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1 **VII. Youth Smoking Prevention**

2 **Q: Dr. Biglan, what other topics have you addressed in this case?**

3 A: I reviewed the effectiveness of the tobacco companies' youth smoking prevention
4 activities.

5 **Q: What do Defendants claim in this litigation about their youth smoking prevention**
6 **activities?**

7 A: According to their July 1, 2004 Findings of Fact at Chapter 6, pages 75-81, Defendants
8 claim that "the tobacco industry and individual Defendants have sponsored and/or
9 implemented programs aimed at preventing or reducing youth smoking" such as the
10 Tobacco Institute's "It's The Law" and "We Card" programs and "[t]hroughout the
11 1990s, the Tobacco Institute also developed educational programs designed to further
12 prevent youth smoking." Defendants further claim they "have buttressed the Tobacco
13 Institute's youth smoking prevention programs by instituting or sponsoring additional
14 programs and initiatives." Defendants' Final Proposed Findings of Fact (R. 3416; filed
15 July 1, 2004) at Chapter 6, ¶¶ 180-185

16 **Q: Have you concluded whether the evidence supports these claims?**

17 A: I have concluded that most of the tobacco companies' youth smoking prevention
18 activities are not effective in reducing youth smoking and that a major purpose of the
19 companies' youth smoking prevention activities is the prevention of restrictions on the
20 companies' marketing.

21 **Q: How did you conduct your analysis?**

22 A: I assessed the effectiveness of the tobacco companies' youth smoking prevention
23 activities by reviewing research literature on the prevention of adolescent tobacco use and

1 evaluating the tobacco companies' specific activities in light of what research shows is
2 likely to reduce the prevalence of adolescent smoking.

3 **Q: What tobacco company materials have you reviewed?**

4 A: I reviewed the tobacco companies' youth smoking prevention materials and depositions
5 of the tobacco company employees who are responsible for youth smoking prevention
6 activities, including Carolyn Levy, Philip Morris Senior Vice President, Youth Smoking
7 Prevention from 1998 to 2002; Howard Willard, current Philip Morris Vice President,
8 Youth Smoking Prevention; Steve Watson, Lorillard Vice President External Affairs and
9 head of their youth smoking prevention activities; and Claudia Newton, Brown &
10 Williamson Vice President for Corporate Responsibility and Youth Smoking Prevention
11 from 1997 to 2001.

12 **Q: Do Defendants publicize their youth smoking prevention activities?**

13 A: Yes.

14 **Q: What is the purpose behind their public statements?**

15 A: The tobacco companies' youth smoking prevention activities appear to be motivated by a
16 desire to prevent marketing restrictions and to improve the industry's public image. This
17 is shown by the documents I cite in Demonstrative 22.

18 *A: School-Based and Community Prevention Programs*

19 **Q: What is a school-based smoking prevention program?**

20 A: These are programs conducted in adolescents' classrooms. Most, though by no means
21 all, take place in grades seven through nine. The programs shown to be effective in
22 preventing adolescent smoking focus on sensitizing young people to influences that
23 encourage smoking (including social influences, tobacco company marketing practices,

1 and media influences), teaching them skills for resisting influences to smoke through
2 modeling and role-play practice, and correcting the perception that more young people
3 smoke than actually do. Comprehensive programs, such as Life Skills Training, more
4 generally assist adolescents in developing the skills needed to be successful in school, at
5 home, and with peers.

6 **Q: Would you describe the Life Skills Training program?**

7 A: Life Skills Training is a specific classroom-based program developed by Dr. Gilbert
8 Botvin at Cornell University Medical School. It is probably the most extensively
9 evaluated school-based prevention program developed to date. Designed to begin in
10 seventh grade, Life Skills Training teaches social and problem-solving skills that focus
11 on decision-making, resisting media influences, coping with negative affect, managing
12 one's own behavior, communicating effectively with others, behaving appropriately in
13 situations that require assertiveness, and resisting peer pressure to smoke or use drugs or
14 alcohol. Youth also receive information about consequences and social acceptability of
15 drug and/or tobacco use. Thus, the intervention focuses on altering social norms and
16 provides extensive teenage skill building. The intervention typically takes 15 sessions
17 that include instruction, modeling, role-plays and feedback, and between-session tasks to
18 complete. Booster sessions (10 in 8th grade and 5 in 9th grade) supplement the initial
19 intervention delivered in seventh grade. A peer-reviewed paper describing this program
20 is listed in Demonstrative 23 as Botvin, 1996 (U.S. Exhibit 73,224; VXA1810091-0097).

21 **Q: What are “empirically validated” school-based prevention programs?**

1 A: By empirically validated programs, I mean those shown in randomized controlled trials to
2 produce a significantly greater reduction in the prevalence of adolescent smoking than
3 was produced by either no program or some alternative program.

4 **Q: What do you mean by a randomized controlled trial?**

5 A: A randomized controlled trial is an experiment in which researchers randomly assign
6 cases to receive one of two or more interventions and then compare the impact of the
7 interventions. This procedure has become a standard and widely accepted method of
8 determining the effects of preventive or treatment interventions. For example, typically
9 in the case of the evaluation of school-based smoking prevention programs, schools—by
10 random assignment—receive or do not receive the program. The study then measures the
11 rate of smoking among students in these schools and tests whether the smoking rate is
12 lower in the schools that received the program than in the schools that did not receive the
13 program.

14 **Q: Is it important that school-based prevention programs be empirically validated?**

15 A: Yes. Such evaluations are the best way to determine whether a program works. If
16 schools are not randomly assigned to conditions, schools that receive the program could
17 have a lower smoking prevalence due to pre-existing characteristics of the schools rather
18 than program exposure. For example, the schools could be in a community that happens
19 to have a low smoking rate or they could have students who are more affluent and less
20 likely to smoke.

21 **Q: Have you reviewed studies evaluating the effectiveness of school-based prevention
22 programs?**

23 A: Yes.

1 **Q: What, if anything, do these studies show about the effectiveness of such programs?**

2 A: A number of school-based smoking prevention programs have shown in randomized
3 controlled trials to contribute significantly to preventing adolescent smoking. This peer-
4 reviewed study is cited in Demonstrative 23 as Rooney & Murray, 1996 (U.S. Exhibit
5 73,277). However, it is important to note that the size of the effects of these programs is
6 limited. Even when schools with the program have a lower smoking rate than those
7 schools without it, many adolescents will still begin smoking in program schools.

8 **Q: Are there any long-term follow-up studies on the effectiveness of school-based
9 prevention programs?**

10 A: Although there are only a limited number of long-term follow-up studies, evidence
11 indicates that the most comprehensive approaches, such as Life Skills Training, can
12 produce reductions in smoking rates that last until the end of high school. However,
13 long-term follow-up studies also indicate that, without booster sessions in subsequent
14 years, prevention effects tend to erode over time. This peer-reviewed paper is cited in
15 Demonstrative 23 as Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995 (U.S. Exhibit
16 73,224).

17 **Q: If a program such as Life Skills Training is empirically validated, can we be sure
18 that it will be effective when implemented?**

19 A: Empirical validation does not guarantee that Life Skills Training will be effective when
20 widely disseminated. This is because schools often do not implement the program as
21 carefully or completely as was done in the research studies. For example, Botvin et al.
22 found that the percentage of Life Skills Training materials covered in actual
23 implementation varied from 27 to 97% across classrooms whose teachers had received

1 training. When schools delivered the program poorly, they did not find positive effects.
2 Thus, care in training and monitoring the quality of implementation is essential and
3 ongoing evaluation of the impact of the program on smoking prevalence is necessary.
4 This peer-reviewed paper is cited in Demonstrative 23 as Botvin, Tortu, Baker, &
5 Dusenbury, 1990 (U.S. Exhibit 73,226; VXA1810109-0122).

6 ***1. Philip Morris***

7 **Q: Have any of the Defendants supported school-based prevention programs?**

8 A: Yes, Philip Morris, Brown & Williamson, and R.J. Reynolds have each provided some
9 funding for school-based prevention programs.

10 **Q: What school-based prevention programs does Philip Morris fund?**

11 A: Philip Morris has funded implementation of the Life Skills Training program. According
12 to the current Philip Morris website, “Over the past five years, youth smoking prevention
13 grants have helped school districts in 19 states to provide the Life Skills Training
14 program to more than 550,000 middle school students.” [http://www.philipmorrisusa.com](http://www.philipmorrisusa.com/policies_practices/ysp/grant_programs/in_school_program.asp)
15 [/policies_practices/ysp/grant_programs/in_school_program.asp](http://www.philipmorrisusa.com/policies_practices/ysp/grant_programs/in_school_program.asp), accessed October 18,
16 2004.

17 **Q: What, if any, financial support has Philip Morris provided to evaluate the**
18 **effectiveness of this program?**

19 A: Together with Brown & Williamson, Philip Morris has funded an evaluation of the Life
20 Skills Training program. A document discussed by Dr. Carolyn Levy at her deposition in
21 this case describes the design of that evaluation. According to the document, schools are
22 implementing the program and participating in the assessment. The design calls for
23 annual evaluations of student substance use beginning in grade six and continuing

1 through grade eight. Teachers provide data on the extent of their implementation of the
2 program. These data will enable the study to examine whether fidelity of implementation
3 relates to changes in the prevalence of smoking. As I just stated, assessing fidelity of
4 implementation is important for ensuring the program's success. 2085004204-4406 at
5 4225 (U.S. Exhibit 45,573); Deposition of Carolyn Levy, United States v. Philip Morris,
6 et al., April 25, 2002, 86:14-87:10.

7 **Q: Will this evaluation provide information on the effectiveness of this program?**

8 A: Because the evaluation lacks a true experimental design, its value for determining
9 whether this implementation of the program is effective is limited. 2085004204-4406 at
10 4222 (U.S. Exhibit 45,573).

11 Since schools were not randomized to condition, it will be impossible to tell
12 whether any differences in smoking rates between schools that did receive Life Skills
13 Training and schools that did not are due to the program or to pre-existing differences in
14 schools. Moreover, according to Appendix H of the report, recruitment of control
15 schools has lagged; the authors recruited only 547 individual participants to the control
16 condition (the number of schools involved is not indicated) and there were systematic
17 differences in smoking rate and ethnicity between control and intervention schools.
18 2085004204-4406 at 4402 (U.S. Exhibit 45,573).

19 The authors of the report are correct that evaluation of wide-scale implementation
20 of Life Skills Training is necessary. However, the study as designed and implemented
21 will not provide interpretable information about the effects of the program. Moreover, in
22 his deposition, Mr. Willard indicated that the study had so much attrition that it was
23 impossible to estimate accurately the smoking rates among those who participated in the

1 program. Deposition of Howard Willard, III, United States v. Philip Morris, et al.,
2 August 5, 2004, 213:18-24.

3 **Q: Is it difficult to get schools to agree to be in a control condition?**

4 A: I do not believe it is. At the Oregon Research Institute, we have conducted numerous
5 randomized controlled trials in which classrooms, schools, and even whole communities
6 agreed to randomization to conditions.

7 **Q: Is Philip Morris funding other school or community smoking prevention activities?**

8 A: Yes, it is. On its website, Philip Morris describes Positive Youth Development activities
9 that it funds. According to Philip Morris, the notion behind Positive Youth Development
10 is that surrounding young people “with positive messages and positive influences” and
11 “enhancing their personal strengths and enabling them to resist risky behaviors” will
12 provide “the foundation for developing and shaping attitudes, behaviors and skills that
13 enable children to become socially, emotionally and physically competent and
14 successful.” www.philipmorrisusa.com/policies_practices/ysp/our_approach.asp#,
15 accessed December 22, 2004.

16 **Q: Is there empirical evidence that Positive Youth Development programs can prevent
17 adolescent smoking?**

18 A: I know of no evidence that they can prevent adolescent smoking. Although the idea that
19 promoting Positive Youth Development can prevent smoking is plausible, empirical
20 evidence for the value of Positive Youth Development strategies in preventing smoking is
21 lacking. The difficulty is that such programs typically reach and involve young people
22 who are at relatively low risk for problem behavior. Indeed, many such programs

1 exclude high-risk young people. This report is cited in Demonstrative 23 as National
2 Research Council & Institute of Medicine, 2002 (U.S. Exhibit 73,258).

3 Thus, while Positive Youth Development strategies are likely to seem valuable to
4 community members and may have some genuine benefit for some young people, there
5 is, thus far, no evidence that they reach and change the motivation to smoke of those at
6 greatest risk to become smokers. Although the funding of such programs may improve
7 the image of Philip Morris, on current empirical evidence, they are unlikely to affect
8 adolescent smoking.

9 **Q: Can you give an example of a Positive Youth Development program that Philip**
10 **Morris is supporting?**

11 A: Yes, I can. Philip Morris has provided funding to the National 4-H council to develop
12 and evaluate “Health Rocks.” The National 4-H Council website indicates that the
13 program is designed “to help youth, ages 8-12 develop life skills, with a special emphasis
14 on youth smoking prevention.” [http://www.healthrocks.org/resource/showquestion.asp?](http://www.healthrocks.org/resource/showquestion.asp?fldAuto=33&fid=14)
15 [fldAuto=33&fid=14](http://www.healthrocks.org/resource/showquestion.asp?fldAuto=33&fid=14), accessed December 21, 2004.

16 **Q: How many young people has the program reached?**

17 A: According to its website, Philip Morris has reached “more than 30,000 kids,” though the
18 website does not provide information about the age or risk status of these young people.
19 http://www.philipmorrisusa.com/en/policies_practices/ysp/grant_programs/nonschool_ho
20 [ur_program.asp](http://www.philipmorrisusa.com/en/policies_practices/ysp/grant_programs/nonschool_ho), accessed December 21, 2004.

21 **Q: Has the program been evaluated?**

22 A: According to the 4-H website, the program was evaluated by “three independent firms”
23 during the first year of its implementation. The website states,

1 The overall evaluation assessed the effectiveness of the program at
2 affecting young people's attitudes, intentions, and behaviors about the use
3 of tobacco products. Through the evaluation process, National 4-H
4 Council learned that the age of youth participants should be lowered from
5 10-14 years to 8-12 years. The evaluation also showed a need for the
6 program to focus more on life skills in general, not just tobacco use
7 prevention.

8 <http://www.healthrocks.org/resource/showquestion.asp?fldAuto=33&id=127&fid>

9 [=14](#), accessed December 21, 2004. Howard Willard also testified at his

10 deposition in this case that a study conducted by Richard Lerner, a developmental

11 psychologist, evaluated the program. Deposition of Howard Willard III, United

12 States v. Philip Morris, et al., August 5, 2004, 150:20-151:6. I spoke with Dr.

13 Lerner's colleague, Jacqueline Lerner, the scientific director of the study. She

14 said they are tracking about 3,000 fifth and sixth graders and assessing them

15 repeatedly until they are in at least ninth grade. Some of these young people have

16 participated in the Health Rocks program. Information about each young person's

17 participation in this and other 4-H programs is being obtained and the researchers

18 will analyze whether those who participate in programs are more likely to develop

19 positive behaviors and less likely to develop problem behaviors, including

20 smoking.

21 **Q: Will this study allow Philip Morris to know if the Health Rocks program is**
22 **preventing adolescent smoking?**

23 A: It might or might not show that those who participate in Health Rocks are less likely to
24 become smokers. However, because the study is not a randomized controlled trial, the
25 ability to judge whether participation influenced adolescent smoking will be limited.

26 **Q: Why is that?**

1 A: As I testified earlier, a randomized controlled trial would allow Philip Morris to know
2 whether Health Rocks made a difference in adolescent smoking, while controlling for any
3 other differences between those who received the program and those who did not.
4 Without such an experimental control, the study may find that those who received Health
5 Rocks were smoking less in ninth grade than those who did not receive Health Rocks.
6 However, it is possible that could happen because the young people who participated in
7 Health Rocks were already less likely to smoke than those who did not receive the
8 program. For example, without random assignment, wealthier communities or those
9 taking other steps to prevent smoking may be more likely to implement the program.

10 It is also noteworthy that the age of the young people targeted by the program
11 dropped from those 10 to 14 to those 8 to 12 years of age. This means that the program
12 now does not target young people in the age range at which the largest proportion of
13 adolescents begin smoking. This report is cited in Demonstrative 23 as U.S. Department
14 of Health & Human Services, 1994 (U.S. Exhibit 64,693).

