

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	:	CA No. 99-2496 (GK)
	:	April 6, 2005
Plaintiff,	:	
	:	9:30 a.m.
	:	
v.	:	Washington, D.C.
	:	
PHILIP MORRIS USA, et al.,	:	
	:	
Defendants.	:	
. . . . .	:	

VOLUME 88  
MORNING SESSION  
TRANSCRIPT OF TRIAL RECORD  
BEFORE THE HONORABLE GLADYS KESSLER  
UNITED STATES DISTRICT JUDGE

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23 Proceedings reported by machine shorthand, transcript produced  
24 by computer-aided transcription.

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1 P R O C E E D I N G S

2 THE COURT: Good morning everybody. This is United  
3 States of America versus Philip Morris, CA 99-2496.

4 And we are ready for the next witness?

5 MR. MINTON: Good morning, Your Honor, Mike Minton for  
6 Lorillard. We are getting Dr. Viscusi.

7 In the meantime, there were two errata which were filed  
8 with respect to Dr. Viscusi's written direct, which he'll cover,  
9 but I have a copy of the written direct with the two errata to  
10 hand up to the court.

11 MS. CROCKER: Your Honor, were you planning on ruling  
12 on any of the objections to testimony or exhibits prior to  
13 starting?

14 THE COURT: Yes, I was. Actually, I was ready  
15 yesterday.

16 MR. MINTON: Do you want Dr. Viscusi in or out?

17 THE COURT: Why doesn't he wait outside, although this  
18 isn't going to take very long. There was only one that I wanted  
19 to discuss with everybody.

20 Issue number one on undisclosed opinions regarding  
21 sources of smoking risk awareness. That objection is going to  
22 be overruled.

23 There is no prejudice in the world to the government.  
24 That's number one. And number two, this objection in my view  
25 was really de minimis.

1           Number two, I'm going to come back to because I do want  
2   to discuss that.

3           Number three, the objection was undisclosed opinion  
4   that smokers take more risks than nonsmokers. That is  
5   overruled, but I want to look specifically. That was examined  
6   carefully in the deposition, and certainly the government was on  
7   full notice that it was coming up.

8           Number four -- well, I'll come back to number four as  
9   well.

10          Number two is the issue, which I gather only covers a  
11   couple of lines, but it is the issue regarding per capita  
12   consumption. And the government's argument, of course, is that  
13   his testimony on that subject has not been disclosed.

14          What is the response on that?

15          MR. MINTON: The response, Your Honor, is it's -- he is  
16   not offering any sort of calculation himself. It's the same  
17   sort of illustration that he put in his expert report and that  
18   he testified about, is that historically there has been -- there  
19   is evidence of a relationship between consumer perception of the  
20   risks of smoking and the demand for cigarettes.

21          And they don't object. The government doesn't object  
22   to the testimony that's immediately before or after this  
23   testimony, and actually all he's doing in those lines is  
24   explaining just a fundamental principle.

25          It's not really an independent expert opinion at all.

1       It's simply a statement of how the testimony that's been  
2       generally covered, in great detail, actually, is related to the  
3       subject matter of his testimony.

4               THE COURT: Let me hear from the government, please.

5               MS. McMAHON: Linda McMahon for the record.

6               Well, the United States actually disagrees. This  
7       actually is sort of the kind of thing that classically experts  
8       talk about.

9               He defines per capita consumption. He sets out the  
10      rate and decline over a 30-year period. He offers explanation  
11      for the decline. And that's the kind of thing that experts talk  
12      about.

13              We don't object to what's before and what's after.  
14      We're not trying to parse things too neatly here, but this is  
15      something that we consider separate and distinct from what is  
16      before and after, and since it wasn't disclosed he ought not be  
17      able to discuss it.

18              THE COURT: Well, it is a close issue, but I will say  
19      this. Those -- I might have said six or seven lines, I think  
20      it's 11 lines. Those 11 lines are so -- I hate to use a bad  
21      word -- embedded in the rest of his testimony and are simply a  
22      slight deviation from the rest of his testimony, that I don't  
23      think the government suffers any prejudice by it coming in, and  
24      so I'm going to overrule that objection.

25              Now, there is also issue number three, which is an

1 allegation that Dr. Viscusi had not disclosed an opinion that  
2 smokers take more risks than nonsmokers.

3 MR. MINTON: I think you ruled on that one, Your Honor.  
4 I think the only remaining issue is the price sensitivity/price  
5 elasticity.

6 THE COURT: That's absolutely right.

7 This regards price sensitivity. I'll hear from the  
8 government, but I found.... yes, I did find the defendants'  
9 response pretty persuasive, but what does the government have to  
10 say?

11 MS. McMAHON: We are not objecting to Dr. Viscusi  
12 talking about price sensitivity or price elasticity in total.  
13 In fact, he talks about it at other points in his testimony and  
14 we have not objected.

15 It's just the specific lines of testimony that we've  
16 objected to where he talks about price sensitivity and the  
17 difference of price sensitivity between youth and adults, and  
18 that is something that was addressed completely in our case.

19 Dr. Viscusi never offered an opinion prior to this on  
20 that particular area and that is what we are attempting to  
21 prevent him from being able to talk about.

22 THE COURT: But he certainly went into the subject in  
23 detail in his expert opinion, didn't he?

24 MS. McMAHON: In his expert report?

25 THE COURT: He talks about his expert report.



1 MS. McMAHON: He certainly talks about price elasticity  
2 and how that affects consumer behavior, but he doesn't offer any  
3 opinions about whether youth are more price sensitive than  
4 adults or anything about the deviation between youth and adults  
5 in terms of price sensitivity. And that is the only testimony  
6 we're seeking.

7 THE COURT: Mr. Minton.

8 MR. MINTON: Well, I have two responses.

9 Number one, younger people smoke cigarettes and older  
10 people smoke cigarettes. And so the relationship that he's  
11 discussing, which is how price sensitivity is a component which  
12 helps to illustrate rational decision making, it doesn't make  
13 any difference.

14 Number one, I think Dr. Viscusi is entitled to respond  
15 to what the plaintiff's experts have said in their direct  
16 testimony in this case.

17 THE COURT: The objection is going to be overruled on  
18 issue number 4.

19 I think that covers all matters, and we can bring  
20 Dr. Viscusi in.

21 MS. CROCKER: Your Honor, can I just ask one question  
22 for clarification?

23 Of course we still have remaining a number of  
24 objections to specific exhibits that were not disclosed, and I  
25 just want to make sure that, although Your Honor has ruled on

1 the issue that it related to those, that we haven't yet reached  
2 the question of the exhibits and we will do that after  
3 Dr. Viscusi's testimony.

4 THE COURT: Correct. I don't think, however, that I  
5 have, or at least I didn't -- maybe this is it. Let me just  
6 check.

7 Defendants' nexus statements, are those on pages 14  
8 through approximately 17 entitled Joint Defendants' Responses to  
9 the Government's Exhibit Objections?

10 MR. MINTON: May I check that, Your Honor? I'm sorry,  
11 I don't have that document in front of me.

12 THE COURT: We're not going to do that now, but I just  
13 wanted to make sure that I had what is to be considered as the  
14 nexus statements.

15 MR. MINTON: I'll make sure you have those.

16 THE COURT: We will take a break for you to look at  
17 that.

18 All right. We are ready to proceed at this point.

19 THE DEPUTY CLERK: Please remain standing and raise  
20 your right hand.

21 WILLIAM KIP VISCUSI, Ph.D., Defendant's witness, SWORN

22 THE DEPUTY CLERK: You may be seated.

23 THE COURT: Please proceed.

24 MR. MINTON: Thank you, Your Honor. Mike Minton for  
25 Lorillard Tobacco Company.

1 DIRECT EXAMINATION

2 BY MR. MINTON:

3 Q. Dr. Viscusi, would you state your name for the record,  
4 please?

5 A. W. Kip Viscusi. W stands for William.

6 Q. All right. Do you have before you your written testimony in  
7 this case?

8 A. Yes.

9 Q. All right. There were two errata that were filed in  
10 connection with that written testimony.

11 With those errata, do you adopt that as your written  
12 direct testimony in this case?

13 A. Yes.

14 Q. All right.

15 MR. MINTON: At this time, Your Honor, we would offer  
16 Dr. Viscusi as an expert in risk perception and behavior under  
17 conditions of risk.

18 THE COURT: Any objection to his area of expertise or  
19 his qualifications?

20 MS. CROCKER: Your Honor, the United States would not  
21 object to Dr. Viscusi being offered as an expert in economics,  
22 but I do not think that this overspecific statement of expertise  
23 is appropriate, and I would be willing to explain, but perhaps  
24 out of the presence of the witness.

25 THE COURT: So at this point you're questioning his

1 expertise in what area now?

2 MS. CROCKER: Your Honor, the statement was, "We offer  
3 Dr. Viscusi as an expert in risk perception and behavior under  
4 the conditions of risk."

5 THE COURT: Well, I'll deal separately with that.  
6 Let's proceed with the testimony.

7 BY MR. MINTON:

8 Q. Dr. Viscusi, what's your current position?

9 A. Cogan Professor of Law and Economics at Harvard Law School.

10 Q. Has the study of risk perception and behavior under  
11 conditions of risk been a consistent part of your research?

12 A. Yes. I've been doing that since the mid-1970s.

13 Q. Approximately how many scholarly articles have you written  
14 or co-authored in risk perception or behavior under conditions  
15 of risk?

16 A. I've written about 250 articles total, and dozens of them  
17 deal explicitly with risk perception or hazard warnings or  
18 behavior.

19 Q. And have you written books in those areas as well?

20 A. I've written about 20 books.

21 Q. And have you written books specifically dealing with smoking  
22 risks and behavior under risks with respect to smoking?

23 A. Yes. I've have two books that deal exclusively with smoking  
24 risks and behavior under risk.

25 Q. Are surveys part of your risk perception research and study,

1 Dr. Viscusi?

2 A. Yes. I've been analyzing surveys since my doctoral  
3 dissertation in the mid-1970s. I've been running surveys since  
4 1981.

5 Q. Could you briefly describe the survey modes that you've  
6 studied and used in your risk perception research?

7 MS. CROCKER: Your Honor, I just object. This is not,  
8 as far as I can tell, an explanation of any complicated  
9 demonstrative or any demonstrative whatsoever. So far, it's  
10 simply a repetition of the direct testimony.

11 I understand we need some introduction, but at some  
12 point I would assume that Mr. Minton would get to explaining a  
13 demonstrative.

14 MR. MINTON: Very quickly.

15 THE COURT: All right.

16 BY MR. MINTON:

17 Q. Have you studied different survey modes, Dr. Viscusi?

18 A. I've not only studied different survey modes. I've run  
19 written surveys, telephone surveys, brought people to mall  
20 intercepts, brought people to central locations, and also run  
21 national Internet-based surveys.

22 Q. For the purpose of understanding the demonstratives that  
23 you're going to be showing here, Dr. Viscusi, the court has  
24 heard testimony about cognitive models of risk perception.

25 Could you describe whether cognitive models of risk

1 perception differ from the empirical research that you have done  
2 as an economist studying risk perception and behavior under  
3 risk?

4 A. The cognitive models that have been discussed have not been  
5 tested against data; whereas, my theories are empirically based  
6 with hypotheses that can rejected based on data.

7 Q. In what ways than do empirically-demonstrated patterns of  
8 smoking behavior tell us about the risks of smoking?

9 MS. CROCKER: Your Honor, same objection. This is  
10 simply a repetition of the direct testimony. We're not talking  
11 about a demonstrative whatsoever.

12 THE COURT: The objection is overruled.

13 Let's proceed, please.

14 A. If the information environment has changed, that will change  
15 risk beliefs and that will affect behaviors. So often we look  
16 at behavior to see what's going on with risk beliefs.

17 Q. One definition before we get to the first demonstrative,  
18 Dr. Viscusi.

19 In the empirical evaluation of risk and behavior in the  
20 presence of risk, what is risk or a choice under uncertainty?

21 A. The choice involving risk or uncertainty is one in which you  
22 don't know the outcome ahead of time, so the benefits could be  
23 uncertain.

24 You don't know if you like the double quarter-pounder  
25 with cheese or the costs may be uncertain, so you don't know

1       what the risk is associated with the act.

2       Q.   All right.  Have you prepared a demonstrative that helps to  
3       illustrate how people make choices under uncertainty?

4       A.   Yes.

5               MR. MINTON:  All right.  Jamie, could you bring up  
6       020231.

7               THE COURT:  And, Mr. Minton, I'm fairly sure this is  
8       not in the direct, but if any of your demonstratives are in the  
9       direct, it's always useful if you point out where they are.

10              MR. MINTON:  I'll do my best, Your Honor.

11       BY MR. MINTON:

12       Q.   What's the concept that you've illustrated in this  
13       demonstrative, Dr. Viscusi?

14       A.   What this figure illustrates is a variety of different  
15       decision context in which people make risky decisions by  
16       balancing the benefits and costs of these decisions.

17       Q.   And there are circles that go around the middle circle.  
18       What do those illustrate?

19       A.   These illustrate various contexts that I and other  
20       economists have analyzed.

21              So, for example, the job context.  The benefit of a  
22       risky job is the higher wage rates you get, the cost is the  
23       probability of injury or death.  And workers will only choose  
24       those jobs if the wages are high enough given the risks.

25              Similarly the safety devices at the bottom right

1 corner. Let's take seatbelts in a car. The benefits of wearing  
2 a seatbelt are that it will decrease your risk of being injured  
3 in a crash. The cost is the time cost and discomfort cost of  
4 buckling up.

5 Q. And are those same basic processes that work in each of the  
6 spheres of decision making that you have illustrated on the  
7 chart?

8 A. Yes. In all these contexts there's a risk/benefit tradeoff  
9 or cost/benefit tradeoff.

10 Q. All right. Let's go to the center circle. And does the  
11 center circle deal specifically with smoking or cigarettes?

12 A. Yes.

13 Q. And could you please describe what's illustrated there?

14 A. Smokers will choose to smoke if they perceive the benefits  
15 of smoking as being greater than the costs.

16 Q. And do the empirical data show benefits that people perceive  
17 from cigarettes?

18 A. Yes. In economic terms the fact that people are willing to  
19 pay for cigarettes is a reflection of the benefits, but we also  
20 know that taste matters.

21 For example, we ran a natural experiment when R.J.  
22 Reynolds introduced the Premier and the Eclipse cigarette which  
23 didn't taste good and nobody bought them.

24 And the Surgeon General in 1964 outline a variety of  
25 other benefits aspects of cigarettes, including the stimulation,



1 relaxation, weight control benefits that people derived from  
2 cigarettes.

3 Q. Okay. Let's go to the left side of the circle where you  
4 have costs.

5 Are there data that show that the costs of smoking are  
6 apparent in decision making?

7 A. Yes. People respond to the costs, the health risks of  
8 cigarettes, the monetary cost, the price of cigarettes, as well  
9 as the nonmonetary costs, which include the inconvenience costs  
10 of smoking restrictions as well as social disapproval costs.

11 Q. Have you prepared a demonstrative that illustrates the type  
12 of empirical data which show that consumers actually respond to  
13 the costs of smoking?

14 A. Yes.

15 MR. MINTON: Jamie, could you bring up 020232, please?

16 And I don't believe this one is in the written direct  
17 either, Your Honor.

18 Q. Let's go through the types of empirical data you've listed  
19 on 020232. The first you have listed is risk perception and  
20 consumption. What's the basic relationship that you're  
21 describing there?

22 A. The riskier people believe smoking to be, the less likely  
23 they are to smoke. They also affect the kind of cigarettes they  
24 smoke.

25 MR. MINTON: Jamie, could you bring up 020234, please.

1 Q. What's being illustrated in that demonstrative, Dr. Viscusi?

2 A. Well, in the horizontal axis is the year. On the vertical  
3 axis is the market share of filtered cigarettes.

4 1953 is when we had the mouse painting experiments.

5 The Wynder and Graham experiments were publicized.

6 1954 was when the Hammond and Horn study came out. And  
7 around that time, because of the increased concern with the  
8 health risks of cigarettes, companies introduced filter tipped  
9 cigarettes.

10 This chart from the Surgeon General's Report indicates  
11 that by 1970 filter tipped cigarettes had taken over, over  
12 three-fourths of the market, and now virtually all cigarettes  
13 sold are filter tipped.

14 Q. Do you have another demonstrative that combines several of  
15 the factors?

16 A. Yes.

17 THE COURT: Excuse me. Could you speak slower, please,  
18 for our court reporter. You've got to slow down a good bit.

