Single Assessment – July 30, 2014, Interim Health Services Committee Senator Judy Lee, Chair

Agency -- ND Tobacco Prevention and Control Executive Committee, Dr. Eric Johnson, member Funding Source - Tobacco Prevention & Control Trust Fund

Integrated	Total	Service providers funded by Exec	utive	General areas & populations served
Programs		Committee		
Local Policy	\$13,719,076	All 28 Local Public Health Units (LPHUs)		All 53 counties, total state population of 725,395 (2014
Grants				population estimate, all races)
FY2011 Q4-	\$1,087,500	12 of 28 LPHUs received additiona	ıl grant	
FY2014 CDC		funding from Executive Committe	e. The LPHUs	
Replacement		previously received these grants f	rom the	
Funds		Department of Health (DoH) throu	_	
		CDC grant. The Executive Commit		
		receive any funds from DoH or CD		
		requested & Executive Committee	-	
		this change to streamline LPHU grants process.		
Special Initiative	\$1,995,979	LPHUs, American Lung Association in North		
Grants		Dakota, American Nonsmokers' Rights		
		Foundation, Northern Lights SADD, Tobacco		
		Free North Dakota, Minot State U	• •	
		University of North Dakota School		
Special Initiative	\$3,364,125	Public Health Law Center, Odney,		
contracts, services		International, Directors of Health		
TOTAL 2009-2014	\$20,166,680	Education, University of North Dakota, Office of		
		Attorney General, Nexus Innovation		
		Improving the health and po	licy environmer	nt in North Dakota
Policy Focus	Before July 1, 20	009 through FY 2014, Q3 Specific popula		ations served
Areas				

NOTE: GLOSSARY of acronyms and abbreviations on page 11.

		Improving the health and po	alth and policy environment in North Dakota		
Policy Focus Areas	Before July 1, 2009	through FY 2014, Q3	Specific populations served		
City smoke-free	2 ordinances in	<u>2009-2012</u> – 12 total	2009 – Fargo, West Fargo		
ordinances	2008	ordinances – 35%	2009-2012 cities – Pembina, Grand Forks, Devils Lake, Bismarck,		
	18.3% (117,562) of	(245,596) (2012	Napoleon, Walhalla, Munich, Cavalier, Lisbon, Linton		
	2008 population	population)	2013-2014 – Dickinson, Williston, Crosby, Harvey, Hankinson, Wahpeton		
		<u>2013-2014</u> – 6 cities			
		passed ordinances same or			
		stronger than state law –			
		7% (53,301) (2014			
		population)			
Smoke-free parks	Data not available	2011 – 1 policy	2011 – Cando (park)		
		2013 – 4 policies	2013 – Rolla, Cando (ball park, rink), Bismarck, Forman		
Tobacco-free	1 policy passed in	2011 1 policy	2008 – Milnor		
parks	2008	2013 – 4 policies	2011 – Rolette		
		2014 – 9 policies	2013 – Harvey (2), Mayville, Wahpeton		
			2014 – Beulah, Hazen, Cooperstown, Garrison, Jamestown (Pepper's Dog		
			Park), Langdon, Valley City, Kindred, Fessenden		
Tobacco-free	Data not available	92 total site-specific	Populations served by the policies in the following kinds of individual sites		
grounds policies		policies	in cities across the state: health care and allied health facilities (local		
(not including			public health, medical, dental, chiropractic, pharmacy, optometric,		
parks)			hospital, long-term care, ambulance services, Grand Forks Air Force Base		
Smoke-free	Data not available	22 total site-specific	treatment facility, physical therapy), businesses (not including bars),		
grounds policies		policies	restaurants/bars/fraternal/sport clubs, Pre-K education services, libraries,		
(not including			equipment dealer, service provider for special needs populations, fitness		
parks)			centers, mini golf courses, public beaches, swimming pools,		
			hotels/motels, taxi services, public transit, law office, county fairs, 4-H		
			club activities		