15 **Q: Is there any other information that bears on the effectiveness of the Health Rocks**
16 **program?**

17 A: The program takes place outside of school in multiple sessions. Such voluntary after-
18 school programs will reach only a subset of young people who may not be at greatest risk
19 to smoke. Additionally, even if they did volunteer for the program, young people at risk
20 to smoke could be expected to miss more sessions and be less likely to complete the
21 program than those young people not at risk to smoke.

22 No information is provided about the characteristics of the 30,000 young people
23 whom the program is said to have reached, but given that about a quarter of adolescents

1 smoke, this program may reach only about 7,500 teenage smokers http://www.pmus.com/policies_practices/ysp/youth_smoking_rates.asp.

3 **2. Lorillard**

4 **Q: Does Lorillard fund any school or community youth smoking prevention programs?**

5 A: In spring 2002, Lorillard described a program called “Making it H.I.P. Not to Smoke.”
6 <http://www.2take10.com/youth/reaching-kids.html>. However, that website is no longer

7 accessible. The program consisted of scholarship programs and other cash awards.

8 According to the website, Lorillard gave “10 \$10,000 scholarships to teens who don’t

9 smoke and are committed to extracurricular and academic achievement.” There were

10 \$5,000 prizes for an essay contest and five \$10,000 grants intended to encourage “kids to

11 partner with community organizations to develop local youth smoking prevention

12 programs.” The awards totaled \$155,000 per year.

13 **Q: Has anyone evaluated contests with prizes for not smoking as a means of preventing**
14 **adolescent smoking?**

15 A: Yes, I am aware of one study that evaluated media advertisements and a contest to
16 prevent adolescent smoking. Dr. Karl Bauman at the University of North Carolina,
17 School of Public Health, conducted that study. This peer-reviewed paper is cited in
18 Demonstrative 23 as Bauman, LaPrelle, Brown, Koch, & Padgett (1991).

19 **Q: What was the result of that study?**

20 A: Dr. Bauman and his colleagues did not find that their media interventions with a contest
21 deterred adolescent smoking. It is important to note, this was a well-designed and
22 carefully implemented randomized control trial with multiple standard metropolitan
23 statistical areas randomly assigned to conditions.

1 3. **Brown & Williamson**

2 **Q: What school-based prevention programs does Brown & Williamson fund?**

3 A: In 1999, Brown & Williamson gave a grant to the Jaycees. The \$232,750 grant paid for
4 members to “offer 6th grade science and health teachers a five-day interactive program
5 for preventing underage smoking.” The program identifies the health risks of smoking,
6 teaches facts about second-hand smoke, describes ways to deal with peer pressure to
7 smoke, and offers cessation advice. http://www.brownandwilliamson.com/index_sub2.cfm?Page=/YSPC/Index.cfm?ID=12,
8 accessed December 21, 2004.

9 **Q: Would the components of this program lead you to conclude that it would be
10 effective in reducing youth smoking?**

11 A: I would generally not judge a program based simply on its stated content. Rather, I
12 would want to see the results of an experimental evaluation. However, this program does
13 not contain the components generally contained in empirically validated programs. Other
14 than the inclusion of a focus on social influences, it is not clear that the program is
15 consistent with the eight desiderata for effective prevention programs that Brown &
16 Williamson cited from the 1994 Surgeon General Report. http://www.brownandwilliamson.com/index_sub2.cfm?Page=/YSPC/Index.cfm?ID=25&Sect=3,
17 accessed December
18 21, 2004. For example, the program consists of only one—not two—sets of five sessions
19 and it is not clear that it is being incorporated into the existing curriculum.

20 **Q: How widely is this program being implemented?**

21 A: According to Beverly Molyneux (Director of Communications for the U.S. Jaycees)
22 whom I contacted by telephone on April 25, 2002, 241 schools participated in the
23 program in 2000, 447 in 2001, and 123 schools were expected to participate in 2002.

1 **Q: Has anyone experimentally evaluated the program?**

2 A: Apparently not. A 1999 Jaycees press release about the program indicates that
3 researchers tested it in six Tulsa area schools. Initial results “show a marked increase in
4 the awareness of the dangers of smoking.”

5 http://www.brownandwilliamson.com/index_sub2.cfm?Page=/

6 [YSPC/Index.cfm?ID=11&Sect=4](http://www.brownandwilliamson.com/index_sub2.cfm?Page=/YSPC/Index.cfm?ID=11&Sect=4), accessed December 21, 2004. However, simply

7 showing that young people exposed to the program had an increased awareness of the

8 dangers of smoking is insufficient to determine whether the program affected adolescent

9 smoking. Measuring the impact of such a program by randomly assigning students,

10 classrooms, or schools to receive or not receive the program and comparing the actual

11 smoking rates between the two conditions has been the standard for the evaluation of

12 smoking prevention programs for at least 25 years. Thus, the evidence offered is far from

13 adequate for concluding the program will actually deter smoking.

14 **Q: Has Brown & Williamson funded any other youth smoking prevention activities?**

15 A: The Brown & Williamson website indicates that the company has given a grant to

16 Jefferson County, Kentucky to implement the Life Skills Training program.

17 http://www.brownandwilliamson.com/index_sub2.cfm?Page=/YSPC/Index.cfm?ID=35&

18 [Sect=3](http://www.brownandwilliamson.com/index_sub2.cfm?Page=/YSPC/Index.cfm?ID=35&Sect=3), accessed December 21, 2004.

19 **Q: Has this program had an effect on youth smoking?**

20 A: As I noted above, there is considerable evidence of the efficacy of the program when

21 fully implemented and delivered by classroom teachers. However, in Jefferson County,

22 police officers are implementing it. There is no empirical evidence that those police

23 officers have the training to implement it effectively.

1 4. R.J. Reynolds

2 **Q: What school-based prevention programs does R.J. Reynolds fund?**

3 A: R.J. Reynolds is implementing Right Decisions, Right Now, which includes a seven-unit
4 curriculum: “1) decision skills, 2) assessing consequences of decisions, 3) refusal
5 techniques, 4) values, 5) conflict resolution, 6) responsibility, and 7) I Quit Smoking
6 Now.” http://www.rightdecisionsrightnow.com/educators_new/about.asp, accessed
7 December 23, 2004.

8 Review of these materials indicates that the first six units seldom mention
9 cigarette smoking. Unlike empirically supported smoking prevention programs (e.g.,
10 Botvin, 2000; U.S. Exhibit 73,225; VXA1810098-0108), this program does not cover the
11 harmful health effects of smoking nor does it seek to sensitize students to the marketing
12 practices of tobacco companies. The program also does nothing to alter students’
13 perceptions that more young people smoke than actually do, a program component shown
14 to affect adolescent smoking initiation. This peer-reviewed paper is cited in
15 Demonstrative 23 as Hansen, 1992 (U.S. Exhibit 73,247).

16 The Right Decisions, Right Now website describes three videos that it says R.J.
17 Reynolds has distributed to middle and junior high schools. Two of these apparently
18 model and advocate skills for resisting peer pressure. Right Decisions, Right Now
19 includes a set of wall posters that, according to the website:

20 ... challenge the perception that smoking will enhance a child's image or
21 gain him or her improved social status among peers. These posters serve
22 as constant reminders that smoking does not make youth look cool or fit in
23 with their peers.

24 www.rightdecisionsrightnow.com/educators_new/posters.asp, accessed online

25 October 18 & December 21, 2004.

1 R.J. Reynolds displayed these posters in
2 a variety of settings, including the Six Flags
3 theme parks, in 1993 and 1995 and at the 278
4 Aladdin's Castle video game arcades in 1994.

5 http://www.rightdecisionsrightnow.com/educators_new/about.asp
6 On this page is one of the
7 fifteen posters currently available.



8 **Q: Has R.J. Reynolds evaluated the program?**

9 A: I could find no evidence that R.J. Reynolds
10 evaluated the program or funded its evaluation.

11 **Q: Is there any evidence that wall posters can prevent adolescent smoking?**

12 A: There is no evidence that wall posters will affect adolescent smoking initiation. Given
13 the curriculum content, there is little reason to believe the program will deter young
14 people's smoking. If the website is accurate, that R.J. Reynolds distributed the program
15 to 90% of the middle and high schools in the U.S., it may be supplanting empirically
16 validated programs likely to be more effective. http://www.rightdecisionsrightnow.com/educators_new/about.asp,
17 accessed December 22, 2004.

18 **Q: Does R.J. Reynolds fund any other programs to prevent adolescent tobacco use
19 through schools or community organizations?**

20 A: The Right Decisions, Right Now website lists a number of special programs it is
21 conducting. http://rightdecisionsrightnow.com/leaders_new/programs.asp#ysl, accessed
22 December 22, 2004. These include:

- 1 • A Miss States Program. “As a part of the program, Miss Virginia made special
2 appearances at middle- and junior-high schools throughout Virginia to discourage
3 youth smoking.”
- 4 • A Boy Scouts Pilot Program, “in partnership with the Old Hickory Council, Boy
5 Scouts of America to reinforce the importance of good decision-making skills for
6 youth, including the decision to not smoke.”
- 7 • The Partners with Youth Sports Foundation, which includes “a baseball training
8 program to reach at-risk youth with a positive message” in Tampa, Florida,
9 Washington, D.C., and New York City.
- 10 • In Winston-Salem, North Carolina, Right Decisions, Right Now materials are
11 used as components for discussions on tobacco, alcohol and drugs as part of the
12 Urban League’s Project S.E.L.F. Enrichment Life Focus (S.E.L.F.) program.”
- 13 • Distribution of Right Decisions, Right Now posters through America’s baseball
14 camps. The “organization uses a poster designed by RDRN and signed by
15 professional athletes/instructors at the camps as a lasting memento of their camp
16 experience.”

17
18
19 **Q: Has there been an evaluation of these programs?**

20 A: I could find no evidence that anyone has evaluated them.

21
22 **Q: Would it be difficult to evaluate these programs?**

23 A: It would be relatively easy to evaluate many of them. For example, attendees at the
24 baseball camps could, by random assignment, receive or not receive posters, and they
25 could complete follow-up measures of their smoking behavior to show if receipt of the
26 poster led to a lower prevalence of smoking.

27 **Q: In summary, what have you concluded about the effectiveness of the school and
28 community programs funded by the Defendants in reducing adolescent smoking?**

29 A: The only program for which there is empirical evidence citing its efficacy is Life Skills
30 Training, which some of the tobacco companies are funding. The evidence indicates that,
31 if implemented properly, Life Skills Training can lower the prevalence of adolescent
32 smoking. However, as Dr. Botvin’s research shows, and those who have evaluated the
33 program for Philip Morris and Brown & Williamson emphasize, the effectiveness of Life

1 Skills Training is contingent upon proper implementation. The evaluation the companies
2 are conducting will not determine whether implementation is effective because schools
3 were not randomly assigned to receive or not receive the program.

4 Research at the Oregon Research Institute and my own experiences working with
5 the Oregon Tobacco Prevention and Education Program have shown that organizations
6 typically do not implement Life Skills Training with fidelity and that schools often
7 discontinue using the program after adopting it. Thus, evidence of the implementation of
8 Life Skills Training in multiple schools is not, by itself, an adequate basis for evaluating
9 whether the program affects adolescent smoking behavior.

10 An effective evaluation of the other programs funded by the tobacco companies
11 requires an assessment of the smoking rate among adolescents and randomized controlled
12 trials comparing the effects on adolescent smoking of being exposed or not exposed to
13 these programs. As far as I can tell, none of the other school-based, curricular, or
14 community prevention programs supported by the tobacco companies has included such
15 experimental evaluation. Moreover, as I have testified, existing evidence raises concerns
16 that these programs are unlikely to be effective.

17 **B. Defendants' Media Campaigns**

18 **Q: Have you reviewed empirical literature evaluating the effectiveness of youth**
19 **smoking prevention media campaigns?**

20 A: Yes, I have.

21 **Q: What does the empirical literature show about the effectiveness of media campaigns**
22 **directed at preventing adolescents from smoking?**

1 A: Evidence on the effects of media campaigns on adolescent smoking is mixed. One
2 randomized controlled trial evaluating a media campaign that focused on countering the
3 social influences to smoke reduced adolescent smoking. This peer-reviewed paper is
4 cited in Demonstrative 23 as Flynn, Worden, Secker-Walker, Badger, Geller, &
5 Costanza, 1992. 508418484-8491 (U.S. Exhibit 51,373).

6 However, two other randomized trials failed to find effects. These peer-reviewed
7 papers are cited in Demonstrative 23 as Bauman, LaPrelle, Brown, Koch, & Padgett,
8 1991 (VXA1810039-0046; U.S. Exhibit 73,219) and Flay, Hansen, Johnson, & Collins,
9 1987 (VXA1810184-0199 at 0197; U.S. Exhibit 73,241).

10 There is also research on the effects of specific anti-tobacco media advertisements
11 on adolescents' attitudes and intentions to smoke.

12 **Q: What does that literature show?**

13 A: In a peer-reviewed publication, Pechmann, Zhao, Goldberg, and Reibling (2002) describe
14 a study of the impact of seven different types of anti-smoking messages on adolescents'
15 intentions to smoke. They randomly assigned 788 7th graders and 879 10th graders to see
16 a set of eight advertisements from one of seven different message types and then assessed
17 students' intentions to smoke. They found that three types of messages affected
18 adolescent intentions to smoke. Advertisements emphasizing the deleterious effects of
19 smoking on families affected youthful intentions to smoke, as did advertisements that
20 emphasized "negative life circumstances" – those portraying young smokers as being
21 unable to achieve popularity, sophistication, and success. The third type of advertisement
22 affecting intentions to smoke included those that depicted attractive individuals
23 vehemently refusing to smoke. Subsequent analyses of the data indicated that all of the

1 effective advertisements involved communicating that adolescent smoking is socially
2 unacceptable. This peer-reviewed paper is cited in Demonstrative 23 as Pechmann,
3 Zhao, Reibling, & Goldberg, 2002 (U.S. Exhibit 73,411).

4 **Q: Overall, what does the empirical evidence show about whether media campaigns**
5 **targeting adolescents will prevent adolescent smoking?**

6 A: Given existing evidence, it would be a mistake to simply assume that an anti-smoking
7 advertisement campaign directed at young people will deter smoking. For example,
8 Pechmann (2001) concluded:

9 There is evidence that anti-smoking advertising can help deter
10 adolescents from smoking cigarettes but, to date, all of the evidence is
11 indirect. Also, research seems to suggest that certain types of
12 advertising messages work better than others but additional studies
13 must be conducted before any definitive conclusions can be drawn.

14
15 This paper is cited in Demonstrative 23 as Pechmann, 2001 (U.S. Exhibit
16 73,263; VXA1810365-0403).

17 **Q: What would be required to identify media campaigns that are effective in**
18 **preventing adolescent smoking?**

19 A: Each campaign needs experimental evaluation—not with focus groups but with two types
20 of randomized controlled trials. The first type of trial would consist of copy testing, in
21 which adolescents, by random assignment, see or do not see the advertisement under
22 evaluation. (Alternatively, they might be assigned to see different advertisements.) Next,
23 the groups would assess effects of the advertisements on rated intentions to smoke and
24 attitudes relevant to tobacco use. Such tests do not prove that the advertisements will
25 affect actual smoking, but they would assess whether the advertisements affect these
26 well-established precursors of smoking.

1 The second type of evaluation should involve randomizing communities or
2 standard metropolitan statistical areas to receive or not receive an advertising campaign,
3 measuring adolescent smoking prevalence before the campaign and for several years
4 during and after the campaign, and assessing whether the communities receiving the
5 campaign have a lower prevalence of smoking due to the campaign. Another method is
6 to employ an interrupted time-series design in which, after repeated assessments of
7 smoking, researchers introduce a campaign in one community or standard metropolitan
8 statistical area at a time and the impact of the campaign on adolescent smoking
9 prevalence is assessed subsequent to the campaign's introduction. A peer-reviewed paper
10 describing this type of design is cited in Demonstrative 23 as Biglan, Ary, & Wagenaar,
11 2000.

12 **Q: Have any Defendants conducted national youth smoking prevention media**
13 **campaigns?**

14 A: Yes, Philip Morris, Lorillard, and R.J. Reynolds have run televised national youth
15 smoking prevention media campaigns.