19 THE WITNESS: I'm sorry, Your Honor.

20 MR. MINTON: Jamie, can you please bring up 020233.

21 Q. What's illustrated there, Dr. Viscusi?

22 A. On the horizontal axis is the year. The vertical axis is  
23 the sales-weighted tar value.

24 What this shows is that the average tar level of  
25 cigarettes has declined throughout the 1950s through mid-1980s

1 period, as has the average nicotine level.

2 Q. Are there any benefits reflected in that chart as well?

3 A. There are two benefits.

4 First, the tar rating has been the main score card that  
5 the government has used to keep track of the dangerous chemicals  
6 in cigarettes, and people have switched to lower-tar cigarettes  
7 over time.

8 In addition, surveys indicate that smokers who smoked  
9 lower-tar cigarettes prefer the lighter taste.

10 MR. MINTON: Jamie, if we could go back to 020232.

11 Q. The second bullet point you have there is price increases.  
12 Have you studied how smokers changed their smoking behavior as  
13 the price of cigarettes goes up?

14 A. Yes. In fact, my first smoking book includes several dozen  
15 studies analyzing the effect of price levels on consumption of  
16 cigarettes, and I've continued to track that literature.

17 Q. And what were the results of your analysis of that data?

18 A. The main results is that as the price goes up, people buy  
19 fewer cigarettes. And the relationship is that there's an  
20 elasticity of demand of minus .4 to minus .7.

21 Q. What does that mean? What does that minus .4 to minus .7  
22 mean?

23 A. What that would mean is that if you increased the price of  
24 cigarettes by 10 percent, that the amount of cigarettes people  
25 would buy would drop by 4 percent to 7 percent.

1 Q. The last -- let's go back to that. How does that show, or  
2 how does that contribute to information which tells us that  
3 consumers are making rational decisions about smoking?

4 A. It tells us that people are price responsive.

5 Also, this degree of price responsiveness is similar to  
6 the demand elasticity for many widely-used consumer products  
7 ranging from stationery to legal services.

8 Q. And the third bullet point you have on J-DEM 020232 is  
9 increased opportunity costs.

10 What are they with respect to smoking, and how have  
11 they been shown to influence smoking behavior?

12 A. This category refers to the nonmonetary costs associated  
13 with smoking, including restrictions on smoking at the workplace  
14 or in public buildings, social disapproval costs and the general  
15 inconvenience costs of, let's say, having to smoke outside.

16 And studies have shown that these various nonmonetary  
17 costs, as they go up, people smoke less and some people quit.

18 Q. You have social disapproval costs as a second subpoint  
19 there. What does that mean?

20 A. As smokers have become a smaller minority of the population,  
21 there has been increased social disapproval of their smoking  
22 behavior.

23 Q. How has that impacted their smoking?

24 A. That will make smoking less attractive to smokers.

25 Q. And overall, what do the empirical data show with respect to

1 people's perceptions of the costs and benefits of smoking and  
2 their smoking behavior?

3 A. People respond to the costs and benefits in the expected  
4 manner so as the costs go up, it decreases smoking or makes  
5 people less likely to smoke, and as benefits go up, it has the  
6 opposite effect.

7 Q. Did the data demonstrate that people make rational decisions  
8 about smoking?

9 A. Yes. This is a consistent pattern that's reflected in all  
10 these effects.

11 Q. Dr. Viscusi, let's talk about --

12 THE COURT: Is it fair to say, though, that you defined  
13 the word "rational" strictly in terms of economic benefits and  
14 losses, if you will?

15 THE WITNESS: Judge Kessler, let me elaborate a little  
16 bit in that all of these things are -- do relate to an economic  
17 model.

18 And the fact that these things hold alone is not proof  
19 of rationality, but these are things that you do expect to be  
20 satisfied if people were rational.

21 I'm going to present other evidence regarding risk  
22 beliefs that will bolster this picture of rationality. But yes,  
23 my reference point is the economic efficiency framework. But it  
24 does include health costs, for example.

25 BY MR. MINTON:

1 Q. Let's move now, Dr. Viscusi, to the interpretation of  
2 historical risk perception information about smoking.

3 You've discussed quite a number of surveys in your  
4 direct examination. And are the historical survey results, say  
5 from 40 to 50 years ago, as helpful scientifically in evaluating  
6 people's perceptions of the risks of smoking as the more recent  
7 survey data, say the data that's been gathered in the last  
8 20 years?

9 A. No, they are not as useful as more recent data because they  
10 don't provide information on quantitative risk metrics; rather  
11 they are more subjective.

12 Q. And as we go back in time, are there other sources of  
13 information on risk beliefs, besides the survey data, which are  
14 helpful in evaluating people's perceptions of the smoking risks?

15 A. Yes, besides the survey data we can look at the information  
16 environment of smokers. We can look at the information being  
17 provided by public health officials. We can look at statements  
18 that public health officials have made regarding smoking, and  
19 the knowledge the public has regarding smoking.

20 We can look at the hazard warnings that were in place.  
21 And, as I just did a few minutes ago, we can look at behavioral  
22 responses to changes in the informational environment.

23 Q. Have you in your own work investigated and written about how  
24 smoking risk information was conveyed in years past?

25 A. Yes.

1 Q. All right. And without going into detail, can you give the  
2 court an overview of the various risk information inputs into  
3 the smoking risk environment?

4 A. The information people can draw on includes information in  
5 the media, which covered scientific studies as they came out.  
6 It includes statements by public health officials. It includes  
7 information provided by their doctors as the physicians were  
8 provided the information. Hazard warnings. So there's a whole  
9 range of things that gave people information about the risks of  
10 smoking.

11 Q. Are there particular aspects of the information environment  
12 that tell us whether the risk information that people receive  
13 will matter to them as they form risk beliefs?

14 A. Yes.

15 Q. And what are they?

16 A. Well, there are three aspects that I like to think of.

17 First, have people receive the information? So have  
18 they gotten the message?

19 Second, does this information convey a risk? So is  
20 this a grave message that's being conveyed?

21 And third, what the credibility of the source of the  
22 information?

23 Q. All right. Let's go to the first factor you mentioned, the  
24 prominence of the message and whether people have gotten the  
25 message.

1           Did you assess the prominence of the smoking risk  
2     message?

3     A.   Yes, I have.

4     Q.   And in your scholarly work have you tracked any benchmarks  
5     for the coverage, media coverage, for instance, of smoking and  
6     health risks?

7     A.   Yes.   In addition to reviewing media coverage, in my first  
8     smoking book I present a year-by-year tally of the number of  
9     articles in Reader's Digest from the 1950s through the 1980s  
10    dealing with smoking.

11           MR. MINTON:  Jamie, could you bring up J-DEM 020196?

12    Q.   Is that -- does that demonstrative reflect what you've just  
13    described, Dr. Viscusi?

14    A.   Yes.

15    Q.   What does the chart show?

16    A.   Well, the chart shows that beginning in 1953 -- I started in  
17    the 1950s -- there has been a steady flow of articles in Readers  
18    Digest covering the risks of cigarettes.  So this has been on a  
19    continuing, persistent basis that smoking risks have been  
20    covered in Reader's Digest.

21    Q.   Did you prepare other demonstratives to help illustrate the  
22    prominence of the smoking risks message?

23    A.   Yes.

24           MR. MINTON:  Jamie, could you bring up 020084.

25    Q.   What does that demonstrative illustrate?



1 A. This is coverage of the 1953 Wynder and Graham mouse skin  
2 painting studies in Life Magazine, Time Magazine, and Reader's  
3 Digest where it's clear from how they describe it, that this was  
4 treated as real news. So this is actually given prominence.

5 Q. All right.

6 MR. MINTON: Jamie, could you bring up 020083?

7 Q. Is that another demonstrative that you prepared,  
8 Dr. Viscusi?

9 A. Yes.

10 Q. And what does it illustrate?

11 A. In 1954 Hammond and Horn released their study linking  
12 smoking to lung cancer and received coverage in Time Magazine,  
13 Newsweek, and U.S. News and World Report.

14 Q. All right. And why do these demonstratives illustrate a  
15 concept that's important?

16 A. People are not born with their risk beliefs, they develop  
17 them based on their informational environment, and this would be  
18 one major component of their informational environment.

19 Q. How did polling experts of the day perceive the prominence  
20 and impact of the media coverage of smoking risks?

21 A. Well, Dr. George Gallup is the dean of American polling.  
22 And in 1957 an American Cancer Society Study came out linking  
23 smoking to lung cancer, and Dr. Gallup found that 78 percent of  
24 the American public were aware of this specific study, and he  
25 called this figure, this 78 percent figure, a phenomenal figure

1 in polling annals.

2 Q. Why was it phenomenal?

3 A. Because we have 4 out of 5 Americans who have read about one  
4 specific study.

5 Q. Your testimony also refers to contemporaneous statements of  
6 public health officials.

7 Why are statements of public health officials made at  
8 the time important in understanding the prominence of the risk  
9 message or empirical understanding of people's risks beliefs?

10 A. One of the responsibilities of a public health official is  
11 to disseminate information to the public, so they're a natural  
12 group of people to turn to see if the message has in fact gotten  
13 out there.

14 Q. And did you prepare a demonstrative to illustrate whether or  
15 not public health officials were confirming the prominence of  
16 the smoking risk message?

17 A. Yes.

18 MR. MINTON: Jamie, could you bring up 020205.

19 Q. Is that the demonstrative, Dr. Viscusi?

20 A. That's right.

21 Q. And what does it illustrate?

22 A. Both Surgeon General Burney and the Director of the National  
23 Cancer Institute, Dr. Heller, indicated in 1957 that the message  
24 had gotten out there through the media that this was an  
25 effective way to communicate to the public.

1 Q. Why did you select Dr. Heller and Dr. Burney?

2 A. Because these are very prominent public health organizations  
3 in the United States.

4 Q. You mentioned that in evaluating people's perceptions of  
5 smoking risks it's important to understand the gravity of the  
6 message and the source of the message.

7 Have you prepared a demonstrative to illustrate that  
8 concept?

9 A. Yes.

10 MR. MINTON: And, Jamie, if you could bring up 020239.

11 Q. Is that the demonstrative?

12 A. That is.

13 Q. All right. And you have three factors listed there. The  
14 factors you have listed are government versus industry, high  
15 versus low, and favorability/reliability and trustworthiness.

16 Does the empirical research and data actually show that  
17 people weigh and interpret risk information according to those  
18 three factors?

19 A. Yes. These are three factors I've studied extensively.

20 Q. Let's talk about each of those factors and begin with  
21 government versus industry. This is a factor that you've  
22 studied yourself?

23 A. That's correct. This is based on work I did for the EPA.

24 MR. MINTON: And, Jamie, could you bring up J-DEM  
25 020238.

1 Q. Is that one of the articles that you're referring to,  
2 Dr. Viscusi?

3 A. Yes.

4 Q. All right. And what does the research show on the issue of  
5 what happens when there's a debate between government and  
6 industry with respect to a risk?

7 A. The bottom line is that if there's a risk debate between  
8 groups, such as industry and government, people will gravitate  
9 to the high risk estimates so they will respond in an alarmist  
10 way.

11 So, what's essential for this is that there has to be a  
12 debate between two different entities -- in this case,  
13 government and industry -- and it doesn't matter whether  
14 industry is on the high side or the government is on the high  
15 side; just the fact that there is a debate between these two  
16 groups generates this alarmist response.

17 Q. Let's go back to 020239. And you have high versus low.

18 Let's say that there are two different risk messages  
19 being sent and one says high and the other says low. Can you  
20 describe what the empirical research shows on that issue in  
21 terms of the impact on people's risk perceptions?

22 A. This is also based on another study we did for EPA where we  
23 found that, let's say you have two government scientists who  
24 have differing risk estimates.

25 People don't simply average the risk estimates. They

1 go a little bit above the average, and that's called in the  
2 literature ambiguity of version, and it's a well-established  
3 result that people tend to respond in a slightly alarmist way  
4 there, too.

5 Q. Does the same principle apply to the situation where there's  
6 conflicting information about how grave or certain the risks  
7 might be?

8 A. Yes. That would be the same thing with people who tend to  
9 overestimate relative to the average of the studies.

10 Q. Speaking of the gravity of the risk message. How would you  
11 describe the gravity of the risk messages that have been  
12 conveyed with respect to cigarette smoking?

13 A. They are extremely grave. In fact, the first message went  
14 out was regarding lung cancer.

15 In our work for EPA in evaluating cancer we found that  
16 this is something that people fear, and also Dr. Slovic has  
17 shown that it's among the most dreaded outcomes.

18 Q. And given the gravity of the smoking risk message, what does  
19 the empirical research tell us about how people would interpret  
20 that message?

21 A. This is something that will, in fact, affect their  
22 decisions, so they will take this into consideration when making  
23 a risky decision.

24 Q. The last factor that you have on the chart is source -- or  
25 favorability, reliability and trustworthiness. What is being

1 described there?

2 A. What is being described here is the weight people place on  
3 the information based on its credibility.

4 So if an information source is highly credible, people  
5 will pay more attention to it and place a greater weight on it  
6 than if it's not a credible source.

7 Q. How wide or narrow is the credibility difference if you  
8 compare the tobacco industry to public health sources of risk  
9 information?

10 A. Well, that comparison gives you the widest spread of  
11 credibility that I've seen, in that groups, such as the American  
12 Cancer Society, are viewed as the most credible and every time  
13 that either the Tobacco Institute or tobacco companies are put  
14 in a credibility poll they are at the bottom.

15 Q. All right. And are the polling data consistent in showing  
16 those differences across time?

17 A. Yes. The polling data, going back to the early 1980s  
18 through the current time, show the same relationship.

19 Q. Do you recall that Dr. Weinstein testified about survey data  
20 that show source credibility?

21 A. Yes, the McMillan study.

22 MR. MINTON: Jamie, could you bring up J-DEM 020235.

23 Q. And is McMillan -- first of all, can you describe what was  
24 going on in McMillan?

25 A. This was a national survey that looked at three different

1 statements that have been linked to the tobacco industry over  
2 time, which is whether tobacco is not harmful to health, the  
3 claim that nicotine is not addictive, and finally the most  
4 recent claim that secondhand smoke is not harmful to health.  
5 And on every one of these the public rejects the claim. They do  
6 not believe the tobacco companies' claim.

7 Q. Let's go back in time, Dr. Viscusi, to historical polling  
8 data in the mid-to-late 1950s.

9 MR. MINTON: Jamie, could you bring up 020217.

10 And, Your Honor, that's on page 28 of Dr. Viscusi's  
11 written direct.

12 Q. What's illustrated on that demonstrative?

13 A. Over a long period of time polls have asked people whether  
14 they believe smoking is harmful to health.

15 So, beginning in the year 1954 we have the Gallup poll  
16 where 70 percent of the public said smoking is harmful to  
17 health, and by 1999 we have 95 percent.

18 Q. And in terms of how people responded to that particular type  
19 of question, how do you interpret the results overall in this  
20 chart?

21 A. Well, two things seem to be going on that I think are most  
22 noteworthy.

23 First, there's a jump between 1954 and 1956. That  
24 decade was the one in which we had the American Cancer Society  
25 Study, we had '64 Surgeon General's Report, and we put on

1 product warnings on cigarettes.

2 But notably after that, we've seemed to have plateaued.  
3 So we seemed to have reached a saturation point in terms of how  
4 many people will say, "Yes, smoking is harmful to health."

5 Q. Let's talk about some of the events that occurred in the  
6 smoking risk environment between 1954 and 1956. I think you  
7 called them landmark events.

8 What were the events that you just mentioned?

9 A. The '57 American Cancer Society Study that I've already  
10 discussed, the '64 report of the Surgeon General, and hazard  
11 warnings on cigarettes that started in 1966 after Congress  
12 passed the legislation in '65.

13 Q. Was the '57 report that you just mentioned the one that  
14 Dr. Gallup had mentioned in connection with his statement about  
15 a phenomenal figure in polling annals?

16 A. Yes.

17 Q. How about the '64 report? Was that a prominent message?

18 A. Yes. This report was front page news throughout the  
19 country.

20 MR. MINTON: Jamie, could you bring up 020286.

21 Q. Is that a demonstrative that illustrates that, Dr. Viscusi?

22 A. Yes. You can see it's even in the headlines.

23 Q. And when did risk warnings first go on cigarette packs?

24 A. 1966.

25 MR. MINTON: Jamie, could you bring up 020195.



1 Q. In terms of understanding the prominence of the message on  
2 the pack warnings, were consumers used to seeing product  
3 warnings in 1966?

4 A. No. They were a novelty. Before that time we had hazard  
5 warnings for the 10 dangerous chemicals, such as sulfuric acid.  
6 We had warnings on prescription drugs, mostly to prevent  
7 misbranding, not adverse reactions.

