

Testimony Before
Committee on Health and the Environment
On the Public Health Effects of Smokeless Tobacco

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Background and Qualifications

My name is Gregory Connolly. I am a professor of public health practice at the Harvard School of Public Health and a dentist. I have conducted research and educational programs on smokeless tobacco use for over 20 years including spending three Spring Trainings in Florida surveying players on use, screening oral lesions and providing counseling on how to quit.^{1,2} In collaboration with the Professional Baseball Players Training Association, we developed a self-help quit guide for athletes on quitting smokeless use which was later used at high school, college and professional baseball team levels.²

I and others have also conducted research on the impact that public use of smokeless tobacco by Major League Baseball (MLB) players has on youth exposure to messages about the use of smokeless tobacco and its free advertising value.^{3,4,5} I have also worked with the NCAA and MLB on developing and implementing policies that prohibit use by college and minor league players while on the field.

My testimony will review the health effects of smokeless tobacco, the use by MLB players, reasons for use, and youth exposure to use based on televised World Series Games from 1988 to 2005.

Health Effects of Smokeless Tobacco on Major League Baseball Players

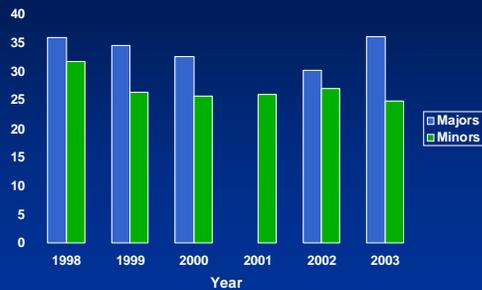
Smokeless tobacco (SLT) causes disease including nicotine addiction, oral and pancreatic cancer, periodontal disease and possible unknown systemic disease associated with toxic compounds such as tobacco specific nitrosamines, benzopyrenes and heavy metals.^{6,7}

Use of Smokeless Tobacco by Major League Players

There has been traditional use of chewing tobacco by a few players since the game was first invented. But, today chewing tobacco has been replaced by moist snuff, a finely ground tobacco placed as a dip between the cheek and gum. This form of SLT is highly addictive and causes serious health problems. Its introduction into baseball was only a few decades ago and a direct result of heavy sports marketing by the tobacco industry. Regretfully, the practice rapidly spread throughout baseball but is a relatively new phenomenon which should be eliminated. Presently, use of SLT is banned from every baseball field in America, Little League, Babe Ruth and NCAA and the Minors. There are only 30 baseball fields which use is unrestricted and they are the most important to American youth.

Baseball players are at major risk of this disease because of their high level of use whether it be in high school or as professional ball players.^{1,9,10,11} Both my and other research has found that about one third of major league players report using SLT, in particular, moist snuff and one quarter of minor leaguers. The lower rate among the minors could be due to the ban on use in 1993.

Prevalence of ST Use Among Baseball Players



*Both users and non-users estimated that over half of all players used ST
(H. Severson, et al)

Baseball Players Reported Reasons for Smokeless Use

Reason	Percent
Habit	39%
Relaxation	34%
Hooked	15%
Lift	7%
Enjoyment	6%
Improves Game	0%
Sharpens Reflexes	0%
Taste	2%

(n= 65 NEJM 1988, Connolly et al)

Players primarily use smokeless tobacco because of its drug effects that cause dependence or addiction and players do not report that use enhances performance or ability.^{1,8}

Finally, the vast majority of players want to quit and seek assistance to do so.¹ Below are some of the examples of the clinical effects of smokeless tobacco use on player's health that I have seen during Spring Training sessions.



Oral Leukoplakia



Periodontal Disease and Leukoplakia

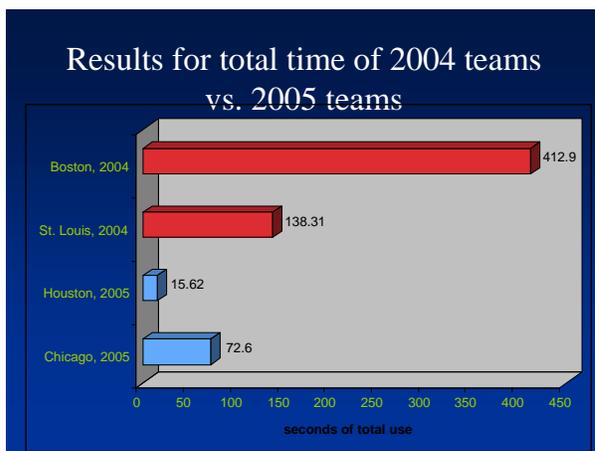
Use of Smokeless Tobacco (SLT) by Players is Heavily Seen by Children and Contributes to Their Use of SLT