16 **Q: Did you review materials relating to these campaigns?**

17 A: Yes.

18 **Q: Do Defendants direct their youth smoking prevention media campaigns at a**
19 **particular age group?**

20 A: Yes, each company directs its anti-smoking media to young adolescents. The Philip
21 Morris media campaign targets 10-14-years-old. Deposition of Jeanne Bonhomme
22 United States v. Philip Morris et al. February 28, 2002 at 298:8-13.

1 As I described above, the Philip Morris Health Rocks program previously targeted
2 10 to 14-year-olds, but now targets 8 to 12-year-olds.

3 Lorillard targets 10 to 15-year-olds. Deposition of Steven Craig Watson, United
4 States v. Philip Morris et al., April 2, 2002, 161:12-22.

5 R.J. Reynolds targets 12- to 15-year-olds. 512023864-3877 at 3866 (U.S. Exhibit
6 66,492).

7 I could not find an explicit statement about the age of the target group for Brown
8 & Williamson's media campaign, but, as described below, several of its activities target
9 children and early adolescents.

10 **Q: What, if any, information have the Defendants collected on the effectiveness of**
11 **targeting adolescents of different ages?**

12 A: According to a peer-reviewed study, Young and Rubicam conducted research for Philip
13 Morris in 1992 showing that advertisements could be less effective with 15 to 17 year-
14 olds than 12 to 14 year-olds. This peer-reviewed paper is cited in Demonstrative 23 as
15 Landman, Ling, and Glantz, 2002 (U.S. Exhibit 73,365).

16 **Q: What, if any, limitations are there to directing smoking-prevention media**
17 **campaigns to early adolescents, aged 10 to 14?**

18 A: Campaigns that target only younger adolescents fail to take advantage of an opportunity
19 to prevent adolescent smoking among older adolescents. A study by Gilpin, Choi, Berry,
20 and Pierce (1999) estimated that each day more than 1,600 young people, ages 15
21 through 17, begin experimenting with cigarettes and that about 3,158 from ages 11 to 14
22 begin experimenting. The peer-reviewed paper describing this study is cited in
23 Demonstrative 23 as Gilpin, Choi, Berry, & Pierce, 1999 (U.S. Exhibit 73,245).

1 Thus, about one third of experimentation begins during these later years. Each
2 day, about 1,250 young people become established smokers (more than 100 cigarettes in
3 their lifetime) at ages 15 through 17, while about 725 become established smokers at ages
4 11 through 14. This means that nearly two thirds of adolescents who smoke become
5 established smokers in the later age range. These numbers are far from insignificant.
6 Directing anti-smoking media only to younger adolescents misses a good opportunity to
7 prevent adolescent smoking.

8 1. **Philip Morris**

9 **Q: What nationally televised youth smoking prevention media campaign has Philip**
10 **Morris run?**

11 A: Philip Morris developed and broadcast a youth smoking prevention media campaign
12 directed at 10 to 14 year olds and entitled “Think. Don’t Smoke.” Counsel for the
13 Defendants indicated that Philip Morris began running the ads in December of 1998. Its
14 budget for broadcast advertising was about \$60 million in 2000 and 2001. However, in
15 2002 the company discontinued the campaign but increased spending on advertising
16 directed at parents. Deposition of Carolyn Levy, United States v. Philip Morris, et al.,
17 April 25, 2002, 96:12-13, 256:7-257:3; Deposition of Howard Willard III, United States
18 v. Philip Morris, et al., August 5, 2004, 98:16-100:24.

19 **Q: Did you review the media advertisements directed at adolescents?**

20 A: Yes, I did.

21 **Q: What, if any, evaluation has Philip Morris conducted on the effectiveness of its**
22 **media campaign on reducing youth smoking?**

1 A: Philip Morris has tested its youth-targeted media campaign in focus groups and mall
2 intercept studies, but it has not evaluated its impact on actual smoking or even intentions
3 to smoke. For example, in her deposition in this case, Jeanne Bonhomme, then Director
4 of Youth Smoking Prevention Research, testified that Philip Morris's Tobacco Attitude
5 and Behavior Survey study does not evaluate whether Philip Morris advertisements affect
6 the incidence of youth smoking. Deposition of Jeanne Bonhomme, United States v.
7 Philip Morris, et al., February 28, 2002, 324:24-325:3.

8 Similarly, Dr. Carolyn Levy testified in her deposition in this case that the
9 specific effects of their advertisements on adolescent smoking could not be evaluated.
10 Deposition of Carolyn Levy, United States v. Philip Morris, et al., April 25-26, 2002,
11 304:6-17. This testimony is not consistent with the fact that numerous experimental
12 evaluations of smoking prevention interventions, including media campaigns, have been
13 conducted and published. Indeed, in her testimony Dr. Levy cited a number of these
14 studies. Deposition of Carolyn Levy, United States v. Philip Morris, et al., April 25-26,
15 2002, 113:16-114:5.

16 Christina Hollis, Youth Smoking Prevention Research Analyst, discussed an
17 exhibit at her deposition that explains that Philip Morris conducted a random digit dialing
18 phone survey of people ages 10 to 17 to assess whether they were being reached by the
19 Philip Morris advertisements. 2083760311-0465 at 312-13 (U.S. Exhibit 45,565);
20 Deposition of Christina Hollis, United States v. Philip Morris, et al., February 15, 2002,
21 226:14-233:17.

22 Not surprisingly, the reach and frequency for these advertisements was high.
23 However, comparisons between the 10 to 17 year-olds who saw the advertisements and

1 those who did not indicated that those who reported seeing the advertisements were not
2 significantly different from the 10 to 17 year-olds who did not see them on a measure of
3 whether not smoking was the "right decision." 2083760311-0466 (U.S. Exhibit 45,565).

4 **Q: Is there other testimony that informs your conclusions?**

5 A: Yes, Mr. Willard testified about the impact of the Philip Morris youth-targeted media
6 campaign on adolescent intentions to smoke. He testified that he was aware of "...one
7 study that was published by Matthew Farrelly et al., that I think used intention to smoke
8 as one of its variables." Deposition of Howard Willard III, United States v. Philip
9 Morris, et al., August 5, 2004 at 178:15-17. He also testified that "...both the 'Truth' and
10 'Think. Don't Smoke' awareness variables had a relatively small impact on the ultimate
11 intent to smoke, and that there were other variables in the model which were much larger
12 in their impact on future intent to smoke." Deposition of Howard Willard III, United
13 States v. Philip Morris, et al., August 5, 2004 at 226:6-10.

14 **Q. How does this testimony inform your conclusions?**

15 A: The study discussed by Mr. Willard is a peer-reviewed study published in the American
16 Journal of Public Health. The study found that "...exposure to 'Think. Don't Smoke'
17 was associated with an *increase* in the odds of youths' intending to smoke in the next
18 year ($p < .05$)..." and that "greater exposure to the campaign was associated with higher
19 levels of intention to smoke." A peer-reviewed paper on this study is cited in
20 Demonstrative 23 as Farrelly, Healton, Davis, Messeri, Hersey, and Haviland, 2002
21 (JD065578).

22 This study falls short of a randomized controlled trial of the impact of these
23 campaigns and Mr. Willard is correct that the relationships between campaign exposure

1 and smoking intention are relatively small. However, the results are certainly not
2 evidence that “Think. Don’t Smoke” is preventing smoking and, to the contrary, they
3 suggest that the campaign may be having a deleterious effect on youth smoking.

4 **Q: Does Philip Morris use experimental methods to evaluate whether its youth smoking
5 prevention activities reduce youth smoking?**

6 A: No, it does not. As I have testified, a common method for comparing the effects of two
7 different programs is to randomly assign cases (people, classrooms, schools, or
8 communities) to the different conditions and compare the impact of each condition. For
9 example, one could compare the impact on adolescent smoking of media spots targeting
10 parents and those targeting adolescents by randomly assigning some communities to get
11 parent spots and others to get adolescent spots and then determining whether the
12 prevalence of smoking declines more in one set of communities than in the other. One
13 might also have a third condition in which communities receive no intervention. In this
14 way, one would be able to assess both the parent media and the adolescent media against
15 a no-intervention control. I could specify numerous variations on this design based on
16 the well-established principles of experimental design.

17 **Q: Does Philip Morris use randomized trials outside the context of determining the
18 effectiveness of its youth smoking prevention activities in reducing youth smoking?**

19 A: Yes. A memorandum discussed at the deposition of Mr. Willard was sent to the Philip
20 Morris USA National Advertising Team from Strategy One. It is dated August 5, 2002
21 and describes the results of a mall intercept study in which the opinions of parents,
22 members of the general public, and “opinion elites” were assessed before and after
23 reviewing, either a brochure that focused on the need to talk to young people about not

1 smoking, or one that described Philip Morris's website. The advertising team defined
2 "opinion elites" as those between 35 and 64 who earn at least \$100,000 per year and have
3 at the minimum a college education. In the study, participants' ratings of whether Philip
4 Morris was a responsible company were obtained before and after the participants saw
5 brochures. Although the memorandum does not explicitly state that participants were
6 randomized to conditions, it is clear they were systematically assigned to receive one of
7 two brochures, thus enabling a systematic comparison of the impact of the two brochures.
8 The results of the study were that both brochures improved opinions about Philip Morris.
9 PM3002404663-4743 at 4663 and 4649 (JD-052971).

10 In addition, a March 1984 document produced from the files of Philip Morris and
11 entitled "Copy Testing" describes a sophisticated system for comparing the reactions to
12 different television and print advertisements. Each respondent viewed one advertisement.
13 Then, they provided ratings of the advertisements on multiple dimensions so that the
14 impact of each advertisement can be compared with the impact of other advertisements.
15 The dimensions assessed included negative reactions, executional impact, anxiety,
16 informational relevance, and image scales (people appeal, people lack of realism; scenic,
17 setting empathy; identification/empathy, people/setting lack of fit). 2500002209-2251 at
18 2224 to 2232 (JD 67,171).

19 **Q: How are these documents relevant to your conclusions?**

20 A: These documents show that, while Philip Morris uses randomized trials or experimental
21 evaluations to determine the impact of its youth smoking prevention activities on its
22 corporate image, it chooses not to do so to determine whether its youth smoking
23 prevention activities reduce youth smoking.

1 2. Lorillard

2 **Q: What youth smoking prevention media campaign has Lorillard run?**

3 A: In 2002, Lorillard had a budget of about \$12 million per year for television and print ads
4 for its youth smoking prevention program. Deposition of Steven Craig Watson, United
5 States v. Philip Morris et al., April 2, 2002, 149:8-13.

6 As of April 2002, Lorillard’s *Butt Out Now* website (<http://www.buttoutnow.com>)
7 featured a collection of attractive visuals. The website describes an essay contest about
8 why it is “not cool to smoke.” The central theme and slogan of the Lorillard effort was
9 Tobacco Is Whacko–If You’re a Teen. The website had sections on “cool ways” to say
10 no to cigarettes, a poll (which, in the week of 4/22/02, had nothing to do with smoking), a
11 collection of video games, a music player, and a set of Tobacco is Whacko screen savers.
12 Lorillard indicated that the Tobacco is Whacko–If You’re a Teen program includes print
13 and broadcast advertising. At that time, the website (<http://www.2take10.com/>) described
14 and showed four advertisements intended to discourage youth smoking. The website also
15 displayed four print advertisements, each of which had the Tobacco is Whacko–If You’re
16 a Teen slogan.

17 Lorillard has apparently discontinued its Tobacco is Whacko program. In a
18 search of the Internet in September 2004, I was unable to find the websites described in
19 the preceding paragraph. A Google search of “Tobacco is Whacko” and “Lorillard youth
20 smoking prevention” produced no Lorillard websites other than one directed to parents,
21 <http://ww.keepkidsfromsmoking.com/programOverview.asp>. The second URL cited in
22 the preceding paragraph also took me to the just-mentioned Lorillard parent website. I
23 discuss Lorillard’s parent-directed prevention efforts below.

1 **Q: Has Lorillard evaluated the effectiveness of its “Tobacco is Whacko” campaign in**
2 **reducing youth smoking?**

3 A: I have found no evidence that Lorillard evaluated the impact of the Tobacco is Whacko—
4 If You’re a Teen campaign through experimental methods.

5 **Q: Have you seen any evidence of its impact?**

6 A: A document discussed by Steve Watson, Lorillard Vice President External Affairs, and
7 head of their youth smoking prevention activities, at his deposition in this case describes
8 the results of focus groups conducted with 10 to 15 year olds for Lorillard by Youth
9 Intelligence. The document date is February 24, 2000. The purpose of the focus groups
10 was to get adolescents’ reactions to Lorillard’s Tobacco Is Whacko advertisements.

11 According to the executive summary of the report:

12 Respondents remembered the tag line but had negative responses to it.
13 They complained that it was very young (younger than them) and
14 ‘cheesy.’ They particularly disliked the ‘*if you’re a teen*’ part of “Tobacco
15 is Whacko If You’re a Teen.” They complained that this singled them out
16 and that they believe it should apply to all ages.

17 Deposition of Steven Craig Watson, United States v. Philip Morris et al., April 2,
18 2002, 162:19-164:24 (U.S. Exhibit 87,874; 94691840-1858 at 1845).

19 Lorillard had this research for over a year, yet continued to implement the
20 campaign. As my earlier testimony has explained, emphasizing in campaigns that
21 smoking is an adult activity underscores the desirability of the behavior for adolescents,
22 who are particularly motivated to appear mature.

23 **3. Brown & Williamson**

24 **Q: What national youth smoking prevention media campaign has Brown & Williamson**
25 **run?**

1 A: Brown & Williamson has apparently chosen not to implement a media campaign
2 targeting young people. Deposition of Claudia Newton, United States v. Philip Morris et
3 al., April 17, 2002, 62:16-19.

4 In April 2000, its website presented a brief public service announcement directed
5 at youth, but Brown & Williamson was apparently not paying to broadcast the spot and
6 the spot is currently not accessible. <http://www.bw.com/Index.cfm?ID=6>.

7 As of May 2002, the Brown & Williamson website listed a variety of small-scale
8 efforts directed at youth. These include a tour of elementary schools by Fishbone Fred
9 Delp, “who delivers child safety and self-esteem messages along with his unique and
10 memorable songs.” The website also described a \$35,000 grant to a church in Chicago to
11 develop a youth smoking prevention program called We Avoid Youth Smoking.

12 As of September 2004, the website also listed the Safe Summer 2000 Initiative
13 which is (or was) conducted in public housing in Louisville. Dubbed The Initiative
14 Toward Smoke-Free Youth (ITS Youth), the program includes “educational experiences,
15 college field trips, youth group sessions and the annual WUSSUP Conference.”
16 www.bw.com/Index.cfm?ID=170&Sect=3.

17 *Sly’s Unwise Surprise* is “a book designed for children (ages 4 to 8) that explores
18 the subject of peer pressure and the concept of making good choices (in this case not to
19 smoke). Free copies of the book are available at the website.

20 **Q: Has Brown & Williamson evaluated the impact of these programs?**

21 A: I have been unable to find any evidence that these programs have been evaluated. At her
22 deposition in this case, Claudia Newton, Brown & Williamson’s Vice President for
23 Corporate Responsibility and Youth Smoking Prevention from 1997 until January 2,

1 2001, indicated that the company is not experimentally evaluating the effects of these
2 activities on adolescent smoking. Deposition of Claudia Newton, United States v. Philip
3 Morris et al., April 17, 2002, 79:24-80:11.

4 **Q: Based upon your research and experience as a psychologist, how likely is it that**
5 **these programs will prevent adolescent smoking?**

6 A: To begin with, these efforts reach so few young people that they could have little impact
7 on the prevalence of adolescent smoking. Moreover, many of the young people these
8 programs target, namely children under the age of 12, are too young to be targeted with
9 smoking prevention interventions. In any case, there has been no evaluation to determine
10 whether these activities influence young people not to smoke.

11 **4. R.J. Reynolds**

12 **Q: What youth smoking prevention media campaigns has R.J. Reynolds run?**

13 A: As of May 2002, the R.J. Reynolds website indicated it had created nine public service
14 announcements for television and radio. However, a return to that website in December
15 2004 describes only programs directed at (a) parents and grandparents, (b) youth group
16 leaders, and (c) educators. Additionally, although the website refers to the public service
17 announcements, there is no information about previous airing dates and/or current
18 availability of the announcements. Consequently, I cannot confirm that R.J. Reynolds
19 still offers television spots directed at adolescents. <http://www.rightdecisions>
20 [rightnow.com/](http://www.rightnow.com/).