8 So that cigarettes were, in fact, the first product to  
9 have hazard warnings that highlighted a risk from the product if  
10 used as intended by the manufacturer.

11 Q. When the warnings first went on the pack, was everyone in  
12 the public health community in agreement that warnings were  
13 necessary to inform people about the risks of smoking?

14 A. No.

15 MR. MINTON: Jamie, could you bring up to 020242.

16 Q. What does that demonstrative illustrate --

17 I don't think that's the right one.

18 What does that demonstrative illustrate, Dr. Viscusi?

19 A. Dr. Blasingame from the American Medical Association wrote a  
20 letter to the FTC published in JAMA indicating that in his view  
21 hazard warnings were not needed because the message had already  
22 been gotten out there and had been well publicized.

23 A similar kind of statement from the American Cancer  
24 Society indicating that the information had gotten out there.

25 MR. MINTON: Jamie, can we go back to 020217.

1 Q. And if we look from 1975 onward, people were reporting  
2 awareness levels of 90 percent and above.

3 Are there practical limits in terms of what we can  
4 expect in risk awareness data from surveys?

5 A. Yes. It's very difficult, if not impossible, in many cases  
6 to get a hundred percent on these questions.

7 Q. Why is that?

8 A. Well, there are a number of things.

9 First, people may have language problems where they are  
10 being asked the question in the survey. They may not understand  
11 the question or disagree with the wording of the question.  
12 There also could be coding errors in terms of how the answers  
13 are recorded.

14 Q. And are there other data from the same or similar polls of  
15 the relevant time frames that asked other questions that help us  
16 compare how prominent or widespread smoking risk awareness and  
17 the smoking risk message has been?

18 A. Yes.

19 MR. MINTON: And Jamie could you bring up 020204.

20 Q. What does that demonstrative illustrate?

21 A. Well, on the horizontal axis we list a variety of questions  
22 people are asked, and the vertical axis is the percentage of  
23 people who could give the answers. So let me just do a couple  
24 of them.

25 The first one, 89 percent of the respondents could name

1 the first U.S. President in an ABC news poll in 1983.

2 Then going to the middle, the 70 percent number. In  
3 1996, which was an election year, only 70 percent of the  
4 American public could name Al Gore as being the Vice President  
5 of the United States.

6 THE COURT: That may have had something to do with his  
7 losing a couple of --

8 THE WITNESS: If he had been higher, Your Honor.

9 MR. MINTON: And that demonstrative is on page 32 of  
10 the written direct, Your Honor.

11 Q. Dr. Viscusi, we've been discussing the concept of practical  
12 maximums in terms of survey responses to risk questions.

13 Is there a different context that's also helpful in  
14 evaluating whether we've reached a saturation point with respect  
15 to hazard or risk awareness when it comes to cigarette smoking?

16 A. I'm not sure I understand the question.

17 Q. Well, let me ask it in a different way.

18 Have there been studies which have looked at the  
19 question from a different issue by providing additional risk  
20 information to people and seeing if it changes their behavior?

21 A. Yes. We have the COMMIT study and the Hutchinson study as  
22 well as other informational intervention studies.

23 MR. MINTON: And, Jamie, could you bring up 020236.

24 Q. What was COMMIT?

25 A. COMMIT was a study in which adults were given information to

1 promote quit behavior. So it was a long-term study that cost  
2 millions of dollars and for which the researchers predicted  
3 there would be a huge effect on quit rates.

4 Q. And what happened?

5 A. They came up empty handed. In fact, if you leave out the  
6 Canadian sites from the sample and only focus on the American  
7 ones, you don't find a significant effect of COMMIT on worker --  
8 on smoking quit rates.

9 Q. And what was Hutchinson?

10 A. Hutchinson was a major long-term intervention to provide  
11 information to school children from grades 3 through 12 to try  
12 to discourage smoking use.

13 This was undertaken in the State of Washington, and  
14 what they found is that even though the information provided was  
15 called the gold standard in terms of giving youth information  
16 about the risks of smoking and trying to discourage smoking,  
17 that there is absolutely no effect of this informational  
18 intervention.

19 Q. And how do these studies then inform the issue of the level  
20 of awareness that people have about the risk of smoking?

21 A. If people are aware, if you provide them additional  
22 information about the risks that's accurate information, you  
23 will not alter their risk beliefs.

24 Q. Now, we've reviewed some historical data on people's  
25 perceptions about smoking being hazardous.

1           Did there come a time when researchers began to study  
2     quantitative measures of people's risk beliefs?

3     A.   Yes, beginning in the 1980s.

4     Q.   And were you, in fact, one of the first researchers to begin  
5     doing that?

6     A.   I think I was the first, yes.

7     Q.   And what type quantitative smoking risk measures have been  
8     studied?

9     A.   The ones I've focused on have been people's perceptions of  
10    the lung cancer risks of smoking, the total mortality risks of  
11    smoking, and the life expectancy loss -- the expected life  
12    expectancy loss associated with smoking.

13    Q.   Why is it that these quantitative measures of people's risk  
14    beliefs are important?

15    A.   Quantitative measures are essential for determining whether  
16    people overestimate the risk, underestimate the risk, or have  
17    risk beliefs that are right on target.

18           If you have a subjective risk measure such as, "I think  
19    smoking is very risky," you don't know how that maps into a  
20    quantitative scientific estimate of what the risks are.

21           MR. MINTON:  Jamie, could you bring up 020229.

22    Q.   And does that demonstrative describe the surveys that you've  
23    discussed in your testimony that contain these types of  
24    quantitative data?

25    A.   Yes.

1 Q. And just looking at the demonstrative, there appears to be  
2 some differences across the surveys.

3 How do those differences impact the interpretation of  
4 results?

5 A. As you can see, there are differences across time,  
6 differences in the samples -- some are national, some focus on  
7 either North Carolina or Massachusetts -- and differences in the  
8 age group that's being sampled.

9 And what's noteworthy is that throughout all these  
10 studies we're going to find that people overestimate the risks  
11 no matter which sample, which age group, or which survey  
12 operation who ran the survey.

13 Q. Let's go to those surveys and see what they show about  
14 people's belief about the lung cancer risks, and let's begin.

15 In terms of getting the type of quantitative risk  
16 information that people actually use, what's the appropriate  
17 question to ask about lung cancer, Dr. Viscusi?

18 A. It would be a variant of something like, Out of 100 smokers,  
19 how many of them do you think will develop lung cancer because  
20 they smoke, or how many will die from lung cancer because they  
21 smoked?

22 Q. Dr. Slovic and Dr. Weinstein have emphasized the answers  
23 that people have given regarding the relative risks of smoking.  
24 Is that the type of information that people actually use in  
25 making a decision about smoking?

1 MS. CROCKER: Objection, leading.

2 THE COURT: Objection is overruled.

3 A. A relative risk information is not the pertinent  
4 consideration for making a smoking decision.

5 What you want to know is the incremental probability of  
6 an adverse outcome, such as death. That will happen if you  
7 smoke as opposed to not smoking.

8 Relative risk information or calculations of relative  
9 risks are of interest in the scientific literature as a way for  
10 testing various hypotheses, but they are not how you would make  
11 a decision.

12 So, for example, there could be something with a huge  
13 relative risk, but if the absolute probability involved is  
14 small, you can go ahead and take that risk.

15 MR. MINTON: Jamie, could you bring J-DEM 020220.

16 THE COURT: I do want to clarify one term.

17 How do you define the term "relative risk"? What are  
18 your comparators?

19 THE WITNESS: Relative risk would be your probability  
20 of, let's say, lung cancer if you're a smoker divided by the  
21 background risk probability of lung cancer for a nonsmoker.

22 THE COURT: So you are not asking the objective  
23 question how many people will die of lung cancer? Or how  
24 many -- I'm sorry, how many smokers will die of lung cancer?

25 THE WITNESS: No. That wouldn't be what that would

1       pertain to.

2       BY MR. MINTON:

3       Q.   And just for clarification.  You endorse the latter question  
4       and not the former; correct?

5       A.   Yes.

6       Q.   And we have up J-DEM 020220.  What are the four surveys that  
7       are represented there?

8       A.   The 1985 survey was administered by Audits & Surveys, a  
9       national survey.

10               1991 is the survey I ran in North Carolina.

11               1997 is a national survey administered by Audits &  
12       Surveys.

13               1998 is a survey in Massachusetts run by the firm Roper  
14       Starch.

15               The bars indicate the number out of a hundred smokers  
16       who either get lung cancer as 1985 or 1987, or die from lung  
17       cancer in the 1991 and 1998 surveys.

18               As you can see these lung cancer risk estimates range  
19       from 38 out of a hundred to 48 out of a hundred.

20       Q.   And when you say "get" or "die," are these the estimates  
21       that people gave in response to that question?

22       A.   Yes.

23       Q.   And overall, what do the results show?

24       A.   They show that people greatly overestimate the risk.  Those  
25       green bars are based on estimates from the U.S. Surgeon



1 General's Report, and using those estimates the actual lung  
2 cancer risk of cigarettes is from 6 to 13 percent or you could  
3 say on average 10 percent, which is substantially below people's  
4 risks beliefs.

5 Q. Are there other surveys, besides these four, that have  
6 looked at that same basic question?

7 A. Yes.

8 MR. MINTON: Jamie, could you bring up J-DEM 020223A.

9 Q. And are some of those -- are the other surveys reflected on  
10 this chart, Dr. Viscusi?

11 A. Yes, they are.

12 Q. And there are three additional surveys. What are they?

13 A. Well, the first two deal with lung cancer, the Annenberg 1  
14 survey of teen smokers, and the second is the Annenberg 2 survey  
15 of teen smokers that Professors Slovic and Weinstein contributed  
16 to. That's die from lung cancer.

17 The last survey is the Weinstein and Slovic survey of  
18 teen smokers, and that question had to deal with whether people  
19 developed life-threatening illnesses.

20 Q. And are the risk beliefs that people expressed in those  
21 additional surveys about lung cancer or developing a life-  
22 threatening illness, are they consistent or inconsistent with  
23 the four other surveys that you've already described?

24 A. They are consistent and, if anything, they are even higher  
25 in part because they focus on teen smokers.

1 Q. And taking the seven surveys as a whole, how do people's  
2 perception of the lung cancer risk, how do they compare to the  
3 actual risk?

4 A. People overestimate the lung cancer risk.

5 Q. And have you studied as well people's estimates of the  
6 overall mortality risk from smoking?

7 A. Yes.

8 MR. MINTON: Jamie, could you bring up 020219.

9 Q. What does that slide show, Dr. Viscusi?

10 A. Well, beginning in '91 I wanted to see if people perceived  
11 the overall mortality risk of smoking, not just the lung cancer  
12 risk. And as you can see, the public's risk perception of the  
13 total mortality risk is 54 percent, 50 percent, 54 percent for  
14 the full sample; and that greatly exceeds the actual risk of 18  
15 to 36 percent.

16 MR. MINTON: Jamie, could you bring up 020222, please?

17 Q. And does that slide also show more recent data with respect  
18 to mortality risk, Dr. Viscusi?

19 A. Yes. And this is -- I'm focusing on the far right, the  
20 Weinstein Slovic analysis.

21 That's what percentage of a one-half pack per day  
22 smokers look at a lightening illness from smokers, and once  
23 again it's 50 to 56 percent.

24 Q. Have you evaluated people's estimates of how many years of  
25 life will be lost due to smoking?

1 A. Yes, because I want to see if people understood the amount  
2 of life they would lose.

3 MR. MINTON: Jamie, could you bring up J-DEM 020218.

4 Q. What does that slide show, Dr. Viscusi?

5 A. Well, it shows three different survey results, and the bars  
6 refer to the life expectancy loss from smoking. And the blue  
7 bars are the responses by men, the yellow bars are the responses  
8 by women.

9 And as you can see, men believe the life expectancy  
10 loss is eight and a half to 10 years, women think it's anywhere  
11 from 13 to almost 16 years.

12 Q. And how does that compare to the estimates of years of life  
13 lost from the public health community?

14 A. The estimates based on Surgeon General estimates, during  
15 that time frame are 3.6 to 7.2 percent life expectancy loss.  
16 I've seen other numbers in that range as well.

17 MR. MINTON: And, Your Honor I apologize. I've fallen  
18 behind in terms of telling you where these were in the written  
19 direct. But the last series of slides is found between pages 52  
20 and 61 in the written direct.

21 Q. Dr. Viscusi, have you also evaluated whether people's  
22 perceptions of the risks of smoking differ by education level?

23 A. Yes, I have.

24 MR. MINTON: Jamie, could you bring up 020192.

25 Q. What does that slide show?

1       A. This chart shows the lung cancer risk beliefs by education  
2       level, where at the top of the chart are the least well-educated  
3       people in the sample, the bottom of the chart are the most well-  
4       educated. And as you can see the message has gotten out there  
5       the all groups in society -- in fact, the least well educated  
6       have even a higher risk belief than people who have gone to  
7       graduate school.

8       Q. The suggestion has been made by plaintiff's experts in this  
9       case that younger people have a less adequate appreciation of  
10      the health risks of smoking than adults do.

11             Have you evaluated the empirical data on health risk  
12      beliefs making that sort of comparison, Dr. Viscusi?

13      A. Yes, I've written extensively about that.

14             MR. MINTON: Jamie, could you bring 020193A back up,  
15      please? Let's begin with that slide.

16      Q. Does that slide have any results that are helpful in terms  
17      of understanding that issue?

18      A. Yes, it does. It shows the results from three different  
19      surveys.

20             The blue or purple bars are the lung cancer risk  
21      beliefs of the youth groups, 16 to 21, age 14 to 17 or 15 to 19  
22      in the different surveys.

23             The yellow bars are the lung cancer risk beliefs for  
24      the adult segment of the sample. And as you can see, in every  
25      case youths have a higher risk belief than do adults.

1 Q. Have you made that same sort of comparison or analysis with  
2 respect to the risks of dying from smoking, not just lung  
3 cancer, but the risks of dying?

4 A. Yes, I have.

5 MR. MINTON: Jamie, could you bring up 020222.

6 Q. And what does that slide show?

7 A. Well, these are -- involve data from the Weinstein-Slovic  
8 studies. And what we find is that 14 to 22-year-olds believe a  
9 higher percentage of adult lifetime smokers will die from lung  
10 cancer than those 23 and over.

11 And similarly for the half-a-pack-a-day smokers getting  
12 a life-threatening disease, teen smokers believe the risk is  
13 higher than do adult smokers.

14 MR. MINTON: Jamie, if you could bring up 020221.

15 Q. Have you looked at whether or not there's a difference in  
16 how younger people and older people perceive the risks from a  
17 small amount of smoking?

18 A. Yes.

19 Q. And what are the results of your analysis, Dr. Viscusi?

20 A. Well, these questions have to do with whether people think  
21 it's safe to only have one or two cigarettes per day or if it's  
22 safe if you only smoke in high school or college and then quit.

23 As you can see, the teens, who are the red bars, are  
24 more in disagreement with these statements than are the adults.  
25 They perceive a higher risk from small amounts of smoking than

1 do adults.

2 Q. And comparing younger people to older people, have you also  
3 looked at the difficulty of quitting -- or people's perception  
4 of the difficulty of quitting?

5 A. Yes, I have.

6 MR. MINTON: Jamie, could you bring up 020225.

7 Q. And what does that slide show?

8 A. 97 percent of teens and adults believe that the longer you  
9 smoke, the harder it is to quit.

10 Q. I think you need to your glasses, Dr. Viscusi. It's 96.

11 A. 96.

12 Q. How about with respect to people's perceptions of how long  
13 it takes to become addicted? Have you looked at that issue as  
14 well?

15 A. Yes.

16 MR. MINTON: Jamie, if you could bring up 020226.

17 Q. And what does this demonstrative show?

18 A. This is the perceived risk of addictiveness. So if a  
19 teenager starts smoking half a pack a cigarettes a day, how long  
20 do you think it will take for them to show signs of addiction,  
21 and teen smokers more than adults believe that it will show up  
22 in a matter of days.

23 Q. And across the categories, who believes that it occurs  
24 quicker: Teens or adults?

25 A. Teens believes it occurs quicker.

1 Q. All right. Are there problems in surveys -- while we're  
2 speaking about intentions -- are there problems in surveys when  
3 you ask people about their intentions to quit smoking?

4 A. Yes, there are huge problems.

5 Q. What are some of the problems?

6 A. Well, the first problem is that it's very difficult for  
7 people to answer any intention question. In fact, Dr. Gallup  
8 pointed this out decades ago.

9 So if you ask an intention question, What's going  
10 through people's heads? Is it, would it be a good idea for me  
11 to quit? Am I likely to quit? Would it be a good idea for  
12 other people to quit?