The use of SLT by players has a powerful role model effect on youth particularly among young males in sport, some of whom ironically remain addicted in future careers as professional athletes. From 1988-2005, we and others have studied televised use of SLT during selected games of the World Series and on average, we observe from 24 to two minutes of use with an average of nine minutes per game.^{3,4,5}

Trends of World Series ST Use

Year	Teams	Total Perceptible Use (minutes)	Researcher
1986	Mets vs. Red Sox	23.9	Jones
1987	Cardinals vs. Twins	11.8	Jones
1988	Dodgers vs. A's	3.8	Sussman and Barovich
1989	Giants vs. A's	7.7	Jones
1990	Reds vs. A's	7.3	Jones
1991	Braves vs. Twins	9.3	Jones
1992	Braves vs. Jays	3.5	Jones
1993	Phillies vs. Jays	20.8	Jones
2004	Cardinals vs. Red Sox	9.2	Johnson and Rothman
2005	Astros vs. White Sox	1.5	Caughey and Tejani

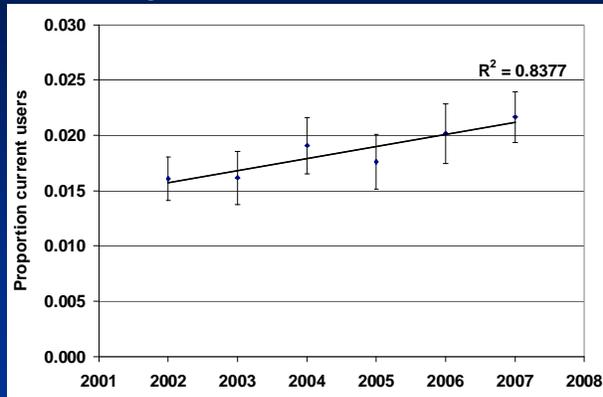
The televised value of just one game is on average worth millions of dollars in free advertising reaching millions of adolescents.



Extrapolate the advertising over a season; the free advertising value to the manufacturers of SLT is probably worth more than the combined salaries of all MLB players combined.

There can be no doubt that public use by MLB players directly contributes to youth smokeless tobacco use in the U.S. Of major concern is that SLT use is increasing 5% per year nationally and among adolescent males, ages 12-17, has increased 25% from 2004-2008. This group only shows a significant increase in use.

Current Moist Snuff Among Youth Ages 12-17 Years



Data source: U.S. Substance Abuse and Mental Health Services Agency, National Survey on Drug Use and Health, 2002 - 2007

Another major concern is the spread of messages about MLB baseball players through internet social networking sites visited by teenagers on sites such as Facebook. We found many groups on Facebook dedicated to MLB players using smokeless tobacco with a total of thousands of members all extolling the virtues of SLT use. This is alarming. Below are typical list of quotes from this site.

Quotes from Facebook, Baseball and Chew Clubs

Nick: “yo who saw the game 4 of the yank and indians....towards the end the camera guy had damon and jeter...and all u see is damon gettin rid of his bomb..lol”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Matthew: “nothing like a nice fat lip when your playing baseball”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Joe: “Dustin Pedroia packs bombs, so does Youlk they are probaly 2 of the biggest up and coming stars of the red sox”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