21 **Q: Was the impact of the spots evaluated by R.J. Reynolds?**

1 A: I can find no evidence that R.J. Reynolds had these public service announcements
2 evaluated through focus groups, copy testing, or experimental evaluations of their impact
3 on adolescent smoking.

4 **Q: In terms of reducing youth smoking, how effective is R.J. Reynolds' media
5 campaign directed at youth?**

6 A: Based on available information, R.J. Reynolds has apparently not evaluated the efficacy
7 of its media efforts. I can find no evidence that these efforts are reducing adolescent
8 smoking.

9 **C. Programs Targeting Parents**

10 **Q: Are programs aimed at parents effective in reducing youth smoking?**

11 A: It is plausible that a program targeting parents could have value in affecting adolescent
12 smoking behavior because there is some evidence that parents influence their
13 adolescents' smoking behavior. With respect to whether parental smoking predicts youth
14 smoking, the evidence is mixed, with some studies finding a relationship and other
15 studies not finding it. A copy of this report is cited in Demonstrative 23 as U.S.
16 Department of Health & Human Services, 1994 (U.S. Exhibit 64,693).

17 It has also been found that parents who do not set clear limits around such
18 behavior and monitor their children's behavior are more likely to have children who
19 smoke. A peer-reviewed paper on this study is cited in Demonstrative 23 as Biglan,
20 Duncan, Ary, & Smolkowski, 1995 (U.S. Exhibit 73,221). Thus, it is possible that efforts
21 to mobilize parents to discourage their children's smoking by communicating their
22 expectations and providing negative consequences for tobacco use *could* help to prevent

1 adolescent tobacco use. Unfortunately, there is not yet evidence that targeting parents
2 with advertising actually does affect adolescent smoking.

3 **Q: Have any such studies been conducted?**

4 A: Yes, they have. My colleagues and I conducted a study in which we randomly assigned
5 parents to receive or not receive a set of four mailed messages designed to encourage
6 parents to set rules about tobacco use. There was no evidence that the messages deterred
7 smoking. A peer-reviewed paper on this study is cited in Demonstrative 23 as Biglan,
8 Glasgow, Ary, hompson et al., 1987 (U.S. Exhibit 73,222).

9 There may be two reasons such messages were ineffective. First, the messages
10 may be ineffective in prompting parents to talk to their teenagers. Second, the parents
11 may not be very effective in talking to their teenagers. Many families with teenagers at
12 risk to smoke have a lot of conflict between parents and teens. For a parent merely to tell
13 an adolescent not to smoke might simply motivate the teenager to defy his or her parent.

14 **Q: What other research have you conducted that bears upon your conclusions?**

15 A: In one project, my colleagues and I at Oregon Research Institute did preliminary work in
16 which we flooded a small community with pamphlets urging parents to talk to their
17 children about not using tobacco. Despite the fact that we distributed enough pamphlets
18 to reach virtually every parent of a sixth through twelfth grade student in the community,
19 survey data indicated that we had no discernible effect on parents actually talking to their
20 children about tobacco use. A peer-reviewed paper on this study is cited in
21 Demonstrative 23 as Biglan, Ary, Yudelson et al., 1996 (U.S. Exhibit 73,220).

22 Only when we gave young people a school assignment to interview their parents
23 about tobacco were we able to influence parents and children even to talk about the topic.

1 The intervention led to young people having more knowledge about tobacco use and
2 attitudes that were more negative toward its use. In some of the communities, the
3 intervention also lowered youths' intentions to smoke. However, due to the short period
4 of time in which the study took place, researchers were unable to assess effects on actual
5 smoking.

6 **Q: Is there other relevant research?**

7 A: Yes. Another peer-reviewed study by Perry, Pirie, Holder, Halper, and Dudovitz (1990)
8 (U.S. Exhibit 73,265) cited in Demonstrative 23, found that a specially designed school
9 assignment could prompt parents and children to talk about smoking.

10 **Q: What conclusions do you draw from the research on this topic?**

11 A: I have three conclusions. First, although there is good correlational evidence suggesting
12 that, if parents effectively set limits on their teenager's use of tobacco, it could have a
13 deterrent effect on adolescent smoking, effective methods of mobilizing parents to take
14 action have not yet been identified. Second, brochures and media advertisements
15 directed at parents appear not to be sufficient to get parents to interact with their
16 teenagers about not smoking. Third, given the state of research knowledge, advertising
17 campaigns targeting parents require routine evaluation in terms of (a) their efficacy in
18 getting parents to talk to their children about not using tobacco or to otherwise set limits
19 around smoking and (b) their actual impact on youth smoking.

20 **Q: Dr. Biglan, have the Defendants also created youth smoking prevention campaigns
21 targeted at parents?**

22 A: Yes. Philip Morris, Lorillard, Brown & Williamson, and R.J. Reynolds have all created
23 youth smoking prevention campaigns directed at parents.

1 **1. Philip Morris**

2 **Q. In their opening statement, what did Defendants claim about their youth smoking**
3 **prevention campaigns targeting parents?**

4 A: In the opening statement, Philip Morris counsel stated:

5 Philip Morris decided to shift to parents for a while because we
6 found there were a lot of organizations that were trying to reach
7 kids about not smoking, but we thought more could be done in
8 reaching what we thought was probably the next most important
9 group, which is trying to convince parents to talk to their kids
10 about not smoking.

11 Opening Statement, United States v. Philip Morris et al., September 22, 2004 at
12 398:21-399:1.

13 Counsel was referring to the move by Philip Morris from airing spots targeting
14 teenagers toward spots targeting parents.

15 **Q. Have you sought to understand Philip Morris's shift to parent-oriented advertising?**

16 A: Yes.

17 **Q. What did you do to learn more about Philip Morris's shift to parent-oriented**
18 **advertising?**

19 A: I read the depositions and exhibits from the depositions of Carolyn Levy and Howard
20 Willard, the former and current Senior Vice Presidents responsible for Philip Morris's
21 youth smoking prevention activities and I reviewed Philip Morris's materials targeted at
22 parents.

23 **Q: Can you describe Philip Morris's parent-targeted efforts?**

24 A: At his deposition, Howard Willard testified that Philip Morris has two primary efforts
25 targeting parents. The first is a series of television advertisements that urge parents to
26 talk to their teens about not smoking. The other, implemented more recently and which

1 has supplanted the television advertisements, consists of the distribution of parent
2 brochures. Deposition of Howard Willard III, August 5, 2004, United States v. Philip
3 Morris et al., 107:21-25.

4 **Q: What percentage of the Philip Morris youth smoking prevention budget was**
5 **devoted to campaigns directed at parents?**

6 A: Mr. Willard testified that the “Think, Don’t Smoke” campaign targeting 10- to 14-year-
7 olds “...was put on hiatus in 2002, and the spending was shifted to our parent campaign.”

8 Mr. Willard testified that the budget for television advertising in 2003 was about \$45
9 million, all of it, apparently directed at parents. He testified that, in 2004, he expected
10 that budget for parent pamphlets would be \$18 million. Deposition of Howard Willard
11 III, August 5, 2004, United States v. Philip Morris et al., 99:17-20, 89:3-9, 90:5-13.

12 **Q: What, if any, steps has Philip Morris taken to evaluate the effectiveness of its**
13 **television advertising directed at parents in reducing adolescent smoking?**

14 A: In his deposition, Mr. Willard described the use of focus groups and survey research to
15 assess the impact of the television advertisements and the parent brochures. Deposition
16 of Howard Willard III, August 5, 2004, United States v. Philip Morris et al., 104:16-
17 105:2, 168:3-19. However, I could find no evidence that Philip Morris has adequately
18 evaluated whether these interventions affect parent-child interactions and or the
19 prevalence of adolescent smoking.

20 For example, Mr. Willard testified that, to evaluate the “Talk, They’ll Listen”
21 Campaign, Philip Morris obtained ratings from parents that indicated that 80% of parents
22 said that the advertisement made them realize how important it is to talk to their
23 teenagers about not smoking. He also testified that more than 70% of the parents said it

1 was “somewhat likely” or “very likely” they would talk to their teenagers about not
2 smoking. He further testified that, after airing the advertisements, Philip Morris found
3 that 50% of parents surveyed said they were aware of the advertisements and that 50% of
4 aware parents said they had held a conversation with their child. Deposition of Howard
5 Willard III, August 5, 2004, United States v. Philip Morris et al., 105:3-23.

6 **Q: Based on your research and experience, how do you evaluate these results?**

7 A: These results are insufficient to judge the value of television advertisements in reducing
8 adolescent smoking. The results do not indicate whether the advertisements actually
9 increased parent-child conversations. Without a controlled experimental evaluation, it
10 cannot be determined whether the results are due to parents who are very concerned
11 about their teenagers smoking being not only more likely to pay attention to and
12 remember the advertisements but also more likely to talk to their children about not
13 smoking. The evaluation also did not assess whether the advertisements actually
14 prevented youth smoking.

15 Reports of conversations with teenagers about this topic are probably
16 overestimates and are not a good measure of teenagers’ exposure to these conversations.
17 Research shows that parents often have higher estimates than their teenagers have of how
18 often they have discussed smoking behavior. In one peer-reviewed study conducted by
19 Oregon Research Institute, parent and adolescent reports of whether they had talked
20 about tobacco use were correlated about .15—a very small correlation, given that the
21 parents and their teenager are ostensibly reporting on the same event. A peer-reviewed
22 paper describing the study is cited in Demonstrative 23 as Biglan, Ary, Yudelson et al.,
23 1996 (U.S. Exhibit 73,220).

1 Even if the Philip Morris data provide an accurate estimate of conversations about
2 smoking, only 25% of all parents reported having them. Existing evidence indicates that
3 parents who are most conscientious about guiding their teenagers are likely to be parents
4 whose teenagers are least at risk to smoke in the first place. A peer-reviewed paper
5 describing this study is cited in Demonstrative 23 as Biglan, Duncan, Ary, &
6 Smolkowski, 1995 (U.S. Exhibit 73,221). Thus, the evidence obtained by Philip Morris
7 is insufficient to conclude that its parent advertising or brochures prevent adolescent
8 smoking.

9 **Q: How could Philip Morris evaluate their parent-targeted advertisements to**
10 **determine their effectiveness?**

11 A: Experimental evaluation of the effects of these advertisements can determine whether
12 Philip Morris advertisements are beneficial in preventing adolescents from smoking.
13 Such evaluations would randomly assign parents to see or not see the advertisements and
14 then measure the prevalence of smoking among adolescents in each of these two
15 conditions. Rather than randomly assigning parents to receive or not receive the
16 television advertisements, one would assign media markets to conditions. The study
17 would compare the prevalence of adolescent smoking in the two conditions. It would
18 also determine if the parents had talked to their children about smoking, in order to find
19 out whether the advertisements made a difference in reports of such conversations.

20 **Q: Have such studies been conducted?**

21 A: Yes. In fact, studies in which whole communities are randomly assigned to conditions
22 are becoming more common. My colleagues and I at Oregon Research Institute
23 published a peer-reviewed paper describing one such study in which we randomly

1 assigned 16 small Oregon communities to receive or not receive a community
2 intervention to reduce adolescent tobacco use. This peer-reviewed study is cited in
3 Demonstrative 23 as Biglan, Ary, Smolkowski, Duncan, & Black, 2000 (U.S. Exhibit
4 64,692).

5 I am aware of three such peer-reviewed studies from Minnesota, and, as I
6 described earlier, Bauman's evaluation of smoking prevention media directed at
7 adolescents, which the researchers evaluated in a randomized controlled trial in which
8 they randomly assigned standard metropolitan statistical areas to conditions. This peer-
9 reviewed study is cited in Demonstrative 23 as Bauman, LaPrelle, Brown, Koch, &
10 Padgett, 1991 (U.S. Exhibit 73,219).

11 **Q: Are there any other ways to evaluate television advertisements targeting parents?**

12 A: Yes. It is possible to track adolescent smoking prevalence in a set of communities over
13 time, then introduce the advertisements in one or two communities each year, and assess
14 whether the prevalence rates in those communities drop, while remaining the same in the
15 communities that did not receive the advertisements. This peer-reviewed study is cited in
16 Demonstrative 23 as Biglan, Ary, & Wagenaar, 2000 (U.S. Exhibit 78,524).

17 In fact, Philip Morris appears already to be obtaining data on adolescent smoking
18 that would enable such an evaluation. The Philip Morris TABS (Teenage Attitudes &
19 Behavior Study) data consist of monthly phone survey data that allow estimates of the
20 prevalence of adolescent smoking. Since Philip Morris is sampling adolescents from
21 across the country, it could derive estimates of smoking prevalence for regions of the
22 country. Philip Morris could then implement the television advertisements in one region
23 at a time and determine whether the advertisements affected smoking prevalence.

1 Others have used such an experimental method for evaluating media
2 interventions. Philip Palmgren at the University of Kentucky used this method in an
3 evaluation of television advertisements designed to decrease adolescent marijuana use. A
4 peer-reviewed paper describing the study is cited in Demonstrative 23 as Palmgren,
5 Donohew, Lorch, Hoyle, & Stephenson, 2001 (U.S. Exhibit 72,761).

6 **Q: Has Philip Morris evaluated the efficacy of the brochures it distributes to parents?**

7 A: According to Mr. Willard's testimony, they have been evaluated in the same way that the
8 television spots were—through focus groups and mall intercept studies. Respondents—
9 in this case parents—are recruited in shopping malls and asked to respond to the
10 advertising materials to be evaluated. Philip Morris asked parents to rate the brochures
11 on a set of questions having to do with the likelihood that they would read them and how
12 likely they were to have a conversation with their child about not smoking after reading
13 the brochures. Deposition of Howard Willard III, August 5, 2004, United States v. Philip
14 Morris et al., 166:18-167:22.

15 **Q: Is Philip Morris's evaluation of the brochures adequate to determine their value for**
16 **preventing adolescent smoking?**

17 A: It may be useful for determining whether the brochure increases parents' stated intentions
18 to talk to their children, but it is inadequate for determining whether the brochures will
19 actually contribute to less adolescent smoking. The only way to know whether the
20 brochures affect adolescent smoking is to deliver the brochures to some parents and not
21 to others and measure whether there are differences in later adolescent smoking rates
22 between the two groups. Randomization of parents to the conditions is essential in order

1 to ensure that any differences that are observed are not due to pre-existing differences in
2 the likelihood that youths in the two groups would take up smoking.

3 **Q: Does any Philip Morris testimony in this case inform your conclusions?**

4 A: In his deposition of August 2004, Mr. Willard was asked whether Philip Morris
5 determined the effectiveness of the parent brochure program on its effect on adolescent
6 smoking. He testified:

7 Well, that isn't how we measure the effectiveness of the brochure.
8 Because it is very difficult.

9 As a matter of fact, I'm not aware of too many cases where somebody can
10 take a specific element like a parent brochure and then somehow connect
11 that directly to youth smoking rates going down.

12 What is typically the state of the art in the field of market research is to
13 conduct disciplined qualitative and quantitative research on the message
14 that's received from the communication material on the indications on the
15 audience of whether their behavior is likely to change from that.

16 And then to measure that. And then to draw the conclusion that if those
17 behavior changes occur and if those attitude changes occur, that it's highly
18 likely it's going to have a positive impact on the end goal.

19 Deposition of Howard Willard III, August 5, 2004, United States v. Philip Morris et al.,
20 168:3-19.

21 Mr. Willard is correct that market research evaluates the impact of the message on
22 target audiences, but neglects to also mention that the companies, including Philip
23 Morris, ultimately measure the impact of cigarette advertising on sales. Each of the
24 Defendants carefully monitors the market share for its cigarette brands. By doing so they
25 are able to tell whether an advertising campaign that worked well in focus groups and
26 copy testing truly affects sales. As numerous documents I have testified about show,
27 when anticipated increases in sales do not materialize, the company creates a new
28 advertising campaign, which it first evaluates using the methods Mr. Willard describes,
29 but then determines whether it affects market share and volume.

1 The analogous approach in smoking prevention research is to evaluate
2 interventions in terms of their impact on the prevalence of adolescent smoking. Certainly,
3 focus groups and copy testing evaluations of smoking prevention media are appropriate
4 for gauging whether the media are likely to affect adolescents or their parents, but the
5 ultimate test is whether they affect the number of adolescents who become smokers. This
6 has been a standard in smoking prevention research since at least the early 1980s.