	Before July 1, 2009	Improving the health and po	olicy environment in North Dakota
Policy Focus Areas		through FY 2014, Q3	Specific populations served
Statewide smoke- free law	2005 law exempts several work & public places	2012 law is comprehensive and covers nearly all work and public places	Total state population of 725,395 excluding non-resident workers and tourists
Multi-unit housing	Data not available	2011-2013 public - 1 policy, 4 buildings; private - 3 policies, 27 bldngs FY2014 - public - 2 policies, 71 bldngs; private - 24, 133 bldngs	Public (housing authorities) – 75 buildings serving special needs populations (elderly, low-income, fixed income, other special needs), Private (including condominiums and town homes) – 160 buildings serving young adults, general population, special needs populations, hospital outpatient living for mental health clients. NOTE: One policy covered 528 apartment units.
Tobacco-free K-12 school district buildings and grounds	60 tobacco-free district building and grounds	127 of 224 districts	56.7% of K-12 school district campuses, serving 59.9% (62,297 of 109,872) of all students not counting faculty and staff, and parents and visitors
Tobacco-free higher education campuses	7 institutions tobacco-free, 1 smoke-free	7 more institutions tobacco-free, 2 more institutions smoke-free	Of 21 institutions (21 = 11 NDUS, 5 private, 5 tribal), 14 are tobacco-free, serving 71% of students. 95% of students are covered under either tobacco-free or the 3 smoke-free campus buildings and grounds policies. FY2014 – United Tribes Technical College (UTTC) became the first tribal college in North Dakota and the third tribal college in the United States to become tobacco-free. Bismarck Burleigh Public Health and American Nonsmokers' Rights Foundation worked with UTTC to pass and implement this policy. Traditional or sacred use of tobacco is exempted for Native American spiritual and cultural ceremonies when requests are made and approved in advance.

		Improving the health and policy environment in North Dakota			
Policy Focus Areas	Before July 1, 2009	through FY 2014, Q3	Specific populations served		
Tobacco tax	44 cents/pack	tax remains at 44	By keeping the tobacco tax very low (average state tax is \$1.53/pack), the		
(pricing)	state law passed in	cents/pack	tax level is reinforcing the tobacco industry marketing to potential		
	1993; federal tax		replacement smokers and tobacco users (primarily all middle and high		
	increased 4/1/09		school youth, approximately 58,867 in 2013) and current adult smokers		
	by 62 cents/pack		and tobacco users (approximately 142,795 in 2012), making our tobacco		
	to \$1.01/pack		use prevention and cessation efforts less effective.		
Electronic	no policies for	<u>Use</u> 2012 – state smoke-	<u>Use</u> – Entire state population served, including nonresident workers and		
cigarettes (e-	either use or	free law prohibits use	visitors.		
cigarettes)	purchase	where smoking is	Purchase – 47,413 under age 19 (27.5% of this population) live in cities		
		prohibited;	with ordinances restricting e-cigarette purchases to those under age 18.		
		2012-2014 – 6 smoke-free	(Cities: Mandan, Fargo, Bismarck, Hankinson, Wahpeton, Williston took		
		city ordinances do the	effect from January 6, 2014 through March 30, 2014). All but Fargo also		
		same; 2013 – Added e-	restrict self-service purchases and Wahpeton requires a license to sell.		
		cigarette use to model			
		policies language;			
		<u>Purchase</u> – FY2014 6 city			
		ordinances passed			
Integrated local &	No integrated	LPHUs, SIGs, & Center	Adult and youth target populations reached statewide with ongoing public		
statewide public	education	integrated public	education since 2009 via TV & radio at recommended total rating points		
education		education on: SHS,	(TRPs), state & local program websites, radio public service		
		societal costs of tobacco,	announcements, newsletters, news releases. Since 2011, weekly		
		tobacco industry targeting	newspaper subscribers reached with public education via placement of		
		of youth, how price of	news releases & ads in weekly newspapers.		
		tobacco affects use,			
		especially by youth. Since	Public education delivered to state & local organizations through		
		2011, all LPHUs placed	presentations & exhibits specific to policy goals.		
		local ads with news			
		releases in weekly			
		newspapers, educating on			
		tobacco's impact on			
L		chronic diseases.			

		Improving the health and policy environment in North Dakota			
Policy Focus Areas	Before July 1, 2009	through FY 2014, Q3	Specific populations served		
Integrated local & statewide surveillance & evaluation	LPHUs funded statewide secondhand smoke surveys in 2002, 2003, 2004, 2006, 2008 for surveillance & evaluation to inform public education & policy.	2010 LPHU secondhand smoke survey duplicated by DoH, as part of DoH one-time federal stimulus funding, so LPHUs did not conduct the survey. LPHUs conducted studies on air pollution, public opinion, compliance & economic impact of smoke-free ordinances passed in West Fargo, Fargo, Grand Forks & Bismarck. 9 LPHUs conducted public assessment surveys on smoke-free air. One LPHU conducted an air quality survey & 1 LPHU conducted public assessment survey on tobacco-free parks. Minot State University conducted air pollution studies pre- and post-2012 statewide law. (See next column.)	Surveillance and evaluation data are used to monitor and improve the effectiveness of policies and programs statewide. Evaluation of local policies benefits the entire state population, as data are used to support more & sometimes even more effective policies. Average Tobacco Smoke Pollution with Harm Level Pre and Post-law in Bars and Restaurants North Dakota, 2013 Significant Ham Level Very Unhealthy Very Unhealthy Very Unhealthy Very Unhealthy India 100 All Venues, n = 65* Bars, n = 51 Restaurants, n = 14* Before Comprehensive Statewide Smoke Free Law After Comprehensive Statewide Smoke Free Law Winable to assess PM in one restaurant Minot State University, 2013		