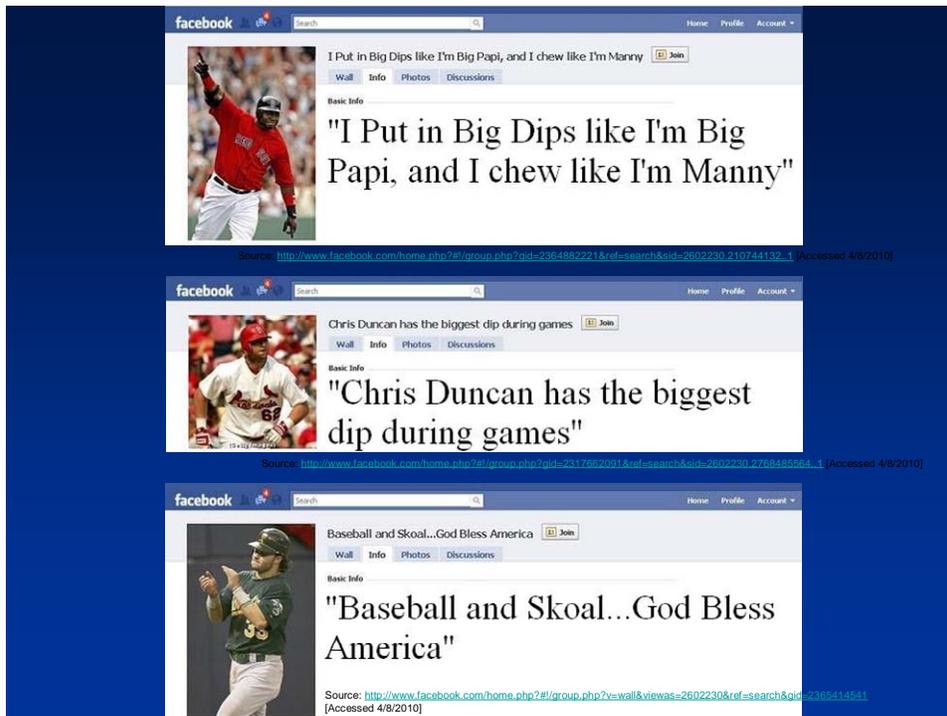
[Accessed 4/12/2010]

Todd: “man threw in my first roofer when i was 11. the best stuff is citris with big league chew or theres always copenhagen with a bit of whisk.”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Travis: “The bigger the dip, the better he plays!!”

Source: <http://www.facebook.com/group.php?v=wall&ref=search&gid=2317662091>
[Accessed 4/12/2010]



(See Appendix for more quotes)



Oral Carcinoma at the Site of SLT Placement

Smokeless Tobacco Use is Incompatible with the Mission of Professional Baseball

Sport is the vehicle by which we pass values down to the young, how to compete, respect your fellow man, and accept winning or losing graciously, but most of all value personal health and fitness. When a professional baseball player uses SLT, condoned by MLB, we do not pass values down, only the potential for future addiction. Leadership is needed now by both the Players Association and MLB to protect not their own interests but the interests of American youth and become true health players for America.

Major League Baseball and the Players are Expecting A Ban on Use and are Ready for It

A major finding from our research is that public use of SLT is declining, but still is unacceptably high. It is being confined to fewer athletes today than 20 years ago. For unknown reasons, these athletes are more heavily using the product and they account for

the bulk of televised exposure. The television cameras seem to be overly focusing on the use of SLT.

I'd like to end my testimony by showing a one minute video I did a few years ago with ABC news on this problem.

(Show Video)

Conclusion

Based on these observations, I feel strongly that the vast majority of professional athletes do not want to use these products on the field, particularly in front of children, but are addicted and a few unwittingly may believe it makes them more appealing on camera. The majority of players do not use the product and the problem is now among a handful of players that only a complete ban could address. I conclude that the athletes are expecting a ban, like the ban on smoking instituted in the 1950s. It is in the interest of the health of the millions of young boys in Little League, Babe Ruth or High School baseball for MLB and the Players Association to step up to the plate and take a lead on oral cancer prevention as they have for other cancers and prevent not foster disease by stopping SLT use on the field.

References

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2. *Beat the Smokeless Habit*, ROW Science MD, 1991, P 1-13.
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4. Jones, R. "Use of Smokeless Tobacco In the 1986 World Series." *New England Journal of Medicine*. 1987; 316(15): 952.
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11. Siegel, D., Benowitz, N., Ernster, V., Grady, D., and Hauck, W. "Smokeless Tobacco, Cardiovascular Risk Factors, and Nicotine and Cotinine Levels in Professional Baseball Players." *American Journal of Public Health*. 1992; 82(3): 417-421.

Appendix

Quotes on Facebook

Phil: "Gotta love Swisher tho. I want him to sign my tin and pack one with him"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Elliott: "im a big fan of citrus i dont know what i would do if i didnt have dip during baseball"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Joe: "Dustin Pedroia packs bombs, so does Youlk they are probaly 2 of the biggest up and coming stars of the red sox"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Donny: "i was at a sox game a while ago and got swishers autograph and he didn't spit for like the whole 20 minutes he was signing autographs now thats a champ"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Todd: "man threw in my first roofer when i was 11. the best stuff is citris with big league chew or theres always copenhagen with a bit of whisk."