7 Moreover, in my review of the Defendants' youth smoking prevention activities I
8 did not find much evidence that the quantitative research Mr. Willard speaks of has been
9 used in evaluating their media efforts.

10 **Q: Earlier you described experimental methods for assessing the impact of brochures**
11 **and television advertisements. Is the use of these methods commonly accepted in the**
12 **research literature in the prevention field?**

13 **A:** It is quite commonly accepted in most areas of the biomedical and behavioral sciences.
14 In fact, it has been estimated that more than one million randomized trials have been
15 conducted since the first one was done in the late 1940s.

16 A task force of the Society for Prevention Research—of which I am a member—
17 recently produced a set of standards for judging the efficacy and effectiveness of
18 preventive interventions. It is very similar to the standards adopted a number of years
19 ago by the American Psychological Association. In education, there is a strong
20 movement, led by the U.S. Department of Education, to increase the use of randomized
21 trials to evaluate educational interventions and to choose educational programs based on
22 evidence from randomized trials.

1 **Q: Are there examples of the use of such experimental methods in the prevention**
2 **science literature?**

3 A: Yes. In fact, at his deposition, Mr. Willard cited the work of Dr. Connie Pechmann, who
4 has conducted a number of randomized trials in which the effects of both pro- and anti-
5 tobacco advertising has been evaluated. Mr. Willard also cited evaluations of the work of
6 Dr. Gilbert Botvin in evaluating Life Skills Training and of the work of Dr. Steve
7 Sussman, both of whom employed randomized controlled trials in their evaluations.
8 Deposition of Howard Willard III, August 5, 2004, United States v. Philip Morris et al.,
9 82:9-12, 129:20-22, 135:3-10.

10 In addition, a number of randomized trials have evaluated media campaigns
11 focused on smoking prevention, which I described in my testimony about media
12 campaigns targeting adolescents. A meta-analysis of school-based smoking prevention
13 studies published in 1996 identified 96 studies that employed a randomized design. This
14 analysis is described in a peer-reviewed paper listed in Demonstrative 23 as Rooney &
15 Murray, 1996 (U.S. Exhibit 73,277).

16 As I described earlier in my testimony, I have personally been involved in
17 experimental evaluations of numerous interventions. These include school-based
18 smoking prevention programs, community interventions to prevent adolescent tobacco
19 use, an intervention to prevent high-risk sexual behavior, several smoking cessation
20 programs, an instructional program to prevent reading failure, several interventions to
21 prevent antisocial behavior among children, and treatment procedures for social anxiety
22 and insomnia.

1 In short, the standard for research in the field of prevention is clear: interventions
2 aimed at preventing health behavior problems are evaluated through randomized
3 controlled trials.

4 **Q: How effective are Philip Morris’s parent-directed youth smoking prevention
5 campaigns?**

6 A: Due to the lack of experimental evaluations, it is impossible to know. The efficacy of
7 media spots directed at parents, however, is in doubt, given that no other studies have
8 shown that such spots can prevent adolescent smoking—or any other problem behavior.
9 With respect to the effects of parent brochures, the available evidence makes it doubtful
10 that distributing such brochures actually increased conversations between parents and
11 teenagers regarding tobacco use, and there is no evidence that these brochures actually
12 prevented tobacco use. Full-scale experimental evaluations of programs that measure
13 adolescent smoking behavior as the outcome would need to be conducted before it could
14 be concluded that these programs are of value in affecting youth smoking behavior.

15 **2. Lorillard**

16 **Q: You previously testified that Lorillard had a youth prevention campaign directed at
17 parents. Can you describe this campaign?**

18 A: “Take 10” is a program directed at parents. It was developed by Dr. Michael Popkin,
19 who, according to the current Lorillard website, is an authority on parenting. The website
20 states:

21 For 2004, Lorillard has deepened the focus of the existing parent
22 education program to prompt parents to talk early and often with
23 their children about the dangers of smoking. The program will add
24 two new TV spots, along with this new website, to provide tips and
25 tools for parents to use to conduct these important conversations....
26

1 Overall, our efforts have evolved into a highly-effective means of
2 communicating with millions of parents. With the help of our
3 program and a growing roster of impressive youth anti-smoking
4 efforts, teen smoking rates are on a dramatic decline, reaching
5 historic lows in 2003.
6

7 <http://www.keepkidsfromsmoking.com/programOverview.asp>, accessed December 24,
8 2004.

9 **Q: Does the website document the number of parents reached in any way?**

10 A: It does not.

11 **Q: Does the website provide other materials?**

12 A: The website allows the visitor to download an eight-page pamphlet entitled “Talk Early,
13 Talk Often,” written by Dr. Popkin. The pamphlet offers advice to parents about
14 assessing a child’s risk to take up smoking. It lists among the risks low self-image and
15 poor grades. The pamphlet provides tips on “how to talk to your child” and describes
16 reasons why adolescents try smoking. These reasons include “to fit in, be part of a group;
17 to look cool; to experiment...they have a friend...who smokes; to be rebellious; to look
18 older.” It also gives advice on ways that children can refuse offers of cigarettes and it
19 answers a series of questions that parents are likely to have about the issue. The
20 pamphlet also has suggestions for how to start conversations about smoking. One idea
21 for starting a conversation is as follows:

22 “When you see smokers portrayed in the media as strong, healthy and sexy,
23 remind them that just the opposite is true.” <http://www.keepkidsfromsmoking.com>.

24 **Q: Are there examples of such portrayals of smokers in cigarette advertising?**

1 A: Earlier in my testimony, I presented
2 examples of images used in Lorillard
3 advertisements of strong, healthy, and sexy
4 smokers that a young person might see. I
5 have reproduced one of them here as U.S.
6 Exhibit 9,360.

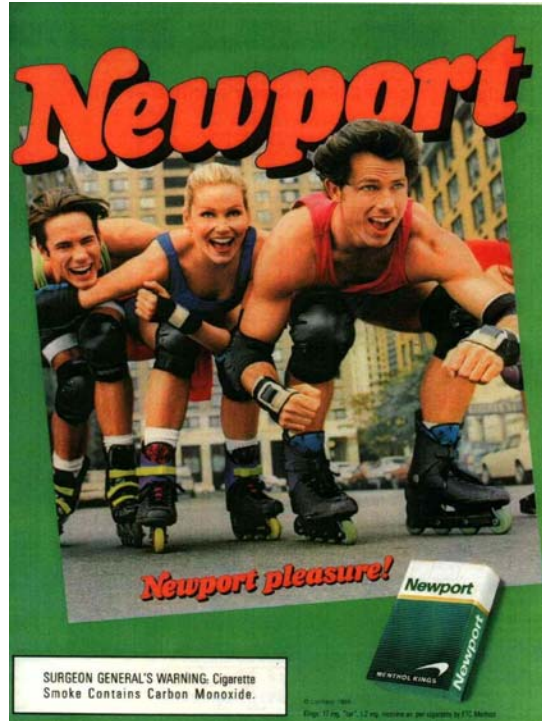
7 **Q: What is your judgment about the value of**
8 **the pamphlet?**

9 A: Much of the advice that is given is sound.
10 However, as I testified above, there is no
11 evidence and it is not likely that many
12 parents of at-risk youth are going to change

13 their behavior toward their teenager based on a pamphlet, even if it contains sound
14 advice. Moreover, there is no evidence of the number of parents who will be reached
15 through the website. There is no research to support the notion that such a web-based
16 program can prevent adolescent tobacco use.

17 **Q: Are there other materials for parents at this Lorillard website?**

18 A: Two videos are presented, which—according to the website—will be used in a television
19 campaign. The first video offers numerous commands that parents give to their children
20 (e.g., “Mow the lawn,” “Comb your hair”) and concludes that since parents have to
21 repeatedly tell their children what to do, they should talk to them early and often about
22 not smoking.



Sports Illustrated, 1995 (ADV0260570-0572, U.S. Exhibit 9,360)

1 The second video shows a mother telling an off-camera child that she wants the
2 child to resist peer pressures to smoke. At the end of the video, the camera reveals that
3 the child is a toddler in a high chair. The message is to tell your children early and often
4 not to smoke.

5 **Q: What is your assessment of these advertisements?**

6 A: They are cleverly conceived and well executed. They probably will be well received by
7 parents. However, without evaluation of their impact on adolescent smoking, there is no
8 research to conclude they will induce many parents to talk to their teenager about
9 smoking or will contribute to reducing the prevalence of adolescent smoking. In both
10 advertisements, the message focuses on talking to young children, not to adolescents. In
11 order to reduce youth smoking, advertisements should prompt parents of adolescents to
12 have these talks.

13 **Q: What, if any, steps has Lorillard taken to evaluate the effectiveness of its youth**
14 **smoking prevention campaigns directed at parents?**

15 A: I have seen no evidence that Lorillard has evaluated the impact of their programs directed
16 at parents. Their website states that the company has evolved "...a highly-effective
17 means of communicating with millions of parents." However, the website does not
18 indicate how they were reached or provide evidence to support this claim. To adequately
19 evaluate this program, the experimental methods I described above would need to be
20 used, in which parents are randomly assigned to receive or not receive the web-based
21 advice and/or the videos, and measures are obtained of parent and teenager reports of
22 conversations about smoking and teenagers' reports of their own smoking behavior.

1 **Q: Dr. Biglan, how effective are the Lorillard youth smoking prevention campaigns**
2 **directed at parents?**

3 A: In the absence of evaluation, it cannot be determined whether these campaigns have any
4 impact on adolescent smoking. Based on existing evidence, including research I have
5 conducted on ways to mobilize parent influences to prevent their adolescents from
6 smoking, there is no reason to believe that these efforts will prevent youth smoking.

7 **3. Brown & Williamson**

8 **Q: Does Brown & Williamson have a youth smoking prevention campaign directed at**
9 **parents?**

10 A: I am not aware of any mass media that Brown & Williamson is directing at parents.
11 However, its website presents information and a video for parents. The website indicates
12 that the video is a public service announcement. [http://www.brownandwilliamson.com](http://www.brownandwilliamson.com/Index.cfm?ID=6)
13 [/Index.cfm?ID=6](http://www.brownandwilliamson.com/Index.cfm?ID=6), accessed December 24, 2004.

14 **Q: Can you describe the information provided to parents?**

15 A: A section entitled “Are Your Kids Sending Smoke Signals?” consists of two and a half
16 pages of general advice about parenting. It describes warning signs for risk behavior and
17 mentions that smoking causes unnamed diseases. It recommends that parents get
18 involved with their children, look for warning signs, talk to their children, set a good
19 example, reinforce the laws (regarding sales of tobacco to young people), role-play ways
20 to deal with peer pressure with their children, encourage them to make good decisions,
21 and stay involved with them.

22 **Q: Is there evidence that advice of this sort given over the Internet can affect parenting**
23 **practices?**

1 A: There is currently no research to show that such an intervention affects youth smoking.

2 **Q: What is your judgment about the likely value of the advice given over the Internet?**

3 A: As a clinical psychologist who has conducted research on parenting interventions focused
4 on preventing smoking and other substance use over the past 20 years, I can say with
5 some confidence that, although some of the things that are suggested to parents could be
6 of value if implemented (e.g., praising children’s achievements), few parents would be
7 able or likely to implement the recommended actions without considerably more
8 guidance from a skilled professional. For example, the suggestion that parents role-play
9 dealing with peer pressures with their teenagers overlooks that fact that teenagers who are
10 most at risk to smoke are unlikely to be willing to take advice from their parents, let alone
11 role-play social behavior with them. Parents whose children would be willing to do so
12 are those least likely to try smoking.

13 **Q: Is other information for parents presented on the website?**

14 A: A three-video set is also offered on the website. The videos cover understanding why
15 teenagers smoke, learning to listen, and building self-esteem. The first video indicates
16 that adolescents are very concerned with “fitting in with the in crowd” and that the desire
17 to fit in often leads them to smoke and try other drugs.

18 The second video focuses on risk factors to look for, such as a drop in grades and
19 hanging out with the teenagers who get into trouble. It offers advice about how to
20 communicate with teenagers by learning to listen to them and getting involved with them
21 in positive activities.

22 The third video offers advice on how to help teenagers develop confidence and
23 self-esteem through positive involvement with them.

1 **Q: Has Brown & Williamson evaluated the impact of these videos on parents' behavior**
2 **or on the smoking behavior of their adolescents?**

3 A: In my review of the website and of Brown & Williamson documents, I did not see any
4 evidence that the impact of the videos has been evaluated.

5 **Q: Based on your research and clinical experience, how likely do you think it is that**
6 **these tapes will help to reduce adolescent smoking?**

7 A: The advice that is given on these tapes is undoubtedly sound. However, my experience,
8 and the research evidence on parenting-skills interventions, indicates at least three
9 reasons why these tapes are unlikely to have much benefit in preventing smoking.

10 The first reason is that it typically takes considerably more help from a therapist
11 for parents whose teenagers are at risk for smoking and other problems to develop the
12 types of supportive relationship with their teenagers that the tapes advocate. Modeling,
13 role-play practice, weekly homework assignments, and a lot of positive reinforcement
14 from a therapist are usually required. The tapes may be a useful reminder to parents who
15 already have the skills, but these are not the parents with adolescents most likely to
16 smoke. For parents who have difficult relationships with their teenagers, it is unlikely
17 that the tapes will lead to improved relationships with their teenagers, let alone to
18 effective communications with the teenagers about their not smoking.

19 Second, the tapes are not clear about the need to set limits on adolescents'
20 activities. It is not enough to build a positive relationship if parents do not make and
21 enforce rules about, for example, where and with whom teenagers can be after school and
22 on weekends. This type of "monitoring and limit setting" has been shown in numerous
23 studies to be a key influence in preventing adolescent problem development. For

1 example, see the peer-reviewed paper in Demonstrative 23, Biglan, Duncan, Ary, &
2 Smolkowski, 1995 (U.S. Exhibit 73,221). Parenting interventions that have been shown
3 to lower adolescent problem behaviors consistently include detailed instructions and
4 behavior rehearsal on how to “set limits.” These tapes do not provide sufficient
5 information and modeling of these important parenting skills.

6 A third reason to question the efficacy of these tapes is that few parents—
7 especially parents of children who are at risk to smoke—are likely to come to this
8 website.

9 **Q: Is there other information about parenting presented at the website?**

10 A: Yes, the website also promotes a book for parents, *Generation Risk, How to Protect Your*
11 *Teenager from Smoking and Other Dangerous Behaviors*, by Corky Newton. Evidence
12 indicates that only five or ten thousand copies of the book have been sold, but the
13 company paid for 25,000 copies; copies were distributed to States Attorneys General and
14 to every member of Congress. Deposition of Claudia Newton, United States v. Philip
15 Morris et al., April 17, 2002 at 243:21-244:16 and 248:3-6.

16 **Q: Is there evidence that a book for parents can lower the prevalence of adolescent**
17 **tobacco use?**

18 A: I am not aware of any such evidence. There are books on parenting that have been used
19 in conjunction with behavior therapy sessions to help parents develop their parenting
20 skills. However, these interventions involve weekly sessions in which skills are modeled,
21 practiced, and then tried at home. Simply reading a book—even a book with precise
22 descriptions of the skills parents need—has not been shown to bring about changes in
23 parent behavior.

1 There is also a question about the reach of such an intervention. Even if 25,000
2 books were read by 25,000 parents, there is no evidence about the number of those
3 parents who would have adolescents at risk to smoke. Even if all families reached had
4 adolescents at risk to smoke, the number would be a very small proportion of all the
5 adolescents who begin smoking each year.

6 **Q: Does the website present any other materials directed at parents?**

7 A: It presents a public service announcement, called “Smoke Signals.” This advertisement
8 emphasizes the role of peer influence and of parents in young people starting to smoke.
9 It makes no mention of the tobacco companies’ cigarette marketing practices.

10 Other sections describe a National Conference on Youth Smoking Prevention that
11 was held in 2000 and the rising use of bidis—a hand rolled, flavored Indian cigarette.
12 There is a tape-recorded interview with Mattie Mack, a tobacco farmer who raised 4
13 children and 38 foster children and prohibited all of them from smoking. The discussion
14 that she has with Corky Newton emphasizes the importance of peer influences and
15 parents in adolescents beginning to smoke. No mention is made of the marketing
16 practices of the tobacco companies.