		Improving the health and po	olicy environment in North Dakota		
Policy Focus Areas	Before July 1, 2009	through FY 2014, Q3 Specific populations served			
		UND School of Medicine conducted study of heart attack hospital admissions before & after Grand Forks smoke-free ordinance. Comprehensive program evaluation conducted every biennium. (See next column.)	UND HEART ATTACK STUDY Comparing heart attack rates 4 months prior to Grand Forks smoke-free law and 4 months after smoke-free law went into effect 110 90 83 70 63 HEART ATTACK RATES 24.1% fewer heart attack admissions at Altru Hospital in 4 months after Grand Forks smoke-free law compared to 4 months before: 83 heart attacks prior to smoke-free law and 63 heart attacks after smoke-free law went into effect.		
		Improving the health and po	olicy environment in North Dakota		
Cessation Policy Focus Areas	Before July 1, 2009	through FY 2014, Q3	Specific populations served		
Health systems changes – Public Health Service Guidelines (PHSG) to ask, advise, assess, assist/refer, arrange appropriate cessation services	Altru used tobacco use as a vital sign since 2006.	2009-2011 – Subcontracts 1 LPHU subcontracted up to \$74,275 total with 4 local health systems to implement Public Health Service Guidelines (PHSG). 2009-2011 – LPHUs 26 LPHUs budgeted \$666,672 for local services (See next column.)	2009-2011 subcontracts – Tobacco users in the Fargo area served by NDSU Student Health Services, NDSU Wellness Center, MeritCare (now Sanford Health), Innovis Health (now Essentia Health). 2009-2011, 2011-2013 and FY2014 – LPHUs – Materials and services provided to all 28 LPHUs and tobacco users in the state: electronic health records, free nicotine replacement therapy (NRT), local NDQuits advertising, Trained Tobacco Specialist (TTS) certification, quit classes, & LPHU salaries for local provision of services. FY2014 – NOTE: Affordable Care Act requires use of electronic health records (EHRs). EHR systems include prompts about tobacco use. The federal requirement reduces the need for local promotion of EHRs.		

		Improving the health and policy environment in North Dakota				
Cessation Policy		through	Specific populations served			
Focus Areas	Before July 1, 2009	FY 2014, Q3				
		2011-2013 – LPHU training	North Dakota Reports of Health Care Providers Asking Them about Tobacco Use, Advising Them to Quit, Assisting with Quit Efforts, and Referring Them to a			
		on PHSG – 902 providers	Smoking Cessation Class, Program, Quitline, or Counseling, among Smokers			
		and 397 LPHU staff; 54	Who Visited a Health Care Provider in the Past 12 Months, North Dakota ATS 2009-2012 and National ATS 2010			
		allied health providers				
		implemented PHSG.				
		<u>2011-2013</u> – <u>Subcontracts</u>	100% - 94.1% 89.2% 89.2% 87.9%			
		1 LPHU subcontracted				
		up to \$144,519 with 5 local	70.7%			
		health systems to	80% - 66.2% 70.7% 63.5% 65.8% 65.8% 40.8% 41.2% 31.9%			
		implement PHSG.	40.8%			
		<u>2011-2013 – LPHUs</u> – All	19.070			
		28 LPHUs budgeted	20/8			
		\$596,457 for local services	0% NA			
		(See next column.)	2009 2010 2012 2010			
		FY2014 – LPHU training on	North Dakota United States			
		PHSG – 196 providers and	■ Asked ■ Advised ■ Referred			
		301 LPHU staff; 5 health	Legend: NA = Not applicable.			
		care providers	Legend. NA – Not аррпсавіе.			
		implemented PHSGs.				
		<u>FY2014</u> – All 28 LPHUs				
		budgeted \$142,110 for				
		local services (See next				
		column.)				
Mental	Data not available	<u>2011-2013</u> – key informant	Mental health and substance abuse treatment providers and treatment			
health/substance		survey of providers	clients			
abuse providers		FY2014 – sponsored	N.D. Department of Human Services Spring Behavioral Health Conference			
		presentations by national	– 292 licensed mental health/substance abuse (MH/SA) counselors			
		expert at 2 conferences;	attended 2 keynote and 1 breakout session.			
		statewide provider survey				