13 So, Dr. Gallup did not think these questions were that  
14 meaningful, and I agree.

15 Q. Now, plaintiff's experts in this case have suggested that  
16 younger people have unrealistic expectations about their chances  
17 of quitting.

18 Have you analyzed the empirical data on that issue?

19 A. Yes, and I've done it using longitudinal data where I  
20 actually track the same sample of people over time to see if  
21 they fulfilled their quit intentions.

22 MR. MINTON: Jamie, could you bring up J-DEM 020060.

23 Q. What does this slide show?

24 A. This is data from the Monitoring the Future Survey, and the  
25 blue bars indicate for each category of cigarettes smoking the

1 percentage who definitely will quit within 5 years, who indicate  
2 that they will definitely quit. The red bars indicates the  
3 percentage of that same sample who actually did quit within  
4 5 years.

5 And, as you can see, the percentage who did quit dwarfs  
6 the percentage who said they definitely would quit.

7 Q. And why did you pick the category of "definitely will quit"?

8 A. First of all, that's clean.

9 If you say, I probably quit or maybe quit, you don't --  
10 not only do not know what to make of that, but given all the  
11 problems of quit questions -- which I think in the current  
12 antismoking environment, people will tend to overstate quit  
13 intentions because of the social pressures against smokers --  
14 that I think this is a better question to focus on.

15 Q. And if you take people who say "I definitely intend to quit"  
16 and compare them longitudinally, compare their behavior, what  
17 does it show?

18 A. It shows that more people quit than who said they definitely  
19 would quit.

20 Q. Let's move now to Dr. Weinstein's testimony, whether smokers  
21 are unrealistically optimistic about smoking health risks.

22 Before we get to the first demonstrative on this, what  
23 is optimism bias?

24 A. Optimism bias is the hypothesis that people believe the  
25 risks pertain to other people but not to themselves.



1 Q. And Dr. Weinstein expressed the opinion that optimism bias  
2 was pervasive, and I'd like to show you a demonstrative that I  
3 asked Dr. Weinstein about.

4 MR. MINTON: And, Jamie, if you could bring up 020089.

5 Q. And if optimism has been found in all of those different  
6 areas, Dr. Viscusi, how does that impact the analysis of  
7 possible optimism in the context of smoking risks?

8 A. Well, it's nowhere Dr. Weinstein in this exhibit has found  
9 optimism bias everywhere except smoking. So smoking is one  
10 where he did not find optimism bias.

11 Q. And when Dr. Weinstein has asked about optimism bias, how  
12 was he asked about it?

13 A. All these questions are framed in a way that will tend to  
14 generate optimistic bias responses.

15 So the standard optimism bias question is whether are  
16 you above average risk, below average risk, or average risk, and  
17 these questions were first developed asking people Are you an  
18 above average driver or not, and nobody wants to find fault with  
19 themselves, so everybody says they are either average or safer  
20 than average.

21 Q. And is that research that you yourself have done?

22 A. I've done this -- did this for the U.S. EPA in the 1950s.

23 And there, I show that even though people answer these  
24 optimism bias questions in the same way that he found, when it  
25 comes to actual risk taking behavior, there's no behavioral

1 effect of optimism bias. In fact, the same people who said "I  
2 think I'm safer than average" were willing to pay substantial  
3 amounts for safer products.

4 Q. Now, you mentioned about whether Dr. Weinstein had found  
5 optimism in connection with smoking.

6 Did you prepare a demonstrative that illustrates  
7 whether some of Dr. Weinstein's own data are consistent with  
8 people expressing optimism about smoking health risks?

9 A. Yes, I did.

10 MR. MINTON: Jamie, could you bring up 020237.

11 Q. What does that demonstrative show, Dr. Viscusi?

12 A. Well, the left-hand side is the perception of whether the  
13 risk of smoking is risky for a person's health. That would be  
14 the public, so other people.

15 The other question on the right is the risk of smoking,  
16 is there a risk of smoking for your personal health? So that  
17 would be whether you internalized the risk.

18 If there was optimism bias as he would view it, the  
19 left bars in red should be higher than the right bars. People  
20 should think the risks to others is higher than the risks to  
21 themselves, but, in fact, people rate the risks to themselves as  
22 higher than the risks to others.

23 Q. Just a few more questions, Dr. Viscusi.

24 THE COURT: Excuse me. Is this in the direct  
25 testimony? I don't think so.

1           MR. MINTON: I don't believe it is, Your Honor. The  
2 testimony about it is in there, but I don't think this  
3 demonstrative is in there.

4           THE COURT: Okay.

5 BY MR. MINTON:

6 Q. Dr. Slovic has proposed that people act on the basis of the  
7 affecturistic and not on rational decision making.

8           As Dr. Slovic describes it, what is affect?

9 A. He would contrast affect with a rational model of decision  
10 making. So in my rational model, people balance benefits and  
11 costs. In the affect model, that's not what's going on; people  
12 make decisions based on the general vibes or other sense of the  
13 decision that overwhelms consideration of benefit and cost  
14 balancing.

15 Q. Well, as Dr. Slovic describes affect, what's the  
16 relationship of risk and benefit under his theory?

17 A. There should be a negative relationship so high risks will  
18 be correlated with low benefit, and if you perceive a high  
19 benefit, that will be correlated with low risk.

20 Q. And have you prepared a demonstrative that provides examples  
21 of how Dr. Slovic himself has measured this divergence in risk  
22 and benefit when it comes to smoking?

23 A. Yes.

24           MR. MINTON: Jamie, could you bring up 020227.

25 Q. And what does that show, Dr. Viscusi?

1 A. Affect can be negative or positive in Dr. Slovic's world.

2 What we find here is that for smoking, according to his  
3 definition, affect is negative. Cigarette smoking is at the  
4 top.

5 The little circle at the right is the perceived risk of  
6 smoking, which is the highest risk of anything on the chart,  
7 which also includes nuclear power.

8 The triangles on the left are the perceived benefits of  
9 smoking, which are the lowest of anything on the chart.

10 So people perceive the highest risk and lowest benefit  
11 from smoking as compared to anything else Dr. Slovic has studied  
12 which would be a side of negative affect, not positive affect.

13 Q. All right. If we view affect as a function of positive or  
14 negative imagery, are there questions in Dr. Slovic's Annenberg  
15 2 survey -- or the survey that he cooperated with, Annenberg 2,  
16 that provide data on whether people's images of smoking or their  
17 images of cigarettes are positive or negative?

18 A. Yes, there are.

19 Q. Did you prepare a demonstrative on that, Dr. Viscusi?

20 A. I did.

21 MR. MINTON: Jamie, could you bring 020240.

22 Q. What does that demonstrative show?

23 A. They asked people when you hear the words smoking or  
24 cigarettes, what's the first thought or image that comes to  
25 mind.

1                   And the good or very good images are shown in the blue  
2 bars. The respondents who said somewhat bad or very bad in  
3 terms of the image, that's red.

4                   And what we find is that for both teen smokers and  
5 adult smokers, the bad or very bad images far outweigh the good  
6 images which is what I also report in my first smoking book.

7           Q. At bottom, Dr. Viscusi, where do we stand today with respect  
8 to people's perceptions of the risks of smoking?

9           A. Where we stand is that the information has gotten out there.  
10 We've essentially reached a saturation point in terms of  
11 informing the public, and, if anything, the public overestimates  
12 the risk of smoking.

13                   MR. MINTON: Thank you, Dr. Viscusi.

14                   That concludes my live direct examination, Your Honor.

15                   MS. CROCKER: For the record, Elizabeth Crocker for the  
16 United States.

17                                           CROSS-EXAMINATION

18           BY MS. CROCKER:

19           Q. Good morning, Dr. Viscusi.

20           A. Good morning, Ms. Crocker.

21                   THE COURT: Ms. Crocker, I don't think you have your  
22 own mike on.

23                   MS. CROCKER: Shall I use that one instead of this one,  
24 Your Honor?

25                   I'll use the other microphone, Your Honor.

1 BY MS. CROCKER:

2 Q. Dr. Viscusi, when did you begin preparing your written  
3 direct testimony in this case?

4 A. Probably last month.

5 Q. And did you work with attorneys in preparing your written  
6 direct testimony?

7 A. Yes.

8 Q. And which attorneys did you work with?

9 A. Mr. Minton, Ms. Blackwell, and Mr. Cox.

10 Q. Was anyone, other than those three attorneys, involved in  
11 preparing your testimony?

12 A. Not that I know of.

13 Q. And who wrote the first draft of your testimony?

14 A. Well, the -- it depends on the particular question. It's  
15 all my first draft, but the process is one in which in some  
16 cases I actually typed it out, and other cases when we met in  
17 person I was asked the question and I would give a response and  
18 somebody in the room, usually Mr. Minton, would type out my  
19 response.

20 Q. I'm going to start by directing you to page 28 of your  
21 written direct testimony.

22 Now, I think we've already covered some material  
23 related to this area of your testimony in the examination by  
24 Mr. Minton this morning. And it's your opinion, as you state on  
25 that page, that as far as back as 1954 the strong majority of

1 people thought that smoking was harmful; is that correct?

2 A. Yes.

3 Q. And to support that opinion in the pages that follow, you  
4 cite to various Gallup polls taken in 1950s through the present;  
5 is that correct?

6 A. That's correct.

7 Q. And I'm going to start by asking you about the 1954 Gallup  
8 poll that you cite. You cite to the question asked in that 1954  
9 Gallup poll, "Do you think that smoking, cigarette smoking is or  
10 is not harmful to your health?" Is that correct?

11 A. Yes.

12 Q. And you also cite to another question in that 1954 poll --  
13 and I think this is on the following page of testimony that  
14 asked -- "Have you heard or read anything recently that  
15 cigarette smoking may be a cause of cancer of the lung?"

16 Is that correct?

17 A. Yes.

18 Q. And you cite that 83 percent of people answered yes that  
19 they had heard or read that cigarette smoking may be a cause of  
20 cancer of the lung; correct?

21 A. Yes.

22 Q. Now in that page and the pages that follow you cite to some  
23 other similar questions in Gallup polls.

24 For example, in 1957 the question, "Did you happen to  
25 hear or read about the recent report of the American Cancer

1 Society reporting the results of a study on the effects of  
2 cigarette smoking?" Correct?

3 A. Yes.

4 Q. And that's the question that Mr. Minton was asking you about  
5 this morning; correct?

6 A. That's correct.

7 Q. And the response to that question was that 78 percent of  
8 people agreed that they had heard or read about the report of  
9 the American Cancer Society; correct?

10 A. That's right.

11 Q. And you testified that this level of awareness is  
12 remarkable; correct?

13 A. Well, I quoted Dr. Gallup who called it phenomenal.

14 Q. Let's look at line 20 to 21 on page 29. It's your word  
15 "remarkable"; is that correct?

16 A. I used the word remarkable, but in the next sentence I quote  
17 Dr. Gallup --

18 Q. (Interrupting) Dr. Viscusi, I'll get to that, but I simply  
19 asked you if you called it remarkable, and you did; correct?

20 A. I was paraphrasing Dr. Gallup. Even Dr. George Gallup was  
21 struck by the remarkable level of awareness, so....

22 Q. In fact, you testify that the levels of smoking risk  
23 awareness are extraordinarily robust and could probably be  
24 characterized as nearly universal. Is that correct?

25 A. Yes.



1 Q. Now, I'm going to provide you with a copy of an article.  
2 It's United States Exhibit 93264. This is an article entitled,  
3 The Tobacco Industry Summons Polls to the Witness Stand. A  
4 Review of the Public Opinion On the Risks of Smoking from The  
5 Gallup Organization by Lydia Saad, The Gallup Organization,  
6 Steve O'Brien, The Gallup Organization, dated May 15, 1998.

7 Did I read that correctly?

8 A. Yes, you did.

9 Q. And you're familiar with this article as you were shown it  
10 at numerous different depositions and trial testimonies you've  
11 given; correct?

12 A. I think I've only seen it once or twice.

13 Q. And you're familiar with the article; correct?

14 A. I've never read the article. I mean, you showed it to me at  
15 the deposition, but I've never read the whole article.

16 Q. You've seen it at a trial; is that correct?

17 A. Maybe. I know I've seen it once or twice.

18 Q. I'm going to take you through it line by line so you will  
19 have a chance to look at it.

20 Now, this organization, as it reflects on the first  
21 page -- I'm sorry. This article, as reflected on the first  
22 page, is written by two members of The Gallup Organization;  
23 correct?

24 A. I understand it's a draft they presented at the conference.  
25 It was never published. Is that right?

1 Q. My question to you simply was: This article, as reflected  
2 on the first page, is written by two members of The Gallup  
3 Organization; is that correct?

4 A. Yes.

5 Q. Now, if you would turn to page 2 of the article under the  
6 subtitle Summary. Do you see that page?

7 A. Yes.

8 Q. Let me give you a moment to look over that page and I'll ask  
9 you a specific question about it.

10 THE COURT: If you're going to have a lot of questions  
11 on this article, which the witness said he hasn't read, would it  
12 make sense to take our morning break now, have him look at the  
13 article, and then perhaps be able to move more quickly through  
14 the questioning?

15 MS. CROCKER: I'm perfectly happy to do that, Your  
16 Honor.

17 THE COURT: Are there other articles that you're going  
18 to want him to comment on, that it would be useful to have him  
19 look at?

20 MS. CROCKER: I think he's going to be familiar with  
21 all the materials that I'm using with him, except this article.  
22 Maybe he would like to take a moment to reacquaint himself with  
23 it.

24 THE COURT: All right. Let's take our morning break  
25 now then and we will come back at 11, please.

1 (Recess began at 10:47 a.m.)

2 (Recess ended at 11:02 a.m.)

3 THE COURT: Ms. Crocker, please.

4 MS. CROCKER: Thank you, Your Honor.

5 BY MS. CROCKER:

6 Q. Dr. Viscusi, did you have chance over that break to read  
7 through this article?

8 A. I read most of it, and I'm happy to discuss it.

9 Q. Okay. I had asked you to turn to page 2 of the article  
10 under the title Summary. Are you on that page?

11 A. Yes.

12 Q. And this article addresses the tobacco companies' defense in  
13 lawsuits that argues that the risks of smoking have been common  
14 knowledge for decades based upon Gallup surveys; is that  
15 correct?

16 A. Are you reading from this?

17 Yes, it deals with Dr. Ford's testimony.

18 Q. And just for the record, just so that we are clear, I'm just  
19 going to say the exhibit number again.

20 This article was U.S. Exhibit 93264, and it does have a  
21 Bates stamp of 520818356, which I understand is an R.J. Reynolds  
22 Bates stamp. Let me continue.

23 MR. MINTON: It's not really an objection, Your Honor,  
24 but just a point of clarification.

25 There's a continuing reference to this being an

1 article, and could we have a clarification whether or not this  
2 was ever published at any point in time? And, if so, I wonder  
3 if the reference to this as an article --

4 THE COURT: An article doesn't necessarily mean  
5 published. You can explore that on redirect, certainly.

6 MS. CROCKER: Thank you, Your Honor.

7 BY MS. CROCKER:

8 Q. As you just said, Dr. Viscusi, this article specifically  
9 addresses the testimony that was provided by an expert witness  
10 for R.J. Reynolds in a tobacco lawsuit, and that's Dr. Ford;  
11 correct?

12 A. Yes, this paper does that.

13 Q. Do you know Dr. Ford?

14 A. I've never met Dr. Ford.

15 Q. Have you relied upon his expert work in other litigation?

16 A. No, I've never read anything by Dr. Ford.

17 Q. And on page 2 the article reflects that Dr. Ford testified  
18 that the Gallup polls from the 1950s and 60s show that the risks  
19 of smoking were common knowledge; correct?

20 A. Yes.

21 Q. Now I'm going to direct you to the paragraph beginning  
22 Belying. Do you see that paragraph?

23 A. I do.

24 Q. "Belying Lacy Ford's conclusions, a review of historical  
25 Gallup surveys suggests that there was, in fact, a high degree

1 of public doubt and confusion about the dangers of smoking in  
2 the 1950s and 60s. There may have been widespread awareness of  
3 the controversy over smoking, but public belief that smoking was  
4 linked to lung cancer trailed far behind this general awareness  
5 of the controversy."

6 Did I read that correctly?

7 A. Yes, you did.

8 Q. Now, let's turn to page 9 of the article and look at what  
9 Dr. Ford cited to in his testimony.

10 If we could pull up that paragraph at the bottom of the  
11 page, beginning "Dr. Ford's testimony."

12 Do you see that, Dr. Viscusi?

13 A. Yes.

14 Q. "In Dr. Ford's testimony before the jury in both the  
15 Raulerson and Karbiwnyk cases, he used a variety of poll results  
16 from surveys conducted prior to 1970 to prove that the risks of  
17 smoking were common knowledge among Americans during this  
18 period. These results included:

19 "The 1954 Gallup poll showing that 90 percent of  
20 Americans had read or heard that cigarette smoking may be a  
21 cause of cancer of the lung.