17 **Q: Considering all of the materials for parents available at this website, what is your**
18 **conclusion regarding their value in preventing adolescent smoking?**

19 A: A website of this sort probably reaches very few parents. It is also likely that parents
20 who visit the website will be parents whose children are at relatively low risk to smoke.
21 With respect to the specific materials that are available, there is no evidence that they will
22 have much impact on adolescent smoking.

1 4. R.J. Reynolds

2 **Q: You testified that R.J. Reynolds had a youth smoking prevention campaign directed**
3 **at parents. Can you describe this campaign?**

4 A: The R.J. Reynolds website describes, and includes the text of, three youth smoking
5 prevention booklets intended for parents: “Tobacco: Helping Your Child Say No!”;
6 “Choices: Helping Your Child Make the Right Ones”; and “How to Talk to Your Kids
7 About Not Smoking Even If You Do.” They also have a booklet for grandparents.
8 <http://www.rightdecisionsrightnow.com/parents/booklets.asp>.

9 “Tobacco: Helping Your Child Say No” briefly discusses peer influences on
10 adolescents, the value of parental involvement with their teenagers, why “kids should not
11 smoke,” talking to your teenager about not smoking, helping teenagers resist peer
12 influence, discussing the power of peer influence, helping teenagers make responsible
13 decisions, and maintaining communication with teenagers. Under the heading, “Kids
14 Should Not Smoke,” the booklet states, “Personal lifestyle choices, such as the decision
15 to smoke or drink, should only be made by informed adults.”

16 [http://www.rightdecisionsrightnow.com/booklets/tobacco.asp#KIDS%20SHOULD](http://www.rightdecisionsrightnow.com/booklets/tobacco.asp#KIDS%20SHOULD%20NOT%20SMOKE)
17 [%20NOT%20SMOKE](http://www.rightdecisionsrightnow.com/booklets/tobacco.asp#KIDS%20SHOULD%20NOT%20SMOKE), accessed October 19, 2004.

18 The booklet, “How to Talk to Your Kids about Not Smoking Even If You Do,”
19 discusses peer pressure, the desire to appear more mature, and family factors as the
20 reasons that “kids smoke.” No mention is made of cigarette marketing practices or the
21 role that image advertising has in influencing adolescents to believe they will appear
22 more mature or will fit in with peers if they smoke.

1 “Choices: Helping Your Child Make the Right Ones” presents a more general
2 discussion of risk and protective factors for adolescent problem behavior and what can be
3 done to reduce the risks. In the spring of 2002, the R.J. Reynolds website stated that the
4 booklets have been made available to pediatricians throughout the country and that they
5 were mailed to all guidance counselors in middle and junior high schools that are
6 receiving the “Right Decisions, Right Now” posters and study guides.

7 **Q: What, if any, steps has R.J. Reynolds taken to evaluate the effectiveness of its youth**
8 **smoking prevention campaigns directed at parents?**

9 A: I am not aware of any research that R.J. Reynolds has conducted to determine whether
10 the booklets or its website reduce youth smoking.

11 **Q: How effective are R.J. Reynolds' youth smoking prevention campaigns directed at**
12 **parents?**

13 A: As I testified above, empirical evaluations of brochures and mailings to parents about
14 talking to their children about not smoking have not shown that these strategies influence
15 parents to talk to their children or that these brochures and mailings reduce youth
16 smoking. Peer-reviewed papers on such evaluations are cited in Demonstrative 23 as
17 Biglan, Ary, Yudelson et al., 1996 (U.S. Exhibit 73,220) and Biglan, Severson, Ary,
18 Faller et al., 1987 (U.S. Exhibit 73,223).

19 **Q: Are you aware of any evaluations of Defendants' youth smoking prevention**
20 **advertising campaigns that target parents?**

21 A: No. Earlier I testified that, given the empirical literature, advertising campaigns that
22 target parents for youth smoking prevention should routinely be evaluated in terms of (a)
23 their efficacy in getting parents to talk to their children about not using tobacco or

1 otherwise set limits around smoking and (b) their actual impact on youth smoking. I have
2 not seen any evidence that the Defendants have used such experimental evaluations to
3 determine whether their campaigns affect parent-child conversations about smoking and I
4 have seen no evidence that Defendants assess the impact of these campaigns on
5 adolescents smoking at all.

6 **Q: Based on your review of Defendants' youth smoking prevention programs directed**
7 **at parents, how effective are these programs in reducing adolescent smoking?**

8 A: Based on the research and clinical work I have done with families on issues of smoking
9 and other aspects of adolescent problem behavior, I do not believe that the media,
10 pamphlets, and web-based advice that Defendants are aiming at parents will contribute to
11 reducing the prevalence of adolescent tobacco use.

12 Research conducted at Oregon Research Institute has found that bringing about a
13 change in parenting practices requires considerably more direct instruction and guidance
14 to parents than the tobacco companies' interventions provide. Moreover, a major
15 problem that other researchers—including researchers at Oregon Research Institute—
16 have encountered is the problem of reaching the parents who most need assistance and
17 effectively involving them in a behavior change effort. We have found it necessary to
18 provide considerable incentives to involve parents of at-risk youth in behavior change
19 efforts. These interventions do not provide those incentives.

20 This is not to say that mass media directed at parents could not have some benefit.
21 Even a small effect could be of value if it occurred in a large population of parents.
22 However, given the current lack of evidence for the efficacy of such a media campaign,
23 any organization that seeks to reduce adolescent smoking through media directed at

1 parents would need to evaluate experimentally the impact of the campaign in order to
2 determine whether it reduces adolescent smoking.

3 **D. Reducing Teenage Access to Cigarettes**

4 **Q: Have you reviewed Defendants' efforts to reduce adolescent access to tobacco?**

5 A: Yes, I reviewed descriptions of the access reduction efforts that are available on
6 Defendants' websites and internal tobacco company documents regarding the tobacco
7 companies' access reduction efforts.

8 **Q: And have you read the literature on adolescent access to tobacco?**

9 A: Yes. Additionally, over the past 15 years, I have done research on the use of a Reward
10 and Reminder program to reduce the proportion of tobacco outlets that sell to minors.

11 **Q: What do you conclude from your review of the Defendants' materials and of the
12 empirical evidence?**

13 A: I draw three conclusions. First, three methods for reducing sales of tobacco to those
14 under the legal age of purchase have been tested, but only two of these methods appear to
15 have a reliable and lasting impact on such sales to adolescents. Second, existing studies
16 show that it is unlikely that even very significant reductions in illegal sales of tobacco
17 will significantly reduce the prevalence of adolescent smoking. Third, the Defendants are
18 implementing the access reduction method shown to be the least effective at reducing
19 youth smoking and least likely to produce sustained effects.

20 **Q: Please describe the three methods for reducing illegal sales to youth.**

21 A: There are three methods evaluated. The first of these is merchant education. The second
22 method is community reward and reminder programs. The third method is increased
23 enforcement of laws against retailers who sell cigarettes to underage youth.

1 **Q: First, what is merchant education?**

2 A: Merchant education includes visiting retail outlets and providing them with signs and
3 information to give to clerks in order to encourage them not to sell tobacco to young
4 people. For example, a tobacco reduction coalition in a community might put together
5 packets of information on the problem of illegal sales of tobacco and have teams of
6 people go to each outlet in the community. They might ask them to agree not to sell and
7 would give them signs to post about how the store will not sell tobacco to minors. In
8 some cases, clerks receive training about how to refuse to sell to minors. The tobacco
9 companies' "We Card" program is a form of merchant education.

10 **Q: What does the empirical evidence show about the effectiveness of merchant**
11 **education in reducing illegal sales?**

12 A: One peer-reviewed study found this approach to reduce sales to underage buyers in the
13 short term. A peer-reviewed paper describing this study is cited in Demonstrative 23 as
14 Altman, Foster, Rasenick-Douss, & Tye, 1989 (U.S. Exhibit 73,215). However, another
15 peer-reviewed study has shown that large reductions in sales do not typically continue. A
16 peer-reviewed paper describing this study is cited in Demonstrative 23 as Altman,
17 Rasenick-Douss, Foster, & Tye, 1991 (U.S. Exhibit 73,217).

18 **Q: Second, what are reward and reminder programs?**

19 A: A reward and reminder program involves mobilizing community support for not selling
20 tobacco to those under 18 and making that support explicit through a proclamation that is
21 distributed to all tobacco outlets, along with signs about the outlet not selling tobacco to
22 those under 18. Then, underage adolescents attempt a series of purchases at each tobacco
23 outlet. If a clerk agrees to sell, he or she receives a brief written reminder from the

1 adolescent that the law makes it illegal to sell to those who are underage. If a clerk
2 refuses to sell, the adolescent hands out a gift certificate worth \$5 or \$10 and thanks the
3 clerk for obeying the law. The refusals of clerks are recognized and celebrated in press
4 releases and flyers in order to provide public recognition for the retailers who obey the
5 law.

6 **Q: How effective is this approach in reducing illegal sales?**

7 A: This approach significantly reduced illegal sales from 57% to 22% of outlets in eight
8 small Oregon communities. Two peer-reviewed papers that are cited in Demonstrative
9 23 describe this study. They are Biglan, Henderson et al., 1995 and Biglan, Ary, Koehn
10 et al., 1996.

11 Statewide replications of the program in Wyoming and Wisconsin showed that
12 the program produced very substantial reductions in the percentage of stores willing to
13 sell. The illegal sales rate in Wyoming went from 55 to 9% of outlets, while the rate in
14 Wisconsin went from about 34% to less than 9%. A graph of these results is in the
15 credentials section of my testimony.

16 **Q: Third, please describe the increased enforcement of laws against retailers who sell
17 cigarettes to young people.**

18 A: Increased enforcement of laws prohibiting the sale of cigarettes to minors typically
19 occurs when there is a community effort by a tobacco control group to urge stepped up
20 enforcement. Often the process includes passage of a local ordinance that increases
21 penalties for illegal sales and requires frequent compliance checks, which involve an
22 underage teenager going into a store and attempting to purchase tobacco. A peer-

1 reviewed paper describing this study is cited in Demonstrative 23 as Altman, Linzer,
2 Kropp, Descheemaeker, Feighery, & Fortmann, 1992 (U.S. Exhibit 73,216).

3 **Q: How effective is increased enforcement of laws against illegal sales in reducing**
4 **illegal sales?**

5 A: Vigorous enforcement of such laws does lead to a reduction in illegal sales. One effort to
6 get communities to adopt model ordinances concerning illegal sales led to reductions of
7 sales to as few as five percent of outlets. Other studies show that vigorous enforcement
8 of the law leads to reductions in sales. Peer-reviewed papers describing this study are in
9 Demonstrative 23 as Forster, Murray, Wolfson, Blaine, Wagenaar, & Hennrikus, 1998
10 (U.S. Exhibit 73,411) and Forster & Wolfson, 1998 (U.S. Exhibit 73,244).

11 **Q: Dr. Biglan, please describe more fully your second conclusion.**

12 A: Existing evidence makes it doubtful that even very significant reductions in illegal sales
13 of tobacco will significantly reduce the prevalence of adolescent smoking. Research on
14 whether reducing teenage access to tobacco can prevent adolescent smoking is mixed.
15 Initially, there seemed good reason to believe that reducing illegal sales of tobacco to
16 young people could help to prevent teenage addiction to cigarettes because laws were
17 seldom enforced and young people were obtaining a large proportion of their cigarettes
18 from commercial outlets. A peer-reviewed paper describing this study is cited in
19 Demonstrative 23 as Forster & Wolfson, 1998 (U.S. Exhibit 73,244).

20 Some peer-reviewed studies of the effects of access reduction programs on youth
21 smoking have shown that reducing access is associated with fewer young people
22 smoking. Peer-reviewed papers describing these effects are cited in Demonstrative 23 as

1 DiFranza, Carlson, & Caise, 1992; Forster et al., 1998 (U.S. Exhibit 73,411); Hinds, 1992
2 (U.S. Exhibit 73,248); Jason, Ji, Anes, & Birkhead, 1991 (U.S. Exhibit 73,252).

3 However, other (peer-reviewed) studies have not shown an effect of access
4 reduction on adolescent smoking prevalence. Peer-reviewed papers describing these
5 studies are cited in Demonstrative 23 as Altman, Wheelis, McFarlane, Lee, & Fortmann,
6 1999 (U.S. Exhibit 73,218); Cummings, Hyland, Perla, & Giovino, 2001; DiFranza et al.,
7 1992; Rigotti, DiFranza, Chang, Tisdale, Kemp, & Singer, 1997 (U.S. Exhibit 73,276).

8 In a meta-analysis of available studies to see if, over all, there was a relationship
9 between reductions in access and reductions in smoking prevalence, researchers did not
10 find a statistically significant relationship. Indeed, the relationship between the amount
11 of access reduction from commercial sources and changes in prevalence was positive, but
12 nonsignificant; that is, there was a tendency for places that decreased access the most to
13 have *increases* in teenage smoking prevalence. A peer-reviewed paper describing this
14 analysis is cited in Demonstrative 23 as Fichtenberg & Glantz, 2002 (U.S. Exhibit
15 65,950).

16 **Q: Why would it be that reducing illegal sales to adolescents does not result in a**
17 **reduction in adolescent smoking prevalence?**

18 A: There are at least two reasons why access reduction may not prevent adolescent smoking.
19 One reason is that even a small number of outlets selling to young people could provide a
20 sufficient supply to enable those young people to become addicted. See the peer-
21 reviewed papers in Demonstrative 23, DiFranza, 2000 (U.S. Exhibit 27,974) and Forster
22 & Wolfson, 1998 (U.S. Exhibit 73,244).

1 The second reason is that young people appear to get many of their cigarettes
2 from social sources, including friends and family members, as shown by the peer-
3 reviewed studies in Demonstrative 23, Forster et al., 1998 (U.S. Exhibit 73,411) and
4 Jones, Sharp, Husten, & Crossett, 2002 (U.S. Exhibit 73,251). Thus, even if all sales of
5 cigarettes to young people were ended, young people might be able to get enough
6 cigarettes from social sources to become addicted smokers. There is undoubtedly a need
7 for further research on this problem. Some peer-reviewed studies suggest that, if access
8 reduction efforts could reduce sales to fewer than 10% of outlets in a locale, it would
9 affect prevalence of smoking. See peer-reviewed paper in Demonstrative 23, Forster &
10 Wolfson, 1998 (U.S. Exhibit 73,244).

11 Only one of the peer-reviewed studies to date was a randomized controlled trial.
12 This study is described in the peer-reviewed paper listed in Demonstrative 23 as Forster
13 et al., 1998 (U.S. Exhibit 73,411). Further randomized trials would provide more precise
14 and thorough tests of the value of access reduction for reducing adolescent smoking
15 prevalence. However, before additional resources are put into widespread
16 implementation of access reduction, there should be several, well-controlled studies
17 showing that access reduction does reduce smoking prevalence. In the absence of such
18 evidence and considering current research, widespread efforts to reduce illegal sales
19 would appear to be of questionable value. In any case, any effort to reduce sales should
20 include careful, ongoing monitoring of illegal sales rates and the prevalence of adolescent
21 tobacco use.

22 **Q: Dr. Biglan, please elaborate on your third conclusion.**

1 A: The tobacco companies are implementing the least effective method of reducing illegal
2 sales of tobacco to adolescents. Each Defendant supports the “We Card” program, which
3 offers “free training seminars, in-store signage, and educational materials.” An online
4 catalogue lists signage and training materials available for purchase. The types of
5 training offered include classroom, online, CD-ROM, and in store training.
6 http://www.philipmorrisusa.com/policies_practices/ysp/responsibleretail/we_card.asp,
7 accessed October 19, 2004.

8 **Q: Based on the available evidence, how likely is it that the “We Card” program is**
9 **reducing illegal sales and adolescent smoking prevalence?**

10 A: As I explained above, the effects on illegal sales of merchant education programs such as
11 “We Card” have proven to be modest and short-lived. There has been no evidence that
12 they result in reductions in adolescent tobacco use. A peer-reviewed paper discussing
13 this is cited in Demonstrative 23 as Feighery, Altman, & Shaffer, 1991 (U.S. Exhibit
14 73,237).