Program	Total		Service providers funded by Executive Committee		General areas & populations served		
Tobacco Settlement State Aid Grants	\$2,350,008	All 28	28 Local Public Health Units (LPHUs)		All 53 counties, total state population of 725,395 (2014 population estimate, all races) and specifically those who use tobacco and e-cigarettes (age 13+), and those exposed to secondhand smoke and e-cigarette aerosol (all ages).		
		I	Improving the health a	and policy environm	ent in North Dakota		
PHSG Focus Area	Before July 1, 2		through FY 2014, Q3	Specific population	ns served		
Policy	No LPHU had	2	2009-2011 All 28	Residents in any c	ounty, all races, who use LPHU client-based services, use		
development & implementation	adopted the 20 PHSG policy.		LPHUs adopted 2008 PHSG agency policy. 2011-2013 – All LPHUs conducted client chart audits annually to assure quality implementation. All LPHUs began asking about exposure to secondhand smoke. FY2014 – All LPHUs documented agency orientation & training on PHSG for all staff. All LPHUs not meeting 90% quality standard developed mediation plans for any client-based service.	tobacco and (beging to secondhand smooth secondhand secondhand secondhand smooth secondhand	nning 2013) e-cigarettes regardless of age, and those exposed oke (2013) and e-cigarette aerosol (2013). 9 total served in LPHU client-based programs statewide in LPHUs met quality standard of documenting asking about use the time. 11 of 28 LPHUs met quality standard of agabout exposure to secondhand smoke 90% of the time. 10 acco-free grounds policies. 10 total clients served statewide. 27 of 28 LPHUs met quality menting asking about use of tobacco 90% of the time. 26 of 28 a standard of documenting asking about exposure to e 90% of the time. 7 LPHUs passed tobacco-free grounds		

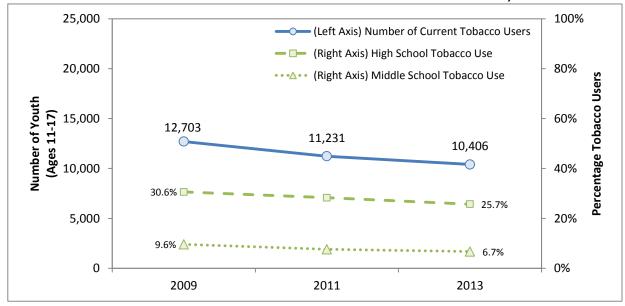
Improving the health and policy environment in North Dakota using evidence-based policy approaches

• North Dakota youth tobacco use rates have continued to decline:

North Dakota's Estimated Number of Youth Tobacco Users and Tobacco Use Prevalence, 2009 – 2013 YRBS and Census

Year	MS + HS (ages 11 to 17)		e School 11 to 13)	_	h School s 14 to 17)
	Number of Youth	Prevalence	Number of Youth	Prevalence	Number of Youth
2009	12,703	9.6%	2,320	30.6%	10,383
2011	11,231	7.6%	1,818	28.3%	9,413
2013	10,406	6.7%	1,665	25.7%	8,741
2009 vs 2013	2,297 fewer	30% decline	654	16% decline	1,643 fewer

North Dakota's Estimated Number of Youth Tobacco Users and Youth Tobacco Use Prevalence, 2009 – 2013 YRBS and Census



Improving the health and policy environment in North Dakota using evidence-based policy approaches

Table presents the calculated number of current youth electronic-cigarette users from the ND-YTS in 2011 and 2013.

North Dakota's Estimated Number of Youth Tobacco Users and Tobacco Use Prevalence, 2011 – 2013 YTS and Census

Year	MS + HS (ages 11 to 17)		Middle School (ages 11 to 13)		High School (ages 14 to 17)	
_	Number of Youth	Prevalence	Number of Youth	Prevalence	Number of Youth	
2011	NA	NA	NA	1.6%	532	
2013	2,364	1.3%	323	6.0%	2,041	

NA = Not available.