22 "Results of Gallup poll questions about whether  
23 cigarette smoking is harmful or not to one's health, starting  
24 with a 1949 survey. . .and going to. . .a 1977 survey."

25 And did I read that correctly, Dr. Viscusi?

1 A. Yes, you did.

2 Q. Now, like yourself, in his testimony Dr. Ford cited to the  
3 1954 Gallup poll; correct?

4 A. I didn't cite that poll result in my testimony today. Maybe  
5 in my written testimony.

6 Q. Whenever I say "in your testimony," Dr. Viscusi, I mean your  
7 written direct testimony in this case unless I say "your live  
8 testimony today." So let me go back and clarify.

9 Like yourself, in your written direct testimony,  
10 Dr. Ford cited to the 1954 Gallup poll; is that correct?

11 MR. MINTON: Just so we are clear. The poll itself or  
12 the specific question that is being discussed with respect to  
13 Dr. Ford's testimony?

14 MS. CROCKER: I think my question is perfectly clear,  
15 and if I'd like to specify later what the question is I'm asking  
16 about, I'm simply asking if he cited to the same 1954 poll.

17 THE COURT: The objection is overruled, but you are  
18 going to have to get to clarify it since, obviously, there were  
19 numerous questions in that poll.

20 MS. CROCKER: Yes, Your Honor. That's exactly where  
21 I'm going.

22 BY MS. CROCKER:

23 Q. Dr. Viscusi, let me just ask it one more time so the record  
24 is clear.

25 Did you in your written direct testimony in this case

1 cite to the 1954 Gallup poll?

2 A. I cited a 1954 Gallup poll, but I do not know that it's the  
3 same poll that included that question because they run multiple  
4 polls in a given year.

5 Q. You cite to a 1954 Gallup poll and you cite to the question,  
6 which we read I think before the break, asking individuals, "Do  
7 you think that cigarette smoking is or is not harmful to your  
8 health?" Correct?

9 A. Yes.

10 Q. And you also cite to 1954 poll and the question, "Have you  
11 heard or read anything recently that cigarette smoking may be a  
12 cause of cancer of the lung?" Correct?

13 A. Yes.

14 Q. And those are exactly the same questions that are included  
15 in this article and specified that Dr. Ford cited to in his  
16 testimony; correct?

17 MR. MINTON: I object, Your Honor, that's incorrect.

18 THE COURT: Well, but the witness can answer that.

19 A. They are the same questions, I'm not sure it's the same  
20 poll, but it is the same year, same polling organization, same  
21 question.

22 Q. Do you know the date of the poll that you cite?

23 A. Some of them are the June '54 poll.

24 Q. And are some of them the January 1954 poll?

25 A. Yes, both polls.

1 Q. You can see on the screen Table 1, which shows the questions  
2 asked in the 1954 poll cited by Dr. Ford. Do you see that?

3 A. Yes.

4 Q. Is that the January 1954 poll and the same questions that  
5 you also cite to?

6 A. Yes.

7 Q. Now, the two questions that you cite to in your testimony  
8 are question 14A, the first question on the screen, and question  
9 15. Is that correct?

10 A. Yes.

11 Q. You do not cite in your testimony question 14B and the  
12 question following question 15 is hard to read. I think it's  
13 question 16. Do you cite those two questions?

14 A. No, I don't.

15 Q. And those two questions read. Question 14B, "In what way do  
16 you think cigarette smoking is harmful?" Correct?

17 A. That's right.

18 Q. And question 16, "Do you think cigarette smoking is one of  
19 the causes of lung cancer or not?" Is that correct?

20 A. Yes.

21 Q. Now, if I could direct you to page 10 of this article and  
22 let's look at the paragraph beginning, The results.

23 "The results, shown below, indicate that there was  
24 widespread belief in 1954 that smoking was harmful (70 percent)  
25 but that top-of-mind recollection or awareness that it caused



1 cancer was extremely low (7 percent). Similarly, there was  
2 widespread awareness of the controversy that smoking might be a  
3 cause of cancer (83 percent), but much lower belief that it was  
4 indeed true (41 percent)."

5 Did I read that correctly?

6 A. Yes, you did.

7 Q. Now, you cite to the court in your written direct testimony  
8 the figure that 70 percent of individuals responded yes to the  
9 question whether smoking was harmful; correct?

10 A. That's correct.

11 Q. You did not tell the court in your testimony about the  
12 follow-up question or the results that are reported here, did  
13 you?

14 A. No.

15 Q. So you didn't tell the court in your testimony that the poll  
16 indicated that only 8 percent of respondents responded that  
17 smoking was harmful because it caused cancer, did you?

18 A. To that open-ended question, that's the number of open-ended  
19 answers you got.

20 Q. Mr. Viscusi, I asked you whether or not you cited that  
21 question and the response to it in your testimony. Did you or  
22 did you not?

23 A. No.

24 Q. You didn't tell the court that only 5 percent of respondents  
25 responded that smoking was harmful because it caused lung

1 cancer; correct?

2 Did you cite that figure in your written direct  
3 testimony?

4 A. That's an unprompted figure and I did not cite it.

5 THE COURT: What do you mean an unprompted figure?

6 Is that the answer to the question, that more  
7 open-ended question that was on the screen a minute ago?

8 THE WITNESS: Yes, Your Honor.

9 THE COURT: All right.

10 MR. BERNICK: Your Honor, can I raise a point just so  
11 that I want the record to be clear on it concerning this  
12 document, because in response to the colloquy about whether this  
13 was published or not --

14 THE COURT: We will get to that, Mr. Bernick. I don't  
15 want to discuss that right now and I certainly don't want to  
16 discuss it while the witness is on the stand.

17 Let's go, please.

18 MS. CROCKER: Thank you, Your Honor.

19 BY MS. CROCKER:

20 Q. Now, I'd like to look at the other follow-up question that I  
21 had just read into the record. That's question 16.

22 Now, we established -- you discussed question 15 which  
23 asked, "Have you heard or read anything recently that cigarette  
24 smoking may be a cause of cancer of the lung?" Correct? You  
25 cite that in your testimony.

1 A. That's correct.

2 Q. But you didn't discuss question 16 or the responses to  
3 question 16 which asked, "Do you think cigarette smoking is one  
4 of the causes of lung cancer or not?" Correct?

5 A. Correct.

6 Q. Let's look at the bottom of page 13 of this article. Are  
7 you there, Dr. Viscusi?

8 A. Yes.

9 Q. Now, do you see there that it indicates that Gallup stopped  
10 asking the heard or read question after 1954? Do you see that?

11 A. Yes.

12 Q. And here is what the trend shows.

13 "In 1954, Americans were clearly uncertain about the  
14 dangers associated with smoking cigarettes. Even in answer to  
15 this rather weak test of the perceived connection between  
16 smoking and cancer, 'Do you think cigarette smoking is one of  
17 the causes of lung cancer,' less than half the public, just  
18 41 percent, indicated that they believed such a connection  
19 existed, and roughly one in three, 29 to 31 percent, were  
20 equally certain there was no connection."

21 Did I read that correctly?

22 A. Yes, you did.

23 Q. You don't report those responses to the court in your direct  
24 testimony, do you?

25 A. No.

1 Q. And if we continue to read.

2 "From January of 1954 to May of 1960, no more than  
3 50 percent of Americans were certain that smoking was a cause of  
4 cancer. Between one-fourth and one-third of the public during  
5 this period believed smoking was not a cause, while roughly  
6 one-quarter were unsure."

7 Did I read that correctly?

8 A. Yes.

9 Q. And again, you didn't report those findings to the court in  
10 your direct testimony; correct?

11 A. Correct.

12 Q. Let's turn to page 16 of this article.

13 If you would pull up under Misleading Definition of  
14 Common Knowledge. Thank you.

15 Now, this section of the article is discussing the  
16 heard or read question that you do cite to; is that correct,  
17 Dr. Viscusi?

18 A. Yes.

19 Q. And let's read what these members of The Gallup Organization  
20 said about that question and the responses.

21 "Firstly, the question sets a very low standard for the  
22 connection between smoking and cancer, asking respondents  
23 whether they have heard or read that it 'may be one of the  
24 causes' of lung cancer; not that it may cause lung cancer or  
25 that it be a major cause, just that it may be 'one' of the

1 causes.

2 "Secondly, the question doesn't ask about a fact (have  
3 you heard or read that smoking causes cancer), but about a  
4 controversy (have you heard or read that smoking may cause  
5 cancer).

6 "On that basis (that the question measures awareness of  
7 a controversy and not of a fact) the answer is no more  
8 indicative of common knowledge about the risks of smoking than,  
9 say, is public awareness of UFO's indicative of common knowledge  
10 about the existence of alien visitors to earth."

11 Do you see that, Dr. Viscusi?

12 A. I do.

13 Q. Now, if you turn to the next page, please, page 17, and look  
14 in the center of that page.

15 You will note that the authors discuss Dr. Ford, and  
16 that's R.J. Reynolds' expert, and he had compared the awareness  
17 levels in response to this heard or read question to awareness  
18 of other events in people in the United States.

19 Do you see that?

20 A. Yes.

21 Q. And let's look at Table 11 together.

22 Actually, can you pull up that paragraph above again,  
23 Chris, for a moment?

24 Do you see at the end of that first paragraph it  
25 indicates that Dr. Ford used a bar chart exhibit, and then says,

1 "see data below"?

2 A. Yes.

3 Q. And then you see the data below included in Table 11?

4 A. Yes.

5 Q. That's Dr. Ford's bar chart exhibit?

6 A. That's right.

7 Q. Now, Dr. Ford's bar chart exhibit included in the second to  
8 last entry the number of respondents who Knew Who Delivered the  
9 Sermon on the Mount; correct?

10 A. That's correct.

11 Q. That's only 34 percent of people; correct?

12 A. Yes.

13 Q. Dr. Ford's bar chart also includes in the second entry from  
14 the top reference to an ABC News poll from 1983. Do you see  
15 that?

16 A. Yes.

17 Q. And there, only 89 percent of respondents could name the  
18 first President; correct?

19 A. That's correct.

20 Q. If you would look at the paragraph above, you will note that  
21 the -- in the first sentence there -- that the authors call this  
22 an invalid comparison. Do you see that?

23 A. Yes.

24 Q. Now, let's look at page 32 of your testimony. And you  
25 include a bar chart exhibit there on page 32; correct?

1 A. Yes.

2 Q. Do you see your bar chart exhibit at the top of the page and  
3 Dr. Ford's bar chart exhibit at the bottom of the page?

4 A. Yes.

5 Q. Now, in your bar chart you also refer to a 1983 ABC News  
6 poll that found that 89 percent of people could name the first  
7 U.S. President; correct?

8 A. Yes.

9 Q. And you also refer to the 1954 Gallup result that found that  
10 34 percent of people knew who delivered the Sermon on the Mount;  
11 correct?

12 A. Yes.

13 Q. And those are exactly the same figures included in  
14 Dr. Ford's bar chart exhibit that we've been looking at from  
15 this article; correct?

16 A. Yes.

17 Q. And these are the figures that the authors of this article,  
18 members of The Gallup Organization, called an invalid  
19 comparison; correct?

20 A. Well, for what purpose?

21 Q. I'm simply asking you if you --

22 A. (Interrupting) It's an invalid comparison for the purpose of  
23 Dr. Ford's testimony, so I like to read what the invalid  
24 comparison was that they are talking about.

25 Q. Dr. Viscusi, we're going to go along much more quickly if

1       you don't interrupt me. I'm not going to interrupt you in your  
2       answers.

3               I am simply asking you, and I had asked you before to  
4       confirm -- we will go back and look at it again --

5       A. (Interrupting) I just want to read the whole sentence --

6       Q. Excuse me. Let's just read it together then.

7               Under the heading Confusing Public Awareness and Public  
8       Knowledge. Chris, if you would pull up that first paragraph.

9               MR. MINTON: Your Honor, at this point, this paper or  
10       document or article, or whatever it is, is a criticism of  
11       Dr. Ford and a particular methodology that he used in a  
12       particular case. It hasn't been shown that Dr. Viscusi used  
13       that methodology.

14               As a matter of fact, it's focusing on a question that  
15       Dr. Viscusi didn't even pick up, you know, as the prime example  
16       of what Dr. Ford used in that as the centerpiece of this  
17       particular thing.

18               I think the whole cross-examination has gone on for a  
19       long time with respect to this document, and I think we now see  
20       that the problem that's being created here. It's making a  
21       contrast that's simply not relevant to this witness --

22               THE COURT: Since the line of cross hasn't been  
23       completed yet, I don't know that for sure. Ms. Crocker may or  
24       may not be able to tie everything up.

25               I am aware, certainly -- and of course I've never seen



1       this document before either -- but I am aware that the document  
2       focuses on Dr. Ford's testimony, and so in order for the cross  
3       to be either useful or persuasive to me, at some point you've  
4       got to tie it to this witness and what his testimony is, not  
5       Dr. Ford who is not before me.

6               Go ahead, if you can do it.

7               MS. CROCKER: Yes, Your Honor.

8               I would just object to counsel's speaking objection and  
9       ask if there are going to be long speaking objections, which may  
10      be necessary --

11              THE COURT: There are not.

12              MS. CROCKER: -- that they happen out of the presence  
13      of the witness, Your Honor.

14              THE COURT: Let's go forward, please.

15      BY MS. CROCKER:

16      Q. Once again, Dr. Viscusi, I think we've established this now  
17      two times, but once again.

18              The questions that Dr. Ford cited to the court in the  
19      case discussed in this article are the same questions from the  
20      1954 Gallup poll that you cited to this court in your direct  
21      testimony in this case. Isn't that correct?

22      A. Yes, many of the questions are the same.

23      Q. And specifically the two questions that I've read to you  
24      now, "Have you heard or read anything recently to the effect  
25      that smoking may be a cause of cancer of the lung?" That's a

1 question you cited; correct?

2 A. Yes.

3 Q. And that's a question that the authors of this article are  
4 discussing and analyzing; correct?

5 A. Yes, within the context of Dr. Ford's testimony.

6 Q. And the question, What is your own opinion -- I'm sorry.  
7 The question, "Do you think cigarette smoking is or is not  
8 harmful to your health" is a question you cited in your  
9 testimony to this court; correct?

10 A. Yes.

11 Q. And that's a question that is also one that Dr. Ford cited  
12 to the court in his testimony; correct?

13 A. Yes.

14 Q. And this article reflects that Dr. Ford had concluded and  
15 testified to the court that the public was aware of the risks of  
16 smoking based upon these Gallup polls; correct?

17 MR. MINTON: Objection, hearsay.

18 THE WITNESS: I don't --

19 THE COURT: Excuse me a minute.

20 Objection is overruled. Certainly the questions based  
21 on this article are not providing evidence for the truth of what  
22 is being repeated from the article. There's no question about  
23 that.

24 Go ahead.

25 MS. CROCKER: Yes, Your Honor.

1 BY MS. CROCKER:

2 Q. Do you recall my question?

3 A. No, I don't.

4 Q. This article reflects that Dr. Ford had concluded and  
5 testified to the court in the trial being discussed that the  
6 public was aware of the risks of smoking based upon Gallup  
7 polls; correct?

8 A. Yes, and he had other things in his testimony, too, but  
9 that's part of it.

10 Q. Now, if I could take you to page 20 of this article which is  
11 the Conclusions section of the article. And if we could go down  
12 to the bullet points at the bottom of that page. Let me read  
13 the first bullet point.

14 "It would be incorrect to say that common knowledge  
15 about the connection between smoking and lung cancer existed  
16 prior to 1960 when less than a majority of the public said they  
17 believed this to be the case."

18 Did I read that correctly, Dr. Viscusi?

19 A. Yes.

20 Q. And you disagree with that statement; correct?

21 A. I believe that people were getting information about the  
22 studies as they came out there, but if everybody believed that  
23 smoking caused lung cancer before 1960, the 1964 report would  
24 not have been front page news. There's a reason it was front  
25 page news, is that it was news.

1 Q. Dr. Viscusi, please focus on my question.

2 I simply asked you: Do you disagree with that  
3 statement? Do you yes, disagree with that statement or no, you  
4 agree with that statement?

5 MR. MINTON: Your Honor, we haven't offered Dr. Viscusi  
6 as an expert historian on what was quote/unquote common  
7 knowledge which was what Dr. Ford was evidently testifying about  
8 in this case.