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Elliott: "last night my summer team was sitting around in a hotel and 2 kids put in a whole tin at one time and it was the funniest thing ive ever seen"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Derek: "no joke, i got my first rip from chase utley when i was 11..greatest thing that ever happened to me"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Joseph: "ant nothin better than sittin in the duggout with a fatty in hangin out with ur boys"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Nick: "skoal citrus makes the day better lol half the baseball team rocks a dip, of course we just cant get caught by the coach kind of a bummer"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Travis: "The bigger the dip, the better he plays!!"

Source: <http://www.facebook.com/group.php?v=wall&ref=search&gid=2317662091>
[Accessed 4/12/2010]

Miles: “ahh...i put half of my red man big in today during my game...i dedicated it to this great group”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2364882221>
[Accessed 4/12/2010]

Sheldon: “chipper jones pokes his lips and gums with a pin before he lips in and he mashes, so him or swisher is the biggest dipper”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Dustin: “man theres nothin like a big pinch right before the game, during the game, and after on the way home haha....helps me drop bombs...it was mine and pres' JUICE haha”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2364882221>
[Accessed 4/12/2010]

Kyle: “Chris Duncan=Best Dipper in Baseball”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Jordan: “how old was everyone when they first threw in a hammer? i was 13!”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Christian: “u gotta like the redman chew and dubble bubble mix that francona does too”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Rob: “dustin pedroia paks bigga bombs then ne one on the field”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Nick: “i have a poster of bonds with a lipper in his mouth and a tin in his back pocket hittin a ball now thats talent lol”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Mark: “the cool thing is that my coach doesnt even care...we pack the biggest bombs right in front of him and he doesnt say anything”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Nick: “watermelon?! damn that should be good...but does it keep the flavor and buzz goin? thats key”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Corey: “yo if u play baseball u gotta love paking dips i love kayak grape”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Ryan: "baseball and skoal make the best combo out there. a nice lip of spearmint while taking bp, theres nothing better"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Patrick: "hahah ya he does i was watcihng a sox game and after he hit a homrun he went to the dug out and packed him slef a nice lip of skoal"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Cameron: "Hurray Dip! I've got a fatty in right now before I go to class. Now only if I was watching a ballgame.

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Drew: "Troy Glaus hands down throws in the biggest daggers. And whenever its a rookie pitcher starting he throws in an extra big one for intimidation factors."

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Nick: "yo who saw the game 4 of the yank and indians....towards the end the camera guy had damon and jeter...and all u see is damon gettin rid of his bomb..lol"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Joe: "i saw a sox game a couple monthes back, beckett was pitchin and he was sittin in the dugout and all he was doin was takin a bomb out, and donnaly was also doin an interview with Nesn in the locker room in his locker was protein and a straight tin it was sick"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

RJ: "ill dip anything skoal..i just had the new skoal edge, gives a great buzz!!!"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Nick: "sitting in the bullpen the other day with a big league chew of grape bubbleicious and levi, it occurred to me that skoal should come out with grape dip.... yeah? no?"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Matthew: "nothing like a nice fat lip when your playing baseball"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Cory: "how is dustin pedroia in this group he packs an atomic bomb that could blow up all of japan every game"

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>
[Accessed 4/12/2010]

Dustin: “who would ever thought johnny damon dips lol saw him spittin out a fatty over the rail in the dugout it was hilarious haha”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2364882221>

[Accessed: 4/12/2010]

Joseph: “josh hamleton ive never seen him without one in ever”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Drew: “Common guys, have you ever seen a Brewers Game? Prince takes the cake on this award. At least a quarter of a tin everytime he is up to bat”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Dean: “Im gonna hav to second Josh Beckett. he always has a tin in his pocket a nice big lip in”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Jason: “chipper jones is the best dipper”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Justin: “If you're not playing baseball, the best place to pack a fatty is definitely in the car. “

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]

Nick: “Baseball season is here baby, and skoal straight is still the only way to roll”

Source: <http://www.facebook.com/home.php?#!/group.php?v=wall&ref=search&gid=2365414541>

[Accessed 4/12/2010]