after you wake up do you have to use tobacco and/or marijuana?
4. Have you ever quit?
 - a) If so, how long (<30 days, >30 days); what did you do to help you quit?
5. Are you interested in quitting?

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Patient-Centered Counseling Model Strategies for Behavior Change

1. Motivational Interviewing
2. Stages of Change
3. Payoff Matrix
4. ICR Readiness Ruler
5. 5A's Model
6. Value Cards
7. Reflective Listening

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graph TD; Patient((PATIENT)) --- MI((MOTIVATIONAL INTERVIEWING)); Patient --- SOC((STAGES OF CHANGE)); Patient --- PM((PAYOFF MATRIX)); Patient --- ICR((ICR READINESS RULER)); Patient --- 5A((5A'S MODEL)); Patient --- VC((VALUE CARDS)); Patient --- RL((REFLECTIVE LISTENING));
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Basic Principles of MI Integration	
Principles	Goals
Express Empathy	Build Rapport
Develop Discrepancy	Elicit Pros and Cons
Roll with Resistance	Respect Patient Autonomy
Support Self-Efficacy	Communicate that the patient is capable of change

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ACTION STEPS		
CONCEPT	DEFINITION	APPLICATION
PRE-CONTEMPLATION	Not considering possibility of change. Does not feel there is a Problem.	Goal: Raise awareness. Task: Inform and encourage. Validate lack of readiness.
CONTEMPLATION	Thinking about change, in the near future.	Goal: Build motivation and Confidence. Task: Explore ambivalence. Evaluate pros and cons.
PREPARATION	Making a plan to change, setting gradual goals.	Goal: Negotiate a plan. Task: Facilitate decision making.
ACTION	Implementation of specific action steps, behavioral changes.	Goal: Implement the plan. Task: Support self-efficacy.
MAINTENANCE	Continuation of desirable actions, or repeating periodic recommended steps).	Goal: Maintain change or new status quo. Task: Identify strategies to prevent relapse.

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PAYOFF MATRIX (Example)		
	Behavior (Drinking Alcohol)	Alternate Behavior (Quit Drinking Alcohol)
Pros Advantages	Helps me relax Enjoy drinking with friends Eases boredom and reduces depression	Feel better physically Have more \$ Less conflict with family, work, some friends
Cons Disadvantages	Hard on my health, including oral health Spending too much \$ Might lose my job Teeth will look bad and cause me to be uncomfortable	I'd miss getting that "buzz" What to do about friends who drink? How to deal with stress of not drinking?

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ICR Readiness Ruler (Example)

- How **Important** is it for you to change right now?

1	2	3	4	5	6	7	8	9	10
Not at all Important			Somewhat Important				Extremely Important		

- How **Confident** are you that you could do it?

1	2	3	4	5	6	7	8	9	10
Not at all Confident			Somewhat Confident				Extremely Confident		

- How **Ready** are you to change right now?

1	2	3	4	5	6	7	8	9	10
Not at all Ready			Somewhat Ready				Extremely Ready		

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5 A's Model of Behavior Change

- 1A Assess - current behavior, importance of changing it, self efficacy, stage of readiness, social support
- 2A Advise - clear, specific, and personalized behavior change, including information about personal health harms/benefits.
- 3A Agree - collaboratively on the behavior to target (may be several), next steps based on stage of readiness
- 4A Assist - self-help and/or counseling including goal setting and action planning to develop skills, confidence, support to achieve goals
- 5A Arrange - follow-up (in person or by telephone) to discuss progress, barriers, adjusting plan

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Discussion!

1. What do you think the impact on oral health might be with the legalization of marijuana?
2. How can healthcare providers better address the risk of non-traditional risk factors for oral cancer (i.e., Hookah, HPV, marijuana, e-cigarettes etc.) as they are growing trends in adolescents?



Questions ??

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