9 THE COURT: The objection is overruled to this  
10 question.

11 You may answer the question.

12 A. Well, I've never adopted a definition of common knowledge.

13 What I have said is that as the studies were released,  
14 the information was being disseminated to the public over time,  
15 and that the link between smoking and lung cancer is not nailed  
16 down definitively until 19 -- until the 1964 report.

17 I also have reservations about the cause questions, or  
18 the foundation of this sentence here, but -- if you want to talk  
19 about surveys.

20 Q. No, I would like you to focus on my questions and respond to  
21 those, please. And if you would wait a moment before, I'm going  
22 to ask you a question and then you could respond to that.

23 You, in fact, testified in your written direct  
24 testimony, as Mr. Minton confirmed with you this morning in your  
25 live testimony, that in the 1950s, specifically 1957, that the

1 levels of awareness of the risks of smoking were remarkable;  
2 correct?

3 A. It was remarkable that people had heard about the report.  
4 That is different than saying it's remarkable that people had  
5 really high assessments of the risk.

6 Q. So your testimony that the levels of smoking risk awareness  
7 are extraordinarily robust and could probably be characterized  
8 as nearly universal simply doesn't apply to the 1950s; is that  
9 correct?

10 A. No. The 1950s -- they had -- as the information came out  
11 there, people received the information, but I've never claimed,  
12 for example, that people's lung cancer risks beliefs in the  
13 1950s were the same as they are in 1985, '97, '98. They've gone  
14 up over time.

15 Q. Dr. Viscusi, when you were preparing your testimony did you  
16 use the actual 1954 survey with all the questions in it?

17 A. Not for this testimony, but I have a box with every Gallup  
18 poll that's ever been run on smoking. I've reviewed every  
19 Gallup poll.

20 Q. So at some point you did review the entirety of the 1954  
21 Gallup poll that we've been discussing; correct?

22 A. Yes, as one of the many in the box.

23 Q. So at some point you did review the question that asked, "In  
24 what way do you think cigarette smoking is harmful?" Correct?

25 A. If that was publicly available, I'm sure I reviewed it.

1 Q. At some point you reviewed the question that asked  
2 respondents, "Do you think cigarette smoking is one of the  
3 causes of lung cancer or not?" Correct?

4 A. Yes, I know I've reviewed that one.

5 Q. And those are simply questions that you did not include in  
6 your written direct testimony for this court; correct?

7 A. Yes.

8 Q. Okay. I'm going to ask you to put this article to one side  
9 and we're going to turn to a different area.

10 MR. MINTON: Your Honor, at this point I'd like to move  
11 to strike the cross-examination with respect to this article. I  
12 think it was --

13 THE COURT: No, that's denied at this point.

14 BY MS. CROCKER:

15 Q. Okay, Dr. Viscusi, it's your opinion that people greatly  
16 overestimate the risks of smoking; correct?

17 A. Yes.

18 Q. In order to determine whether people over or underestimate  
19 the risks of smoking you rely upon two types of information;  
20 correct?

21 A. I'm not sure what you're referring to.

22 Q. Let me pull -- show you your direct testimony in this case  
23 at page 45, line 5 to 7. You indicate:

24 "There are really only two pieces to the puzzle.

25 First, you need to know the actual risk. Second, you need to

1 know the level at which smokers perceive the risk."

2 Is that your testimony?

3 A. That's correct.

4 Q. And those are the two types of information that you rely  
5 upon; correct?

6 A. Yes.

7 Q. The first is information about actual risk; right?

8 A. That's right.

9 Q. The second is information about the level at which smokers  
10 perceive risks; correct?

11 A. That's correct.

12 Q. And then you compare these two types of information in order  
13 to arrive at your conclusion that people greatly overestimate  
14 the risks of smoking; correct?

15 A. I compare -- yes, I compare the risk beliefs with the actual  
16 risks.

17 Q. Now, for the first type of information that first piece of  
18 the puzzle, you rely upon the estimates provided by the Surgeon  
19 General and NCI; correct?

20 A. That's correct.

21 Q. And for the second type of information -- and that's that  
22 second piece of the puzzle -- you rely upon survey research;  
23 correct?

24 A. That's correct.

25 Q. Now, in doing this comparison in your direct testimony, you

1 state that you use four surveys; correct?

2 A. I use more than that, but in my research I've analyzed four  
3 surveys.

4 Q. Well, let's pull up your direct testimony at page 47, line  
5 12 through 17.

6 And could you put the question up too, Chris?

7 Do you see that testimony that you provided,  
8 Dr. Viscusi?

9 A. Yes.

10 Q. The question asked you, "What surveys did you use?"

11 And your response is, "I used four surveys." Is that  
12 correct?

13 A. Yes. This refers to the surveys I've used in my research.

14 MS. CROCKER: Can you go up to the question and answer  
15 before that, Chris?

16 Q. Is there anywhere that you qualify that this is surveys you  
17 only used for your research and not the surveys you're relying  
18 upon for your testimony in this case?

19 A. No, I didn't explicitly say that.

20 Q. Okay. Now, we're going to go through these surveys one by  
21 one. Now, first, you cite to the 1985 Audits and Surveys  
22 national survey. This is a national survey with 3,119  
23 respondents; correct?

24 A. I don't remember the exact number, but it was a large  
25 sample.



1 Q. This survey was in both smokers and nonsmokers; correct?

2 A. Yes.

3 Q. And this survey was funded by the tobacco companies;  
4 correct?

5 A. I don't know if the companies themselves had any  
6 involvement, but I do know that law firms representing the  
7 companies did commission the survey.

8 Q. So the survey was commissioned by, and paid for, by the law  
9 firms representing the tobacco companies; correct?

10 A. Yes.

11 Q. And the survey was conducted in anticipation of litigation;  
12 correct?

13 A. Yes.

14 Q. And the title page of this survey states it was prepared at  
15 the request of Arnold & Porter, Jones, Day and Shook, Hardy &  
16 Bacon in anticipation of litigation; correct?

17 A. Yes.

18 Q. Is that the title page that you see on the screen there?

19 A. That is.

20 Q. And that's Joint Defendants' Exhibit 022818.

21 Now, you only came across this survey because you were  
22 hired by attorneys for Jones, Day to work or consult on tobacco  
23 issues; correct?

24 A. That's correct.

25 Q. And this was around 1986 or 1987?

1 A. I believe 1986 would be my best estimate, yes.

2 Q. Now, before you were hired by Jones, Day to work on tobacco  
3 issues in 1986, you had not published anything related to  
4 tobacco, had you?

5 A. The article was not yet published, but I had written an  
6 article.

7 Q. Prior to being hired by Jones, Day to work on tobacco issues  
8 in 1986, it's correct that you had not published anything  
9 related to tobacco; correct?

10 A. Nothing was in print at that point, yes, but just like the  
11 Gallup study is an article, I've written an article.

12 Q. And that article was not yet published?

13 A. That's correct.

14 Q. And you had not published any article or book by that time  
15 in which you had stated that you had concluded that people  
16 underestimated the risks of smoking; correct?

17 A. That's correct.

18 Q. Now, just as a side note, this survey included three age  
19 groups: 16 to 21-year-olds, 22 to 45-year-olds, and those 46 or  
20 older; correct?

21 A. Yes.

22 Q. And so this survey that was conducted by two law firms for  
23 the tobacco industry in 1985 included teenagers age 16 and up;  
24 correct?

25 A. 16 to 21, yes.

1 Q. So teenagers age 16, 17, 18; correct.

2 MS. CROCKER: Sorry, Your Honor.

3 THE COURT: Ms. Crocker, just to be clear. I think in  
4 your prior sentence you said the survey was conducted by law  
5 firms, and of course that would not be correct.

6 MS. CROCKER: Sorry, Your Honor. Let me ask that  
7 again.

8 BY MS. CROCKER:

9 Q. This survey, which was commissioned by and paid for by law  
10 firms for the tobacco industry, included people age 16, 17 years  
11 old; correct?

12 A. Yes, all the way -- you know, through 21 in the first study,  
13 age category.

14 Q. Now, the second survey that you rely upon is a survey that  
15 you performed in 1991 in Durham, North Carolina; correct?

16 A. Yes.

17 Q. And this survey had 206 respondents; correct?

18 A. Yes.

19 Q. So comparatively it was a small survey; right?

20 A. Yes, it was.

21 Q. And at the time you conducted this survey you had been  
22 consulting for the law firms for the tobacco industry for about  
23 five years, since 1986; correct?

24 A. Before I ran the survey, I had done consulting work, but  
25 during the time I was doing this survey in this study, I had no

1 involvement with the tobacco industry or any firms representing  
2 them.

3 Q. Prior to the time you conducted this survey you had been  
4 continuing to consult for the tobacco law firms since 1986 on an  
5 on-and-off basis; correct?

6 A. I did two or three things for them, yes.

7 Q. Now, after you conducted this survey in 1991, your  
8 consultation work for those tobacco industry law firms  
9 continued; correct?

10 A. Sporadically it happened, yes.

11 Q. And that's throughout the 1990s; correct?

12 A. It picked up with the state Attorney General suits. Before  
13 then, I don't think I did much, if anything.

14 Q. You did some consultation work throughout the 1990s for law  
15 firms for the tobacco industry; correct?

16 A. Not necessarily in every year, but yes, I did some work in  
17 the 1990s.

18 Q. Now, the third survey that you rely upon is a 1997 Audits  
19 and Surveys survey; correct?

20 A. '97 was Audits and Surveys as well as in '85.

21 Q. Like the 1985 survey, this 1997 survey was paid for by law  
22 firms for the tobacco industry; correct?

23 A. Yes, but I'm not sure which ones.

24 Q. Well, let me refresh your memory.

25 This is JD 022820. It's the 1987 Audits and Surveys.

1 Do you see that up on the screen?

2 A. I do.

3 Q. Do you see it says, "Prepared for Arnold & Porter, Jones,  
4 Day, Reavis & Pogue"?

5 A. Yes.

6 Q. Those are the same law firms that commissioned the 1985  
7 survey that you also rely upon; correct?

8 A. It's two of the three, yes.

9 Q. Now, this survey was commissioned and conducted by Audits  
10 and Surveys for Arnold & Porter and Jones, Day without any input  
11 from you; correct?

12 A. That's correct.

13 Q. And this 1997 survey was commissioned to defend lawsuits  
14 against the tobacco industry; correct?

15 A. I'm not sure why they did it, but I assume it's in  
16 connection with these state Attorney General cases.

17 Q. Let's show you your testimony in the Falise case at page  
18 4415, and I'll provide you with a transcript. It's lines 1 to  
19 4.

20 MR. MINTON: Could I have one, too?

21 Q. Do you have that transcript? Do you see it up on the  
22 screen, Dr. Viscusi?

23 A. I do.

24 Q. And the question to you was, "The 1997 and the 1998 surveys,  
25 just so we're clear, were commissioned to defend lawsuits

1       against the industry which were unrelated to this case that's  
2       brought us here today."

3               "Yes" is your answer; correct?

4       A.   That's what I said, but I was focusing on the "unrelated to  
5       the case that's brought us here today."

6       Q.   Do you provide that explanation in that testimony?

7       A.   No, I don't.

8       Q.   Let's look at your testimony in Falise at page 4359.

9               MS. CROCKER: Chris, if you could bring that up, and at  
10       line 12 through 21.

11       Q.   The question is asked of you, "Surveys again in 1997 and  
12       1998. Why were additional surveys run in general?"

13               And your answer is, "'91 was on North Carolina sample.  
14       When there's a series of lawsuits by the states against the  
15       tobacco industry, there was a desire to see if my results held  
16       up nationwide. In 1997 was a national replication of my '91  
17       survey."

18               Is that your testimony, Dr. Viscusi?

19       A.   Yes.

20       Q.   We can take that down.

21               So the fourth survey you rely upon is a 1998 survey  
22       that was administered by the firm Roper Starch; correct?

23       A.   Yes.

24       Q.   And this survey was also funded by the tobacco industry;  
25       correct?

1 A. Once again, it's by law firms representing the industry.

2 I'm not sure which ones, other than Arnold & Porter.

3 Q. And this survey was designed to be used by the tobacco  
4 industry to defend against litigation; correct?

5 A. It was designed to be used by me in the Massachusetts case,  
6 so I guess yes.

7 Q. And let's look at your direct testimony at page 51, line 2  
8 through 3.

9 You indicate there, "That study was funded by the  
10 industry and was designed to gather data from a Massachusetts  
11 population in connection with that state's lawsuit against the  
12 industry." Correct?

13 A. Yes.

14 Q. So of the four surveys you rely upon, three were funded by  
15 law firms for the tobacco industry or by the industry; correct?

16 A. Yes.

17 Q. And those three are the 1985, 1997, and 1998; correct?

18 A. Yes.

19 Q. Now, three of the surveys -- again, the 1985, 1997 and  
20 1998 -- were conducted for use in litigation; correct?

21 A. That's what I assume they were all done for, yes.

22 Q. Well, you know that to be a fact. You've testified to that;  
23 correct?

24 A. Yes, but that was the assumption on my part, at least with  
25 respect to the '97 survey.

1 Q. That's the 1997 survey that you stated in Falise was  
2 commissioned to defend lawsuits against the industry; correct?

3 A. Yeah. I answered yes to that question.

4 Q. And two of these surveys, the 1985 and the 1997 survey, were  
5 commissioned by law firms for the tobacco industry without any  
6 input from you; correct?

7 A. Yes, that's correct.

8 Q. Now, you served as a consultant and then as an expert  
9 witness for tobacco companies for almost 20 years, since 1986;  
10 correct?

11 A. Those are the starting and end dates, but I didn't do work  
12 in every year.

13 Q. But you have been a consultant, as we just discussed,  
14 throughout the '90s; correct?

15 A. Once again, not in every year, but yes, in many of the years  
16 of the '90s.

17 Q. And you began your consultation in 1986; correct?

18 A. I believe that would be the start date.

19 Q. And in those 20 years you've testified as an expert witness  
20 numerous times on behalf of various tobacco companies; correct?

21 A. Well, I believe this is the ninth court testimony I've  
22 given.

23 Q. So you've testified at trial eight times for these  
24 defendants, correct? And this today is the ninth time?

25 A. I believe that's the count.



1 Q. And you've been deposed as an expert for these defendants in  
2 25 different cases; is that correct?

3 A. Yes.

4 Q. Can you estimate how many days of testimony, trial and  
5 deposition, you've provided over those 20 years for these  
6 defendants?

7 A. Trial testimony, I would estimate under 20, maybe 15.  
8 Depositions, I'd say between 25 and 30 deposition days.

9 Q. So approximately 50 days of testimony trial and deposition?

10 A. Something like that.

11 Q. And you've been compensated, of course, for your work for  
12 the tobacco companies, including your testimony in those  
13 25 cases; correct?

14 A. Yes.

15 Q. And you were compensated at \$750 an hour for your work;  
16 correct?

17 A. No. It's 850 an hour now. It used to be 750 an hour.

18 Q. When you started this case it was \$700 an hour; correct?

19 A. It may have been that several years ago. At the time of my  
20 deposition, it was 750. I'm not sure of when I started. But it  
21 has been lower in the past.

22 Q. At the time you filed your expert report in this case, do  
23 you recall reporting it was \$700?

24 A. No.

25 Q. At the time of your deposition in this case, it was \$750 an

1 hour; correct?

2 A. That's correct.

3 Q. In the last two years you've raised your prices by a hundred  
4 dollars an hour; correct?

5 A. That's correct.

6 Q. And at the time of your deposition you testified that you  
7 were paid \$3,000 for a half day of testimony or \$6,000 for each  
8 full day of testimony; is that correct?

9 Is that what you said at your deposition?

10 A. 3,000 or every half day or part thereof.

11 Q. Or any part thereof. So even if testimony went on for only  
12 an hour, you're still going to be compensated at \$3,000;  
13 correct?

14 A. That's correct.

15 Q. Now, have your rates for testimony gone up since your  
16 deposition in this case?

17 A. It's \$3,400 per half day or part thereof.

18 Q. And what is it for a full day of testimony?

19 A. \$6,800.

20 Q. So for your testimony today you're going to be compensated  
21 at \$6,800; correct?

22 A. That's correct.

23 Q. On how many cases are you currently working with any of the  
24 tobacco company defendants, even if you have not yet filed an  
25 expert report or testified?

1 A. I believe just one other case.

2 Q. So would that bring you up to 26 cases in which you've  
3 served as an expert for the tobacco companies?

4 A. I'm not -- I won't be deposed in that case. I might  
5 testify, but I won't be deposed. So it might bring up to 10 the  
6 number of testimony. But they've indicated they don't want to  
7 take my deposition.