Improving the health and policy environment in North Dakota using evidence-based policy approaches

- Heart attack admissions to Altru decreased by 24.1% in the four months after Grand Forks smoke-free city ordinance took effect, according to a UND study. (Johnson et al., 2012) The 20 fewer heart attack admissions is estimated to have saved \$156,620 based on an average cost of a heart attack admission (\$7,831/admit, according to recent Medicaid costs) and \$860,000 total saved for all costs related to a heart attack episode (admit, follow-up, pharmacy, cardiac rehab and an average of \$43,000/all care, according to Blue Cross Blue Shield of Minnesota). According to the American Heart Association, for employers, disability costs outweighed direct costs. The estimated per claim productivity loss for short-term disability was \$7,943 and \$52,473 for long-term disability.
- Tobacco smoke pollution levels in hospitality venues was reduced by an average of 83% after passage and implementation of North Dakota's comprehensive statewide smoke-free law. Tobacco smoke pollution levels in bars alone was reduced by an average of 88%. (Buettner-Schmidt et al., 2013)
- Social norms constructs, such as beliefs about the tobacco industry and tobacco denormalization, have been independently associated with tobacco cessation intentions and behavior (Hammond et al., 2006, Zhang et al., 2010) and have been a key target of tobacco prevention and control programs (CA DOH, 2009). California, for example, implemented a comprehensive tobacco prevention and control program that sought to change tobacco-related social norms by "indirectly influencing current and potential future tobacco users by creating a social milieu and legal climate in which tobacco becomes less desirable, less acceptable, and less accessible" (CA DOH, 2009, pp. 2-3). This approach emphasized countering pro-tobacco influences, reducing exposure to secondhand smoke, reducing the availability of tobacco, and providing services to help smokers quit. Between 1988 and 2006, concurrent with the implementation of California's tobacco control program, California saw a decline in adult smoking prevalence from 22.7% to 13.3% and declines in heart disease death and lung cancer incidence that outpaced national trends (CDC, 2014). From FY 1998 to 2008, the California program costs \$2.4 billion and led to cumulative health expenditure savings of \$134 billion, a 50:1 return on investment. (Lightwood et al., 2013)

Improving the health and policy environment in North Dakota using evidence-based policy approaches

- After seven years, a tobacco prevention and cessation initiative funded by the Missouri Foundation for Health resulted in 14,491 quality-adjusted life years (QALYs) gained and lifetime medical care savings of \$90.8 million. This translated to \$1,358.58 in cost per QALY and \$4.61 in medical care savings per dollar spent across approaches (smoke-free policies, cessation services, tobacco tax education, and grants for youth education & smoke-free worksites). Smoke-free city policies proved the most cost effective, garnering an estimated \$23.35 savings in medical care for every dollar spent. Cessation services saved \$3.89 and grants for education and worksites saved \$3.40 for each dollar spent. The tobacco tax did not increase, so no medical savings were realized. (Washington University in St. Louis, 2012)
- Theories of behavior change, such as the theory of reasoned action, and evidence from evaluations of health communication campaigns, demonstrate that changes in tobacco-related attitudes, beliefs, and intentions precede changes in related behavior (Fishbein, 2008; Fishbein and Ajzen, 1975; Farrelly et al., 2002; Farrelly et al., 2005; Farrelly et al., 2009; Wakefield, Loken, & Hornik, 2010). Health communication campaigns have been shown to prevent smoking initiation, promote and facilitate cessation, and shape social norms related to tobacco use (National Cancer Institute, 2008; Wakefield, Loken, & Hornik, 2010).

GLOSSARY

ATS – Adult Tobacco Survey; bldngs – buildings; CDC – U.S. Centers for Disease Control & Prevention; Center – ND Center for Tobacco Prevention & Control Policy; DoH – Department of Health; e-cigarettes – electronic cigarettes; EHRs – electronic health records; FY – fiscal year; K-12 – kindergarten through grade 12; LPHUs – local public health units; MH/SA – mental health/substance abuse; NDSU – North Dakota State University; NDUS – North Dakota University System; NRT – nicotine replacement therapy approved by Food & Drug Administration; PHSG – U.S. Public Health Service Guidelines; Pre-K – pre-kindergarten; Q – quarter; QALYs – quality adjusted life years; RTI – Research Triangle Institute; SADD – Students Against Destructive Decisions; SHS – secondhand smoke; SIG – Special Initiative Grants; TRPs – total rating points; TTS – trained tobacco specialist; UND – University of North Dakota; UTTC – United Tribes Technical College; YRBS – Youth Risk Behavior Survey; YTS – Youth Tobacco Survey.

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