15 **Q: Have Defendants evaluated the effectiveness of the “We Card” program in reducing**
16 **illegal tobacco sales to minors?**

17 A: Stephen R. Strawsburg was named Vice President of Public Issues for R.J. Reynolds in
18 May 1999. His primary duties are to implement, execute, and develop youth nonsmoking
19 programs for R.J. Reynolds Tobacco Company. In his deposition in this case, Mr.
20 Strawsburg indicated he was unaware of any effort to assess whether tobacco outlets in
21 the “We Card” program were selling tobacco to young people. Deposition of Stephen R.
22 Strawsburg, United States v. Philip Morris et al., May 23, 2001, at 19:11-13.

1 Claudia Newton, the former head of Brown & Williamson's youth smoking
2 prevention effort, testified that Brown & Williamson did not conduct any studies of the
3 program's effectiveness. Deposition of Claudia Newton, United States v. Philip Morris
4 et al., April 17, 2002 at 210:4-17, 213:5-16.

5 In his August 5, 2004 deposition, Howard Willard, was asked what evaluations
6 Philip Morris had performed on the effects of its access reduction efforts. He testified,
7 "...we have monitored the number of kits distributed and the presence of that point of
8 sale at retail stores to make sure it gets broad penetration." Deposition of Howard
9 Willard III United States v. Philip Morris et al., August 5, 2004, 136:5-8. When asked
10 whether there had "...been any studies or evaluations of the effectiveness of the access
11 prevention program in reducing youth access..." he testified, "I don't that think Philip
12 Morris USA has done any..." and that he was not sure whether the third party
13 organization, the Coalition for Responsible Tobacco Retailing, may have done an
14 evaluation. Id. at 136:9-15

15 Mr. Willard further testified, "...our research organization ...keeps the [Youth
16 Smoking Prevention] Department abreast of new developments in youth smoking
17 prevention and also researches the various approaches we use for preventing youth
18 smoking." Deposition of Howard Willard III United States v. Philip Morris et al., August
19 5, 2004, 259:16-20. However, when asked if had read the peer-reviewed analysis by
20 Fichtenberg and Glantz (U.S. Exhibit 65,950; VXA 1810164-0183), cited above, on the
21 effects of access reduction programs, he replied, "I actually—I don't know whether I've
22 read that article or not." Willard Deposition at 136:21-25. In addition, when asked
23 whether he could recall the conclusions of the articles he had read on youth access

1 prevention, he testified, “No, I don’t.” Id. at 137:5-7. Finally, Mr. Willard was asked,
2 “Do you recall whether those articles discuss whether youth access prevention programs
3 actually reduce youth smoking?” He replied, “I don’t recall.” Deposition of Howard
4 Willard III United States v. Philip Morris et al., August 5, 2004, 137:8-11.

5 **Q: Have you reviewed Defendants’ previous “It’s the Law” program?**

6 A: Yes, I have. One peer-reviewed study reported data on “It’s the Law,” the industry’s
7 predecessor to the “We Card” program. “It’s the Law” was implemented by the Tobacco
8 Institute in 1990, in response to growing public concern about illegal sales of tobacco to
9 youth. In a study of 480 purchase attempts in Massachusetts, outlets displaying “It’s the
10 Law” signage were no less likely to sell to youth than other outlets were. A peer-
11 reviewed paper detailing this study is cited in Demonstrative 23 as DiFranza, Savageau,
12 & Aisquith, 1996 (U.S. Exhibit 73,234).

13 **Q: Did any of the Defendants evaluate the effectiveness of the “It’s the Law” program?**

14 A: Philip Morris conducted a study of the “It’s the Law” program. An interoffice
15 memorandum stated, “Philip Morris has recently developed the ‘Ask First/It’s the Law’
16 public affairs campaign.” According to the document:

17 The following objectives are viewed as central to (but not
18 exhaustive of) the research that was conducted:

- 19 • To explore general awareness of/feelings about this program–
20 among smokers (18-24 years of age) and among convenience
21 store employees;
- 22 • To explore trade compliance and participation with this
23 program;
- 24 • To explore any strengths/weaknesses of the program and any
25 areas for refinement/enhancement;
- 26 • To explore any strengths/weaknesses of the program and any
27 areas for refinement/enhancement;
- 28 • To explore any strengths/weaknesses of the program and any
29 areas for refinement/enhancement;

- 1 • To explore reactions to the "It's the Law" program, it's
2 influence on Philip Morris imagery, and it's influence on
3 feelings about specific brands;
4
5 • To explore the reactions of 18-24 year old smokers to the end
6 results of this program (i.e., in-store signage, being "carded,"
7 having to carry identification, etc.).
8

9 2047139045-9055 at 9044 (U.S. Exhibit 22,355)

10 The document shows that Philip Morris did evaluate whether the tobacco
11 industry's "It's the Law" program might be offensive to its customers or to convenience
12 store owners. Thus, although the company did not assess whether the program reduced
13 sales to young people, it did assess public perception of the program.
14

15 **Q: How does this document inform your conclusion about the purpose of Philip**
16 **Morris' "It's the Law" program?**

17 A: Above I mentioned the value of the tobacco companies' youth smoking prevention
18 activities for improving their image and preventing restrictions on their marketing. This
19 research is an example of the attention that Philip Morris has paid to the impact of its
20 access reduction efforts on the company's image.

21 **Q: Dr. Biglan, in terms of reducing youth smoking, how effective are Defendants'**
22 **programs in reducing illegal sales that you have just described?**

23 A: I have seen no evidence that these programs are effective in reducing illegal sales of
24 tobacco to adolescents. Additionally, the empirical evidence currently suggests that, even
25 if they were reducing illegal sales, such sales reductions would not contribute to reducing
26 the prevalence of adolescent tobacco use.

1 **E. Skills and Experience of Tobacco Company Youth Smoking Prevention**

2 **Personnel**

3 **Q: Dr. Biglan, did you evaluate the credentials and experience of the Defendants'**
4 **employees responsible for youth smoking prevention?**

5 A: Yes.

6 **Q: And what did you conclude from this review?**

7 A: That the Defendants have transferred employees from other departments within their
8 companies to their respective youth smoking prevention departments and that these
9 employees have little or no experience or education in prevention research or practice.

10 **Q: Please describe the backgrounds of Philip Morris employees who are currently**
11 **responsible for Youth Smoking Prevention.**

12 A: Carolyn Levy, the former and now retired Senior Vice President of Youth Smoking
13 Prevention, testified that she has a Ph.D. in experimental psychology and had worked in
14 research "...for my entire career at Philip Morris." However, she acknowledged that she
15 did not have any specific background in youth smoking prevention. Deposition of
16 Carolyn Levy, U.S. v. Philip Morris et al., April 26, 2002, 568:12-24. Howard Willard,
17 the current Senior Vice President of Youth Smoking Prevention and Corporate
18 Responsibility for Philip Morris, obtained an MBA from the University of Chicago and
19 testified that he had no educational background in youth smoking prevention, and had
20 only minimal job experience with youth smoking prevention issues. In fact, his only
21 previous job-related experience involved dealing with retail access prevention programs
22 as a Regional Vice President of Sales at Philip Morris. Deposition of Howard Willard

1 III, United States v. Philip Morris et al., August 5, 2004 at 53:20-23; 54:12-16; 56:16-23;
2 68:20-25.

3 As for the other employees currently in the Philip Morris Youth Smoking
4 Prevention Department, Mr. Willard testified that the:

- 5 • Senior Director for Programs of Youth Smoking Prevention had no prior
6 experience in youth smoking prevention. Willard deposition at 33:23-34:9.
- 7 • Research Director for Youth Smoking Prevention was a Ph.D.-level psychologist,
8 but that he had no prior experience in youth smoking prevention. Willard
9 deposition at 34:10-35:14.
- 10 • Senior Director of Corporate Responsibility and Cessation Support had previously
11 worked in sales and in that capacity had been involved in youth access reduction
12 activities. However, she had no experience in smoking cessation—an activity that
13 requires distinctly different skills and knowledge than access reduction efforts do.
14 Willard deposition at 35:15-37:19.
- 15 • Youth Access Prevention Manager had previously been a sales manager and had
16 some experience working on youth access issues in retail stores. Willard
17 deposition at 37:20-39:3.
- 18 • Grant-Making Manager for Youth Smoking Prevention was previously a director
19 in Philip Morris' purchasing department, and Mr. Willard did not know of any
20 specific experience that she had in the area of youth smoking prevention. Willard
21 deposition at 39:4-40:7.
- 22 • Strategic Planning Manager had previously worked in the government affairs
23 section of Altria and had worked for the National Conference of State Legislators.

1 Mr. Willard thought she had been involved in youth smoking prevention issues in
2 her past work, but could not say for certain. Willard deposition at 40:17-41:20.

- 3 • Cessation Manager had been in his position for 10 months. Before that, he
4 worked in Philip Morris Research and Development. According to Mr. Willard,
5 the cessation manager "...had significant scientific experience and research
6 experience..." but he did not indicate that he had experience in counseling
7 smokers to quit or in evaluating smoking cessation programs. Willard deposition
8 at 41:21-43:2

- 9 • Person responsible for research on parent communications had been a manager in
10 the Quality System Analysis and Complaint Handling Group. She had a master's
11 degree in statistics, but no prior experience in smoking prevention or parent
12 communications. Willard deposition at 44:16-45:10.

- 13 • Youth Smoking Prevention Manager within the Corporate Responsibility and
14 Cessation Support Group had no prior experience in youth smoking prevention.
15 Willard deposition at 46:17-47:12.

- 16 • Cessation Support Manager in the group for Corporate Responsibility and
17 Cessation Support Group had no prior experience in youth smoking prevention.
18 Willard deposition at 47:13-48:13.

19 Mr. Willard's testimony also demonstrated that he does not understand the
20 methodological principles relevant to evaluating the effects of preventive interventions.
21 For example, when asked whether he was aware "of any other studies that have been
22 done on youth smoking prevention programs, whether at Philip Morris or elsewhere, that
23 test the effectiveness of those programs to youth smoking rates," Mr. Willard replied,

1 “I’m not aware of any study that can quantify the connection between a program and a
2 specific decline in youth smoking rates.” Deposition of Howard Willard III, United
3 States v. Philip Morris et al., August 5, 2004, 175:24-176:11.

4 **Q: How is the testimony you have just discussed relevant to your conclusions?**

5 A: The current employees in the Youth Smoking Prevention Department of Philip Morris
6 lack the training or experience in youth smoking prevention, smoking cessation, or in
7 prevention or treatment interventions more generally. From Mr. Willard’s testimony, it
8 appears that Philip Morris has no staff with experience working directly with adolescents
9 on issues related to smoking or other youth problems. A couple of employees may have
10 experience in research methods relevant to determining whether prevention or cessation
11 interventions work. However, based on Mr. Willard’s testimony and that of Carolyn
12 Levy, it appears that none of the Youth Smoking Prevention group has the skills relevant
13 to identifying programs that have been empirically validated, developing programs that
14 are likely to work, or evaluating the impact of the programs.

15 **Q: Please describe the backgrounds of the people responsible for youth smoking**
16 **prevention at the other tobacco companies.**

17 A: Steven Craig Watson, Lorillard Vice President External Affairs and head of their youth
18 smoking prevention activities, described his training and background in his deposition in
19 this case. He received a Bachelor’s degree in political science from George Washington
20 University. He had a series of positions in government and political campaigns. In 1996,
21 he went to work for the Miami Heat NBA basketball franchise; in 2000, he was their
22 Vice President of Broadcasting and Communications. In July 2000, he took his current

1 position with Lorillard. Deposition of Steven Craig Watson, United States v. Philip
2 Morris et al., April 2, 2002, 16:19-17:4, 18:23-25.

3 Mr. Watson testified that he had never done any work that required him to
4 develop programs for youth and that during his hiring interviews he was not asked if he
5 had any experience in working with youth. He further testified that he was not familiar
6 with any specific studies assessing the effectiveness of the “We Card” program.

7 Deposition of Steven Craig Watson, United States v. Philip Morris et al., April 2, 2002,
8 25:8-26:1, 109:2-7.

9 In her deposition in this case, Claudia Newton, Vice President for Corporate
10 Responsibility and Youth Smoking Prevention from 1997 to 2001, was asked whether in
11 staffing the Brown & Williamson youth smoking prevention effort, “...skills with regard
12 to public education or youth education or working with youth...” were “...desirable
13 qualifications...” She testified,

14 No. And the reason was there was never any intention that this
15 person would end up working directly with youth or providing any
16 sort of educational programs directly.

17 When asked if she wanted staff “...with any kind of background in parent-child
18 education,” she testified, “I wanted somebody who was a parent.”

19 With respect to her own qualifications to lead Brown & Williamson’s smoking
20 prevention efforts, she testified,

21 I think I became qualified for my job more and more as I began to
22 gather information and learn about the subject area. And never
23 having worked with kids before and never having worked in
24 prevention area before, a lot of this was new, but I had the basic
25 management skills and I had—I guess I had the passion and
26 personal concern.
27

1 Deposition of Claudia Newton, United States v. Philip Morris et al., April 17, 2002,
2 78:18-25, 80:22-24, 86:21-87-3.

3 According to his deposition in this case, Stephen Strawsburg is R. J. Reynolds
4 Vice President of Public Issues and has been since May of 1999. His primary duty “is to
5 continue to implement, execute, and develop [the company’s] youth nonsmoking
6 programs.” In reading his deposition, I could find no evidence that he has read the
7 literature on smoking prevention, is familiar with methods of evaluating smoking
8 prevention programs, or has used research evidence in developing the Right Decisions,
9 Right Now program. Deposition of Stephen Strawsburg, United States v. Philip Morris et
10 al., May 23, 2001, 12:5-14.

11 **Q: Is there any research that addresses whether Defendants have evaluated the impact**
12 **of their youth smoking prevention programs?**

13 A: Yes. A peer-reviewed study describes a systematic search of publicly available tobacco
14 industry documents. The study concluded the following:

15 We searched industry document sites by using an extensive list of
16 terms, including “evaluation,” “assessment,” “tracking,”
17 “outcome,” “research,” “result,” and the names of every youth
18 program we had identified, in an attempt to find any industry
19 research on the effectiveness of tobacco companies’ ‘youth
20 smoking’ programs. We did not find any evidence that these
21 programs had been evaluated in terms of effect on the rates of
22 youth smoking. Instead, tobacco companies studied the reach and
23 effectiveness of these programs as though they were public
24 relations campaigns, tracking the number of ‘media hits,’
25 awareness of the program among adults, and the effect of the
26 program on their corporate image.

27 This peer-reviewed study is cited in Demonstrative 23 as Landman, Ling, &
28 Glantz, 2002 VXA 3160729-0742 at 733-734 (U.S. Exhibit 73,365).

1 **F. Master Settlement Agreement**

2 **Q: Does the Master Settlement Agreement impose any restrictions upon Defendants to**
3 **reduce the incidence of youth smoking?**

4 **A:** Specifically, the Master Settlement Agreement under section III (I), requires in its
5 entirety:

6 (1) Corporate Culture Commitments Related to Youth Access and
7 Consumption. Beginning 180 days after the MSA Execution Date each
8 Participating Manufacturer shall:

9 (1) promulgate or reaffirm corporate principles that express and
10 explain its commitment to comply with the provisions of this Agreement
11 and the reduction of use of Tobacco Products by Youth, and clearly and
12 regularly communicate to its employees and customers its commitment to
13 assist in the reduction of Youth use of Tobacco Products;

14 (2) designate an executive level manager (and provide written
15 notice to NAAG of such designation) to identify methods to reduce Youth
16 access to, and the incidence of Youth consumption of, Tobacco Products;
17 and

18 (3) encourage its employees to identify additional methods to
19 reduce Youth access to, and the incidence of Youth consumption of,
20 Tobacco Products.

21
22 Master Settlement Agreement, 0215-0479 at 0249 (U.S. Exhibit 36,251).

23 The Master Settlement Agreement does not require that youth smoking prevention
24 activities be research-based or empirically evaluated. Nor are there financial or other
25 incentives for reducing adolescent smoking prevalence or penalties for failing to do so.

26 The MSA also does not mandate that companies spend any specific amount on youth
27 smoking prevention or cessation activities. Finally, there is no requirement that the
28 tobacco companies hire or place individuals in the position of an “executive level
29 manager” who have education, skills or experience in prevention research or practice.
30 Indeed, as I have testified, the tobacco companies have not hired or placed individuals
31 with such experience in positions within their youth smoking prevention departments.