8 Q. You have been deposed 25 times after all; isn't that  
9 correct?

10 A. Yes.

11 Q. Now, each time you've testified for these tobacco company  
12 defendants you've relied upon and cited to the same four surveys  
13 that are included in your testimony for this trial and that we  
14 just discussed: the 1985 survey, 1991, 1997, and 1998; correct?

15 A. I don't think that's true if you count deposition testimony  
16 because some of the depositions were before the '98 survey was  
17 run.

18 Q. For any deposition testimony you provided or trial testimony  
19 after that survey was run, you cited to and relied upon those  
20 four surveys; correct?

21 A. Yes, possibly with the exception of the Miles Price case. I  
22 don't recall if I did that. But certainly in all the other  
23 cases I relied on all four surveys.

24 Q. And you would agree, would you not, that objectivity can be  
25 compromised where a survey is conducted in anticipation of

1       litigation and by persons connected with the parties or for  
2       counsel who are aware of its purposes in the litigation;  
3       correct?

4       A.   I'm not sure I would buy into that if I'm the one reviewing  
5       the survey instrument and making sure it's sound.

6       Q.   So you wouldn't agree that objectivity can be compromised in  
7       that circumstance?

8       A.   It could if I'm not doing a cross-check on the validity of  
9       the survey.

10      Q.   Let's pull up your testimony in the Falise case at page 4430  
11      and beginning at line 12. And I think we will have to go to  
12      line 25.

13                   Do you see that testimony, Dr. Viscusi?

14      A.   Yes.

15      Q.   You were asked, "Let me ask you if you agree with this  
16      statement that talks about objectivity of a survey. It says,  
17      objectivity can be compromised where a survey is conducted in  
18      anticipation of litigation and by persons connected with the  
19      parties or for counsel are aware of its purposes in the  
20      litigation. Do you agree with that statement?"

21                   Your answer: "In any circumstance it's possible to  
22      have a survey that is not objective, not just that circumstance.

23                   "Question: Do you agree with that statement?

24                   "Answer: I don't know why I would disagree with it.  
25      It's possible to compromise objectivity all the time.

1                   "Question: I'm sorry. Do you agree or not? I didn't  
2 follow.

3                   "Answer: Yes, it's always possible to compromise  
4 objectivity, including litigation."

5                   Is that the testimony you provided in the Falise trial?

6 A. Yes.

7 Q. Okay. I'm going to put up now United States demonstrative  
8 exhibit 18217 and I'll provide you with a copy of that. I'll  
9 give you a moment to look that over, Dr. Viscusi.

10                  Do you have it in front of you?

11 A. I've read it.

12 Q. Now --

13 A. I'm ready.

14 Q. Thank you.

15                  As you stated in your written direct, and again this  
16 morning in your live testimony, from these four surveys that you  
17 rely upon, you rely upon three questions to understand people's  
18 perceptions of the risks of smoking; correct?

19 A. Three questions and variants of them, yes.

20 Q. There's a question about lung cancer; correct?

21 A. Yes.

22 Q. There's a question about mortality risks; correct?

23 A. Yes.

24 Q. There's a question about life expectancy; correct?

25 A. That's right.

1 Q. And those are the three questions, with some slight  
2 variation in wording, that you rely upon to come to the  
3 conclusion that people overperceive the risks of smoking;  
4 correct?

5 A. Yes.

6 Q. Now, you can see on the demonstrative the questions as cited  
7 in your direct testimony that form the basis of your opinion  
8 that you rely upon that you've just stated, and we will go  
9 through them together.

10 From the 1985 Audits and Surveys survey, you rely upon  
11 only a single question; correct?

12 A. For the lung cancer risk beliefs, I analyzed other questions  
13 from the survey, but yes, for lung cancer risk beliefs, yes.

14 Q. Do you cite any of the other questions from that survey in  
15 your direct testimony in this case?

16 A. No.

17 Q. So for your direct testimony in this case, you rely upon and  
18 cite to only a single question from that survey; correct?

19 A. Yes.

20 Q. And that question is, "Among a hundred cigarette smokers,  
21 how many of them do you think will get lung cancer because they  
22 smoke?" Correct?

23 A. Yes.

24 Q. Now, that's the question there, question 1, that you then  
25 repeated in your 1991 survey with a slight variation in wording;

1 correct?

2 A. I changed the wording and I also undertook an extensive  
3 series of pretests exploring different question wording.

4 Q. Dr. Viscusi, that's way beyond what I've asked you in my  
5 question, so let me ask it again and I'll try to be clear.

6 Question one. "Among a hundred cigarette smokers how  
7 many of them do you think will get lung cancer because they  
8 smoke?"

9 That's the question in your 1985 survey; correct?

10 A. Would get lung cancer because they smoke is the '85 survey  
11 question.

12 Q. And the 1991 survey question is, "Among a hundred cigarette  
13 smokers how many of them do you think will die from lung cancer  
14 because they smoke?" Correct?

15 A. Yes.

16 Q. So question 1 in both of those surveys is the same except  
17 for the word "die" instead of "get"; correct?

18 A. Yes.

19 Q. In fact, in the demonstrative -- let me start again.

20 Dr. Viscusi, the demonstratives that were shown to us  
21 this morning in your live testimony, are those things that you  
22 prepared or that counsel prepared for you?

23 A. I didn't, you know, do any of the graphics work, but I  
24 discussed the numbers with counsel.

25 MS. CROCKER: And could we display demonstrative

1 020220, Chris?

2 I'll come back to that in a moment. I've got it right  
3 here.

4 Q. J-DEM 020220. This is a demonstrative you discussed this  
5 morning with counsel; correct?

6 A. Yes.

7 Q. And in this demonstrative, which reflects the results from  
8 your 1985 -- or the 1985, 1991, 1997, and 1998 survey, you can  
9 see the question at the top is written as a single question;  
10 correct?

11 A. With lots of variations in parenthesis, yes.

12 Q. The question is, "Among, out of every, a hundred smokers,  
13 how many of them do you think will get, die from, develop, lung  
14 cancer because they smoke?" Correct?

15 A. Yes.

16 Q. Okay, let's go back to the demonstrative that I had put up  
17 before.

18 So in the 1997 survey that question was then repeated  
19 with a slight variation in wording; correct?

20 A. Yes.

21 Q. And in the 1998 survey, that question was again repeated; is  
22 that correct?

23 A. With a slight difference in wording plus "die" instead of  
24 "develop."

25 Q. So that's the question that you asked in your 1991 survey;



1 correct?

2 A. Yes. The "die" version is mine.

3 Q. And your question in the 1991 survey, that's a question that  
4 you included in that survey yourself; correct?

5 A. That's correct.

6 Q. Then that question number 1 was also included in the 1997  
7 survey, which you have testified was commissioned by law firms  
8 for the tobacco industry without your input; correct?

9 A. That's correct.

10 Q. Now -- okay, I'm going to ask you now to look at the second  
11 question that's on the screen there. The second question that  
12 you rely about is related to the mortality rates from smoking;  
13 correct?

14 A. Yes.

15 Q. And in the 1991 survey you asked, "Among a hundred cigarette  
16 smokers how many of them do you think will die from lung cancer,  
17 heart disease, throat cancer and all other illnesses because  
18 they smoke?" Correct?

19 A. Yes.

20 Q. The 1997 survey repeated that question, and that survey  
21 again was commissioned without your input; correct?

22 A. That's correct.

23 Q. And then the 1998 survey repeats that question again;  
24 correct?

25 A. That's right.

1 Q. And the third question that you rely upon looks at life  
2 expectancy; correct?

3 A. That's correct.

4 Q. The question that you drafted in the 1991 survey is, "The  
5 average life expectancy for a 21-year-old male, or female, is  
6 that he or she would live for another 53, or 59, years. What do  
7 you believe the life expectancy is for the average male or  
8 female smoker?" Correct?

9 A. Yes.

10 Q. And when I said male or female, Dr. Viscusi, males were  
11 asked the male version of that question, the females were asked  
12 the female version of that question; correct?

13 A. That's right.

14 Q. Now, that question is repeated in the 1997 survey with a  
15 slight change in wording.

16 "As you may know, an average 21-year-old female" -- and  
17 I'll read the female version -- "would be expected to live to  
18 the age of 80. What do you think the life expectancy is for the  
19 average female smoker?" Is that correct?

20 A. Yes.

21 Q. And that's a change in wording from your version of the  
22 question; correct?

23 A. Yes.

24 Q. And then that change in wording is the same change that you  
25 chose to include in the 1998 survey; correct?

1                   It says, "As you may know, an average 21-year-old  
2   female will be expected to live to the age of 80. What do you  
3   think the life expectancy is for the average female smoker?"  
4   Correct?

5   A. Yes.

6   Q. Now, all three of these questions that you rely upon asks  
7   people to provide numerical estimates; correct?

8   A. That's correct.

9   Q. So the first two asked people to provide estimates of lung  
10   cancer and mortality in terms of a number out of a hundred  
11   smokers; correct?

12   A. Yes.

13   Q. And the third question asked for people to provide a  
14   numerical estimate of the years of life expectancy lost; right?

15   A. Yes.

16   Q. And you conclude that people greatly overestimate the risks  
17   of smoking because they provide you with numerical estimates  
18   that are higher than the Surgeon General or NCI estimates for  
19   those three questions; correct?

20   A. Yes.

21   Q. For example, when you ask the lung cancer question, you get  
22   responses ranging from 38 to 48; correct?

23   A. That's correct.

24   Q. And the Surgeon General's estimate is 6 to 13; correct?

25   A. That's right.

1 Q. So your analysis is limited to measuring risk perception by  
2 people's numerical estimates in answer to those three questions;  
3 correct?

4 A. Well, I do more than that, as you noticed this morning, but  
5 that's the core of my analysis, these three questions.

6 Q. These three questions from the four surveys are the core of  
7 your analysis; correct?

8 A. Yes.

9 Q. Now, you are familiar, are you not, with the published work  
10 of scholars who criticize questions that asked people to express  
11 risk estimates in numerical fashion?

12 A. Depends on how you ask the numerical question.

13 Q. Dr. Viscusi, I am not asking you about how you ask the  
14 question. I am simply asking you whether or not you were  
15 familiar with the published work of scholars who criticize  
16 questions that asked people to express risk estimates in a  
17 numerical fashion.

18 A. I know Dr. Slovic disagrees with me, for example.

19 Q. Are you familiar that scholars, including Dr. Slovic and  
20 others, have published work criticizing questions asking people  
21 to express risk estimates in a numerical fashion?

22 A. Once again, I think it depends on how you ask the risk  
23 question.

24 I haven't seen any specific criticism except, perhaps,  
25 Dr. Slovic criticizing where you ask out of a denominator of a

1       hundred.

2       Q.   Let's look at the testimony you provided in the Falise trial  
3       at page 4461.

4               And the question there at line 3 is, "Are you familiar  
5       with the criticism that have been raised by various scholars of  
6       questions which asked people to express risk estimates in a  
7       numerical fashion like this?

8               "Answer:  You're reading from Professor Hansen's  
9       article, I take it?"

10              That's your response?

11      A.   Yes.  I'd be happy to comment on it as well.

12      Q.   I'm not asking you to comment on the article.  I was simply  
13      asking you to confirm that you're aware that scholars have  
14      criticized questions that asked people to express risk estimates  
15      in numerical fashion, and that includes scholars such as  
16      Dr. Slovic and also such as Dr. Hansen; correct?

17      A.   Hansen is not a Doctor.  Hansen is a lawyer.  He's a  
18      colleague of mine and Judge Weinstein concluded his testimony  
19      with --

20      Q.   (Overtalking) Doctor --

21      A.   (Overtalking)-- he's not a Doctor.  You called him a Doctor.

22      Q.   Then Mr. Hansen.  Are you aware that Mr. Hansen, who is a  
23      Professor; is that correct?

24      A.   He's a Professor, yes.

25      Q.   He's a Professor at Harvard Law School like yourself;

1 correct?

2 A. He's not an economist and not a chaired Professor --

3 Q. (Overtalking) He's a Professor at Harvard Law School like  
4 yourself; correct?

5 A. We both have jobs at Harvard Law School, but we deal in a  
6 different rank.

7 Q. And you're aware, as you've already stated, that in his  
8 testimony for this case Dr. Slovic also expressed criticisms of  
9 using a purely numerical approach to ask people about risk  
10 perception; correct?

11 Are you aware of those statements in his testimony?

12 A. Yes.

13 Q. And you're aware -- and Dr. Weinstein's testimony, he also  
14 made statements expressing criticisms of using a purely  
15 numerical approach; correct?

16 A. Yes.

17 Q. Now, in your testimony for this case you don't distinguish,  
18 do you, between different levels of risk beliefs or risk  
19 perception?

20 A. Sure I do. That's what these quantitative risk questions  
21 do.

22 Q. Let me be more clear then.

23 You don't include in your direct testimony any  
24 discussion of whether smokers have only a superficial awareness  
25 of the risks of smoking or whether they have some knowledge or a

1 deeper knowledge of the risks of smoking; correct?

2 A. It's not correct. If people think smoking is going to kill  
3 them, cause lung cancer, and lead to life expectancy loss,  
4 that's not superficial knowledge.

5 Q. Do you anywhere in your direct testimony distinguish between  
6 different levels of risk belief, saying that some levels of risk  
7 belief are superficial knowledge and some are a deeper  
8 knowledge, Dr. Viscusi?

9 A. Those aren't my categorizations, and you have to tell me  
10 what you mean by superficial knowledge or deeper knowledge.

11 Q. Then that is not an opinion that you express in this case;  
12 correct?

13 You do not categorize risk beliefs into superficial or  
14 deeper beliefs; correct?

15 A. Well, I think it's deeper in the sense of --

16 Q. Dr. Viscusi, is that an opinion that you express in this  
17 case?

18 It's not; correct?

19 A. I may have used words like this somewhere, but these are  
20 not, you know, major categories in which you put knowledge.

21 Q. You don't use the word "superficial" in your testimony in  
22 this case; correct?

23 A. I didn't have deny that. I said that those are not general  
24 categories in which I usually put things. I may have used that  
25 word, and it's over a 100-page document, but that's not a

1       general grouping in which you put knowledge.

2       Q.   Okay.  So you don't distinguish, in your direct testimony  
3       that you're providing to the court, between a superficial  
4       knowledge or some deeper knowledge of risk beliefs?

5               That's just something that you don't distinguish  
6       between and talk about in your testimony; correct?

7       A.   I believe that knowledge -- if you call it knowledge deep in  
8       terms of knowing the consequences, knowing the severe effects,  
9       knowing the probability of the effects, this is as deep as it  
10      gets.

11      Q.   So what you're telling me is you believe the knowledge is  
12      deep.

13             What I'm asking you, Dr. Viscusi, is in your direct  
14      testimony do you distinguish between deep knowledge and some  
15      superficial level of knowledge?

16             You don't do that; correct?

17      A.   I may have used those words.  If you can show me the portion  
18      of the direct testimony that you want to discuss, I'll be happy  
19      to discuss it.

20      Q.   I'm simply trying to confirm with you --

21             THE COURT:  I think the witness -- excuse me.  I think  
22      the witness has answered that question.

23             MS. CROCKER:  Thank you.

24      BY MS. CROCKER:

25      Q.   Let me show you United States demonstrative exhibit 17421.



1           You've testified that you reviewed the testimony of  
2   Dr. Slovic in this case, so you've already reviewed this  
3   demonstrative exhibit; correct?

4   A.   Yes.

5   Q.   And you're aware that Dr. Slovic in his testimony to this  
6   court distinguished between superficial awareness of the risks  
7   of smoking, some knowledge, and deeper knowledge of the risks of  
8   smoking? You're aware of that testimony; correct?

9   A.   Yes. I now recall where I saw the superficial/deeper  
10   distinction.

11   Q.   That's not a distinction that you make, correct, that's a  
12   distinction that Dr. Slovic makes; correct?

13   A.   That's correct.

14   Q.   You can put that to one side, Dr. Viscusi.

15           Now, you are aware that numerous surveys, besides the  
16   four that you rely upon as the core of your opinion, have been  
17   conducted on the question of risk perception and smoking;  
18   correct?

19   A.   Yes, there have been other surveys.

20   Q.   For example, you're aware of data collected in a 1999 survey  
21   that I think you referred to as Annenberg 1; correct?

22   A.   Yes.

23   Q.   You're aware of a survey conducted by Doctors Weinstein and  
24   Slovic that was conducted in 2000 and 2001; correct?

25   A.   Yes.

1 Q. And in your testimony you call that Weinstein-Slovic 2001;  
2 correct?

3 A. Yes.

4 Q. And you're aware of a 1999 to 2000 survey often referred to  
5 as Annenberg 2; correct?

6 A. That's correct.

7 Q. Now, the survey conducted by Doctors Weinstein and Slovic in  
8 2000, 2001, was funded by the Robert Wood Johnson Foundation;  
9 correct?