1 **Q. Did Defendants discuss their youth smoking prevention efforts in their opening**
2 **statement in this case?**

3 A: Yes, Philip Morris counsel represented in the opening statement: “Your Honor, Philip
4 Morris has become a dedicated advocate to try to play its role in reducing youth smoking,
5 obviously a very serious societal problem that Philip Morris recognizes...[T]he company
6 has funded that department with over a hundred million dollars a year for the past six
7 years,” and:

8 We have a four-prong program that deals with communications
9 with youths and their parents about not smoking; we provide grant
10 money to other groups that will develop positive youth
11 development programs that help programs for kids not to smoke;
12 we engage in substantial access prevention to keep kids from
13 obtaining cigarettes; and we actually do research so we can better
14 figure out why kids do smoke so we can better design our
15 commercials.

16 Opening Statement, September 22, 2004, at 396:17-397:23.

17 **Q. Do you agree with this portrayal of Philip Morris's current youth smoking**
18 **prevention efforts?**

19 A: No. As I believe my testimony shows, Philip Morris’s youth smoking prevention efforts
20 are ineffective and Philip Morris is not evaluating their impact on youth smoking
21 prevalence.

22 **Q: How much did Philip Morris spend on youth smoking prevention activities in 2002?**

23 A: In the opening statement, counsel for Philip Morris said its Youth Smoking Prevention
24 budget has been about \$100 million a year for the last several years.

25 **Q: What did Philip Morris spend on marketing its cigarette brands in 2002?**

26 A: I cannot discuss the 2002 marketing budget for Philip Morris because Philip Morris has
27 identified it as confidential information not subject to public disclosure. However, I

1 looked at its 2001 marketing budget. It shows the revised forecast budget for marketing
2 of Marlboro alone for the year 2001 to be more than \$3.5 billion. 2085298135-8136 at
3 8135 (U.S. Exhibit 25,253).

4 **Q: Are these figures relevant to your conclusions?**

5 A: I calculate that \$100 million is less than 3% percent of \$3.5 billion. Therefore, Philip
6 Morris is spending more than 30 times more on marketing Marlboro than it is spending
7 on youth smoking prevention. Therefore, the approximately \$100 million dollars that
8 Philip Morris budgets for youth smoking prevention activities is small in comparison to
9 its substantial expenditures on marketing – about one thirtieth of what the company
10 spends marketing cigarettes.

11 **G. Smoking Prevention Research and the Hutchinson Study**

12 **Q: Have you reviewed the Defendants' expert reports concerning smoking prevention**
13 **research?**

14 A: Yes.

15 **Q: Which ones did you review?**

16 A: I reviewed reports of four experts: Dr. Wecker, Dr. Rubin, Dr. Heckman, and Dr. Viscusi.

17 **Q: What did their reports state that you have addressed?**

18 A: All four experts rely largely upon the Hutchinson study for their conclusion that the
19 dissemination of information would not affect youth smoking. I will describe the study
20 below. Dr. Wecker concludes as follows:

21 The Hutchinson Smoking Prevention Project (HSPP), conducted
22 from September 1984 through August 1999, 'aimed to attain the
23 most rigorous randomized trial possible to determine the long-term
24 impact of theory-based, social-influences, grade 3-12 intervention
25 on smoking prevalence among youth.' This 'gold standard in
26 prevention science' found that 'Consistent with previous trials,

1 there is no evidence from this trial that a school-based social-
2 influences approach is effective in the long-term deterrence of
3 smoking among youth.’

4 Expert Report of William E. Wecker, Ph.D., United States vs. Philip Morris et al., May
5 10, 2002, page 5 (R. 1145).

6 Dr. Rubin draws nearly identical conclusions. He focuses on “available evidence
7 concerning the effect of additional information on the health risks of smoking, including
8 nicotine dependence, on smoking behavior, from which one can infer the causal effect of
9 the defendants’ first two alleged RICO violations on smoking behavior by the YAP.”

10 Expert Report of Donald Rubin, United States vs. Philip Morris et al., May 10, 2002,
11 page 13 (R. 1139). He reviewed some evidence relevant to the prevention of youth
12 smoking and some literature on adult cessation, concluding that whether the tobacco
13 companies were accurate in their public statements about the health effects of smoking
14 and the addictiveness of cigarettes would have made no difference in the number of
15 young people who became smokers.

16 Dr. Heckman concludes, “The government’s experts assume that tobacco
17 company alleged misconduct regarding the dissemination of smoking health-risk
18 information caused youth smoking. This assumption is ... directly at odds with the
19 findings of the intervention literature and research on youth risky behavior. These
20 findings suggest that any effects on youth smoking of tobacco company alleged
21 misconduct regarding health information were likely to be small or non-existent.” Expert
22 Report of James Heckman, United States vs. Philip Morris et al., May 10, 2002, page 11
23 (R. 1135).

24 Dr. Viscusi also cites the Hutchinson study, claiming that it shows that
25 information about the harmful effects of smoking has no impact on smoking behavior.

1 Expert Report of Kip Viscusi, United States vs. Philip Morris et al., January 28, 2002,
2 page 8-9 (R. 850).

3 **Q: Do you agree with their conclusions?**

4 A: No, for at least three reasons. First, as I have discussed earlier, the conduct of the
5 Defendants that influences adolescents to smoke is their brand image marketing--as is
6 shown by peer-reviewed literature and their own documents.

7 Second, inexplicably, these experts conclude that even if the tobacco
8 companies had provided youth with information about the harmful effects of smoking, it
9 would not have affected them. I am not aware of any empirically evaluated smoking
10 prevention programs that focused solely on providing information about the health effects
11 of smoking and many of the ones I am aware of did not provide this information at all.
12 See the peer-reviewed paper listed in Demonstrative 23 as Skara & Sussman, 2003.

13 Studies of smoking prevention programs are not relevant to evaluating claims
14 about the impact of Defendants' provision of health information for at least three reasons:
15 (1) many programs do not even provide health information; (2) those that contain health
16 information have additional components, so that one cannot make inferences about the
17 impact of the provision of health information by itself; and (3) it is impossible to infer the
18 impact of cigarette manufacturers' provision of health information on the basis of the
19 effects of a school-based curriculum providing it.

20 Third, Defendants' experts are simply mistaken in stating that the evidence shows
21 that youth smoking cannot be prevented. Defendants' experts have seized on one
22 evaluation of one smoking prevention program and have drawn conclusions about the
23 general efficacy of smoking prevention programs based upon it. They have overlooked a

1 significant amount of literature contradicting that assertion. Additionally, they have
2 overlooked considerable criticism of the Hutchinson study and the editorials that
3 accompanied it. In particular, these experts failed to cite two reviews of school-based
4 smoking prevention research that conclude that some types of school-based interventions
5 do reduce the proportion of young people who begin smoking. See these articles cited in
6 Demonstrative 23 as Bliss, 2001 (U.S. Exhibit 72,938); Botvin, Sussman, & Biglan, 2001
7 (U.S. Exhibit 64,691); Cameron, Best, & Brown, 2001 (U.S. Exhibit 64,690); and
8 Sussman, Hansen, Flay, & Botvin, 2001 (U.S. Exhibit 64,690).

9 **Q: Please describe the Hutchinson Study.**

10 A: The Hutchinson Study was a peer-reviewed study that evaluated a single type of
11 preventive intervention—one that focused on social influences to smoke. See the peer-
12 reviewed paper on this study in Demonstrative 23, cited as Peterson, Kealey, Mann,
13 Mrazek, & Sarason, 2000 (U.S. Exhibit 64,684). It did not include a number of the
14 components that are in empirically validated Life Skills Training program. See above,
15 Peterson et al., 2000 (U.S. Exhibit 64,684).

16 Specifically, the Hutchinson intervention included:

- 17 • Skills for identifying social influences to smoke
- 18 • Skills for resisting influences to smoke
- 19 • Information for correcting erroneous normative perceptions
20 regarding smoking and for promoting tobacco-free social norms
- 21 • Motivating students to want to be smoke free
- 22 • Promoting self-confidence in one's own abilities to refuse
23 pressures or influences to smoke, and

1 • Enlisting positive family influences.

2 Peterson et al., 2000, page 1981 (U.S. Exhibit 64,684). However, it did not employ a
3 number of components that other successful programs have included, such as:

- 4 • Decision-making skills training
- 5 • Making a public commitment not to use tobacco
- 6 • Skills for listening to others
- 7 • Effective communication skills
- 8 • Coping skills, such as anger-management and self-control
- 9 • Other life skills such as job search skills

10 A number of prevention scientists have criticized the Hutchinson study for not
11 evaluating effects before the end of high school. By failing to do so, the Hutchinson
12 study failed to establish—as other evaluations of social-influence interventions have
13 established—that it could prevent smoking even in middle school and early high school
14 years. If the Hutchinson intervention failed to do this, then it failed to show that it was
15 even as effective as other social influence interventions and thus, is a poor basis for
16 evaluating the long-term effects of social influence interventions.

17 The Hutchinson study was called a “gold standard” because of its methodological
18 features—a true randomized trial where schools were assigned to conditions, the fidelity of
19 implementation was monitored, the long-term effects of the intervention were assessed,
20 and a large proportion of young people were assessed in follow-up. See the referred-to
21 document in Demonstrative 23, Clayton, Scutchfield, & Wyatt, 2000 (U.S. Exhibit
22 64,689). It was not called the “gold standard” because of its results. In any case, Dr.
23 Clayton’s statement has been roundly criticized by other researchers because it fostered

1 news reports stating that no prevention programs were effective. Not even Dr. Peterson,
2 the principal investigator in the Hutchinson study, agrees with that characterization.

3 Dr. Peterson himself acknowledged the long-term effects of Life Skills Training
4 on smoking among youth. Peterson et al., 2000 (U.S. Exhibit 64,684). He reiterated the
5 point in a letter he wrote in reply to three commentaries written in response to the
6 Peterson et al. (2000) paper. He wrote, “The HSPP results pertain only to the
7 intervention approach tested in the HSPP trial—the social influences approach...—and not
8 to the life skills training approach...or to school-plus-community-wide intervention...”
9 His letter is cited in Demonstrative 23 as Peterson et al., 2001, page 1269 (JD 065892).

10 As the critical commentary pointed out, at least two meta-analyses of school-
11 based prevention programs show very clearly that some types of smoking prevention
12 programs have a significant impact on smoking.

13 Rooney and Murray’s (1996) peer-reviewed meta-analysis of smoking prevention
14 studies (1996; U.S. Exhibit 73,277; cited earlier, in Demonstrative 23) concluded:

15 While the average effect sizes were modest, the results from this
16 meta-analysis suggest that the impact of the peer or social
17 programs may be improved if they are delivered early during the
18 transition from elementary to middle school (e.g., 6th grade), if
19 same-age peer leaders play a substantial role in delivering the
20 intervention program, if they are part of a multi-component health
21 program, if booster sessions are included in subsequent years, and
22 if peers are not over trained. The optimal effect sizes estimated
23 from the final regression models were on the order of 0.50 to 0.80,
24 which would be termed medium to large effects based on Cohen's
25 scheme and would be equivalent to 19 to 29% reductions in
26 smoking based on the area under the curve in the z-distribution.
27 Thus, while the average effects were quite modest, the optimal
28 effects predicted from this meta-analysis are more encouraging.

29 VXA1810474-0491 at 0487 (U.S. Exhibit 73,277).

1 It should be noted that the Rooney and Murray meta-analysis addressed one of the
2 methodological problems that Dr. Rubin cited as threatening the validity of evaluations of
3 school-based research, namely, the tendency of early studies to analyze data at the
4 individual level, when schools—not students—were randomly assigned to conditions.
5 Rooney and Murray corrected for the contribution of this problem to the outcomes of
6 these studies, yet still concluded that the programs they reviewed—on average—can
7 prevent some adolescent smoking.

8 Similarly, Tobler et al. (2000) conducted a meta-analysis that included more
9 recent school-based prevention studies. Their peer-reviewed study concluded that
10 school-based smoking prevention programs that involved interactions focused on skill
11 development had a significant impact on youth smoking initiation. This peer-reviewed
12 analysis is listed in Demonstrative 23 as Tobler, Roona, Ochshorn, Marshall, Streke, and
13 Stackpole, 2000 (U.S. Exhibit 77,836).

14 **Q: What other conclusions of Dr. Rubin did you evaluate?**

15 A: Dr. Rubin identified several methodological shortcomings in studies of smoking
16 prevention. He argued that, when high levels of methodological rigor are used,
17 prevention interventions have been less effective. However, a peer-reviewed meta-
18 analysis of this research did not find this to be the case. It reported that the effect size for
19 the highest quality evaluations was the same as the effect size over all studies. See
20 previously cited analysis in Demonstrative 23, Tobler et al., 2000 (U.S. Exhibit 77,836).

21 Dr. Rubin cites three studies that evaluated “multi-faceted educational strategies”
22 and notes that only one is a randomized controlled trial. He fails to cite at least two other
23 randomized controlled trials, both of which showed that community interventions can

1 help to prevent youth smoking. These studies are reported in the papers listed in
2 Demonstrative 23 as Biglan, Ary, Smolkowski, Duncan, & Black, 2000 (U.S. Exhibit
3 64,692); Forster, Wolfson, Murray, Wagenaar, & Claxton, 1997 (U.S. Exhibit 64,686)
4 and Perry, Klepp, & Sillers, 1989 (U.S. Exhibit 64,685).

5 At the same time, it must be emphasized that—given the effectiveness and extent
6 of tobacco company advertising and promotion of cigarettes—even the most effective
7 prevention programs fail to prevent many youth from smoking. See the peer-reviewed
8 paper in Demonstrative 23, Rooney & Murray, 1996 (U.S. Exhibit 73,277).

9 Indeed, in the Biglan et al. (2000) peer-reviewed study, although the intervention
10 had a significant effect on the prevalence of youth smoking, the effect was simply to
11 produce a lower rate of *increase* in prevalence in intervention communities than in
12 control communities. The study was conducted during the early 1990's when the Joe
13 Camel campaign was in full swing and smoking rates among youth were increasing
14 nationwide. See the peer-reviewed paper in Demonstrative 23, Biglan, Ary, Smolkowski
15 et al., 2000 (U.S. Exhibit 64,692).

16 **Q: What overall conclusion have you reached about the Hutchinson study?**

17 A: The failure of the Hutchinson study to prevent tobacco use does not indicate that the
18 tobacco companies are helpless to prevent youth smoking. If anything, this failure
19 illustrates that, in the face of sophisticated and effective tobacco marketing, even
20 carefully conceived and well-implemented prevention programs may fail to prevent
21 smoking.

22 There is considerable evidence that smoking prevention programs that employ a
23 social influence intervention have long-term effects. One recent peer-reviewed study by

1 Skara & Sussman (2003), which I cited earlier, reviewed 25 studies that obtained follow-
2 up data on the impact of smoking prevention programs. Follow-up periods ranged
3 between 24 months and 15 years. The mean length of follow-up was 69 months. The
4 interventions tested included social influence programs designed to counteract normative
5 social influences (group influences on individuals) and/or informational social influences
6 (pressures to adopt attitudes favorable to smoking, including overestimates of the
7 proportion of adolescents who smoke). Two of the studies included life skills training
8 program components that provide students with general life skills, such as stress
9 management and coping more generally with peers. Five studies provided information
10 about both short and long-term health effects, three discussed short-term effects only, and
11 one emphasized only long term health effects. The studies included ethnically diverse
12 populations and took place in North America and Europe.

13 The authors concluded:

14 This review of long-term tobacco and drug use prevention
15 intervention studies published since 1966 indicates that school- and
16 community-based programs were effective in preventing or
17 reducing adolescent cigarette, alcohol, and marijuana use across
18 follow-up periods ranging from 2 to 15 years. The majority of
19 these evaluations reported statistically significant program effects
20 for smoking outcomes, indicating reductions in the percentage of
21 baseline nonusers who initiated smoking in experimental versus
22 control conditions ranging from 9 to 14.2%—lasting for up to 15
23 years....Of the studies that had these data available, it was found
24 that the large majority of interventions that produced initial
25 positive program effects tended to maintain long-term reductions
26 in substance use incidence and prevalence beyond 2 years.

27 See the peer-reviewed document listed in Demonstrative 23 as Skara &
28 Sussman, 2003.

29 **Thank you, Dr. Biglan.**