10 A. That's correct.

11 Q. And the Robert Wood Johnson Foundation is not a party to any  
12 tobacco litigation to your knowledge; correct?

13 A. I don't know if they are. As far as I know, no.

14 Q. And the two Annenberg surveys were conducted through the  
15 University of Pennsylvania's Annenberg School for Communication;  
16 correct?

17 A. That's correct.

18 Q. And the survey that we call Annenberg 1 was also funded with  
19 grant money from the Robert Wood Johnson Foundation; correct?

20 A. Yes.

21 Q. And Annenberg 2 was funded by the Annenberg Public Policies  
22 Center of the Annenberg School of Communication; correct?

23 A. I don't know where they got their money. But, yes, I know  
24 the Annenberg Center ran the survey.

25 Q. Do you know the Annenberg Center to be a party in any

1 litigation, any tobacco litigation?

2 A. No.

3 Q. Now --

4 THE COURT: Excuse me. That's really not a clear,  
5 answer.

6 Do you know the answer to that question?

7 THE WITNESS: I don't. As far as I know, they are not  
8 party to any litigation.

9 THE COURT: All right.

10 MS. CROCKER: Thank you, Your Honor.

11 BY MS. CROCKER:

12 Q. You know that these surveys have asked various types of  
13 questions not limited to the three numerical estimation  
14 questions that we've just reviewed you rely upon; correct?

15 A. Yes.

16 Q. For example, surveys have asked whether people know what  
17 illnesses are caused by smoking; correct?

18 A. Yes, that's correct.

19 Q. Surveys have asked whether people know how serious these  
20 illnesses are; correct?

21 A. I believe so, yes.

22 Q. And let's pull up demonstrative 17782A. I'll provide you  
23 with a copy of that.

24 The question here is, "To the best of your knowledge,  
25 what illnesses, if any, are caused by smoking cigarettes?" Do

1       you see that question?

2       A.   Yes.

3       Q.   Now, that's not one of the three numerical estimation  
4       questions that you rely upon; correct?

5       A.   That's correct.

6       Q.   And let's pull up 17783A.

7                Do you see the question, "Once a person is diagnosed  
8       with lung cancer, how many years do you think he or she  
9       typically lives?" Do you see that question?

10      A.   Yes.

11      Q.   Now, again, this isn't one of the three numerical estimation  
12      questions that you rely upon; correct?

13      A.   That's correct.

14      Q.   Let's pull up 17785A. This question asked, "If emphysema is  
15      detected early, is it always curable, usually curable, sometimes  
16      curable, or not curable?"

17                Do you see that question?

18      A.   Yes.

19      Q.   And again, this isn't one of the three numerical estimation  
20      questions that you rely upon; correct?

21      A.   That's correct.

22      Q.   We can take that down.

23                Now, surveys have also asked whether people know  
24      whether smoking causes more deaths each year than other causes  
25      of death; correct?

1 A. Yes.

2 Q. And let's put up 17786.

3 The question is, "Which one of the following do you  
4 think causes the most deaths each year?"

5 And the answer: "Smoking, car crashes, alcohol, guns,  
6 AIDS." Correct?

7 A. Yes.

8 Q. Again, this question isn't one of the three numerical  
9 estimation questions that you rely upon; correct?

10 A. That's correct.

11 Q. And you can take that down.

12 Surveys have also asked questions about quitting  
13 smoking; correct?

14 A. Yes.

15 Q. And you haven't asked any questions about quitting smoking  
16 in the surveys you conducted; correct?

17 A. That's correct.

18 Q. And let's put up 17792A.

19 A. Excuse me. I did ask questions about whether you were a  
20 former smoker in some surveys, but not with quit intentions.

21 Q. Thank you, Dr. Viscusi.

22 17792A, the question is, "In your opinion, once someone  
23 has been smoking half a pack of cigarettes a day for several  
24 years, how easy is it for them to quit and never smoke again?"

25 And do you see that question, Dr. Viscusi?

1 A. Yes, I do.

2 Q. And the follow-up question, "If you wanted to, how easy  
3 would it be for you to quit and never smoke again?"

4 Do you see that question?

5 A. Yes.

6 Q. And these questions are not part of the three numerical  
7 estimation questions that you rely upon; correct?

8 A. Yes. I'm not sure -- do these numbers refer to the first  
9 question or the second question?

10 Q. Dr. Viscusi, you will just have to focus on my questions  
11 right now, and I simply asked you if you relied upon these  
12 questions, and you don't; correct?

13 A. No, I don't.

14 Q. Okay. Now -- we can take that down -- .surveys have also  
15 asked whether smokers consider themselves to be less vulnerable  
16 to the risks of smoking than the average smoker.

17 Are you aware of those types of questions?

18 A. Yes, certainly.

19 Q. Let's put up 17790.

20 For example, surveys have asked, "Compared to the  
21 average smoker would you say that you -- smoke more cigarettes  
22 per week, fewer cigarettes per week, or about the same number?"  
23 Is that correct?

24 A. That's correct.

25 Q. "Whether you smoke cigarettes with higher tar and nicotine

1 levels, lower tar and nicotine levels or about the same levels."

2 Correct?

3 A. Yes.

4 Q. And so forth.

5 And those again aren't the numerical estimation

6 questions that you rely upon for your conclusion; correct?

7 A. Well, those aren't numerical estimation questions, those are  
8 yes, no, percentage of people who would say yes or no.

9 Q. So again those questions are not one of the three questions  
10 that you rely upon for your conclusion; correct?

11 A. That's correct.

12 Q. Now, surveys have asked whether people who are smoking even  
13 consider themselves to be smokers; correct?

14 A. Yes.

15 Q. And let's put up 17791.

16 You see the question is, "Do you consider yourself a  
17 smoker?" You're familiar with that question?

18 A. Yes.

19 Q. And again that question isn't one that you rely upon;  
20 correct?

21 A. That's correct.

22 Q. Surveys have also asked whether people understand that the  
23 risks of illness and addiction apply to themselves rather than  
24 just to smokers in general. Correct?

25 A. Yes.

1 Q. And let's put up 17787.

2 This question asked, "Would you say that you, the  
3 average smoker has about the same lung cancer risk as a  
4 nonsmoker, a little higher risk than a nonsmoker, twice the  
5 nonsmoker's risk, five times the nonsmoker's risk, or 10 or more  
6 times the nonsmoker's risk?"

7 You're aware of that question?

8 A. Yes, I am.

9 Q. And that isn't one of the questions that you rely upon;  
10 correct?

11 A. That's correct.

12 Q. And 17788, please. And let's take that one down, move to  
13 the next one.

14 "Surveys have also asked smokers, including young  
15 smokers, whether they think that they will continue smoking for  
16 a long period of time." Right?

17 A. Yes.

18 Q. And again those questions aren't one of the three numerical  
19 estimation questions that you rely upon; correct?

20 A. Yes. I think your question, though, is not a numerical  
21 question, it would be a qualitative question, though.

22 Q. The questions you rely upon are the three numerical  
23 estimation questions; correct?

24 A. That's correct.

25 Q. Let's put up 17789.



1                   Surveys have also asked people whether they believe  
2           that exercise can undue the risks of smoking; correct?

3           A.   Yes.

4           Q.   Surveys have asked whether vitamins can undue the effects of  
5           smoking; correct?

6           A.   I know of at least one survey.  I don't know if multiple  
7           surveys on these questions.

8           Q.   So you're aware of that survey question; correct?

9           A.   Yes.

10          Q.   A survey, at least one, has asked if there is no risk of  
11          getting cancer if someone only smokes a few years; correct?

12          A.   Yes.

13          Q.   And a survey has asked whether a person gets lung cancer  
14          depends more on genes than anything else; correct?

15          A.   That's correct.

16          Q.   And again, those questions are not one of the three  
17          questions that you rely upon; correct?

18          A.   That's correct.

19          Q.   So you don't rely upon any other types of questions, other  
20          than the three numerical estimation questions that we've  
21          identified that were on that demonstrative we went through  
22          together; correct?

23          A.   I discussed a lot of questions this morning, but those three  
24          questions are the core for my analysis that smokers overestimate  
25          the risks.  But I also report results from the Annenberg surveys

1 as well.

2 Q. We're going to get to Annenberg, Dr. Viscusi. But I'm  
3 asking you what you rely upon for your conclusion.

4 For your conclusion in this case, you rely upon those  
5 three numerical estimation questions; right?

6 A. Well, Dr. Slovic and Dr. Weinstein had a question that I  
7 also rely on about the half-a-pack-a-day smokers contracting a  
8 life-threatening illness, so I would add that to the roster.  
9 That was the fourth in my bar charts. The fourth bar of the bar  
10 charts.

11 Q. You don't rely upon data that shows whether people can name  
12 the diseases caused by smoking. That's not part of your core  
13 set of questions; correct?

14 A. That's correct.

15 Q. You don't rely upon data that shows whether people  
16 understand addiction or how hard it is to quit smoking, and  
17 those questions you don't list as part of your core set of  
18 questions; correct?

19 A. I do report some questions on perceptions of the difficulty  
20 of quitting, but they aren't part of my core of three questions.

21 Q. That's what I'm asking you, Dr. Viscusi.

22 I'm asking you to focus -- I know in your direct  
23 testimony you include many different questions that you report  
24 and disagree with; correct?

25 A. Or I agreed with them. Some I disagree and some I agree.

1 Q. And then you have a core set of three questions that we've  
2 identified; correct?

3 A. Yes.

4 Q. And for your core set of three questions, you don't rely  
5 upon data about whether people have an understanding of the pain  
6 and suffering due to disease caused by smoking; correct?

7 A. People know that death is permanent and that life expectancy  
8 loss is bad, and the studies I've done for EPA show that cancer  
9 is one of the most feared outcomes. So if people overestimate  
10 the risk of cancer, they know this is bad.

11 Q. So, again, that's one of the three questions you asked out  
12 of a hundred smokers how many will get cancer; correct?

13 A. Or die from cancer.

14 Q. Okay. But besides that question, you don't rely upon any  
15 other questions that probe people's understanding of the pain  
16 and suffering due to disease caused by smoking; correct?

17 A. Cancer, death, and life expectancy loss are the three.

18 Q. Now, you've reviewed the testimony of Dr. Slovic and  
19 Dr. Weinstein; right?

20 A. Yes.

21 Q. So you know that Dr. Slovic does consider and rely upon all  
22 of the different types of data that we have just discussed, the  
23 data that you don't rely upon; correct?

24 A. I'm not sure if he relies on my three surveys, but he does  
25 use yes, no questions, qualitative questions. I talk about some

1 of these opinion poll questions, too. They are just not among  
2 my three questions.

3 Q. And you know similarly Dr. Weinstein does consider and rely  
4 upon the types of data that that we have just discussed that are  
5 not part of your core set of three questions; correct?

6 A. Yes, I believe these were some of their exhibits.

7 Q. Now, in a survey conducted by Dr. Slovic and Weinstein, they  
8 asked one of your questions, one of your three questions of  
9 respondents; correct?

10 A. Yes, they did.

11 Q. And let's look at Dr. Slovic's testimony about this, and I  
12 will provide you a copy of his written direct testimony. We're  
13 going to be looking at page 50.

14 MS. CROCKER: If you would just bring out starting at  
15 line 3 and going down, Chris.

16 Q. You're familiar with this testimony; correct?

17 A. Yes, I am.

18 THE COURT: This is his direct testimony in this case?

19 MS. CROCKER: Yes, Your Honor. That's Dr. Slovic's  
20 direct testimony in this case.

21 THE COURT: And what page are you on?

22 MS. CROCKER: I'm at page 50 of that direct testimony.

23 THE COURT: Okay. Go ahead.

24 BY MS. CROCKER:

25 Q. At line 3 it reads, "The Annenberg survey tested these

1 hypothesis by first replicating Dr. Viscusi's line of  
2 questioning and then adding a variation in the question format  
3 along the lines suggested by Tversky and Koehler.

4 "Early in the survey respondents were asked to imagine  
5 a hundred cigarette smokers, both men and women, who smoked  
6 cigarettes their entire adult lives. How many of these hundred  
7 people do you think will die from lung cancer?

8 "This was immediately followed by a similar question  
9 asking about the number of a hundred" -- I'm sorry -- "number of  
10 lung cancer deaths among a hundred nonsmokers.

11 "Next, a third question asked for respondents'  
12 estimates of the numbers of deaths among these same 100 smokers  
13 from, A automobile accidents, B heart disease, C stroke, D lung  
14 cancer, and E all other causes combined."

15 You're familiar with this question or set of questions  
16 in the Annenberg survey; correct?

17 A. Yes. I've analyzed the data as well.

18 Q. And the testimony goes on to state. "Figure N presents the  
19 means of the estimates for lung cancer among the hundred smokers  
20 inquired about in the first and third questions."

21 MS. CROCKER: If we can go down to the next page,  
22 Chris, and I want to just look at the question that begins at  
23 line 18 of page 50 and goes on to page 51.

24 Q. The question was asked of Dr. Slovic, "Doesn't this report  
25 support -- doesn't this result support Dr. Viscusi's conclusion

1       that the risks are overestimated?" Do you see that question?

2       A. Yes.

3       Q. And the answer is provided, "No. The estimates for lung  
4       cancer in question 1 decreased by more than 50 percent when made  
5       in the context of the other causes question 3.

6               "The proportions of respondents who reduced their first  
7       estimates when given a small number of alternative causes of  
8       death in question 3 were 72.5 percent adults and 80.9 percent  
9       youth.

10              "Further, the correlation between the two estimates, a  
11       form of reliability, was very low, only .33 for the adults  
12       and .19 for the younger respondents."

13              Correct?

14       A. That's correct.

15       Q. And by correlation there Dr. Slovic is referring to whether  
16       a respondent had these same estimates and the first question and  
17       the third question; correct?

18       A. That's right.

19       Q. Now, in your direct testimony you suggest that the Annenberg  
20       survey found these results because the Annenberg survey is a  
21       telephone survey and not a pencil-and-paper exercise; correct?

22       A. These particular results, that's one of the reasons, yes.

23       Q. And you also suggest that people would have difficulty doing  
24       what you call mental accounting to keep track of their risk  
25       estimates on the telephone survey; correct?

1 A. Yes.

2 Q. You also suggested your concern is that people would use up  
3 the 100 possible deaths by the time they got to the lung cancer  
4 option. Is that your testimony?

5 A. Yes.

6 Q. Now I'm going to provide you with a copy of U.S.  
7 Exhibit 63865.

8 MS. CROCKER: Your Honor, I just have a few more  
9 questions along this line. If we could keep going before our  
10 lunch break.

11 THE COURT: That's fine.

12 BY MS. CROCKER:

13 Q. This U.S. exhibit is an article that is entitled: What does  
14 it mean to know a cumulative risk?

15 A. This is a draft of my article.

16 Q. Oh, I'm sorry. You've been provided with the wrong exhibit.  
17 The exhibit that I meant to give you -- and we have the wrong  
18 one up there as well.

19 The exhibit I meant to give you is Dr. Slovic's  
20 article, "What does it mean to know a cumulative risk?"

21 Can you locate that one?

22 Your Honor, this might be a good time for a lunch break  
23 after all.

24 THE COURT: All right, everybody, we will take until --  
25 let's see, approximately how much longer do you think you have

1 to go?

2 MS. CROCKER: I would hope to finish in no more than an  
3 hour, Your Honor.

4 THE COURT: Mr. Minton, do you have an estimate or  
5 guesstimate on your redirect?

6 MR. MINTON: I think it will be less than an hour,  
7 certainly.

8 THE COURT: All right. 20 of 2:00, everybody, please.

9 (Lunch recess began at 12:26 p.m.)

10 INDEX

11 WITNESS:

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12 WILLIAM KIP VISCUSI, Ph.D.

13 DIRECT EXAMINATION BY MR. MINTON  
14 CROSS-EXAMINATION BY MS. CROCKER

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CERTIFICATE

20 I, EDWARD N. HAWKINS, Official Court Reporter, certify  
21 that the foregoing pages are a correct transcript from the  
record of proceedings in the above-entitled matter.

21

22

Edward N. Hawkins, RMR

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UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	.	
	.	
Plaintiff,	.	Docket No. CA99-02496
	.	
v.	.	
	.	
PHILIP MORRIS USA, et al.,	.	Washington, D.C.
	.	April 6, 2005
	.	
Defendants.	.	
. . . . .	.	

VOLUME 88  
AFTERNOON SESSION  
TRANSCRIPT OF BENCH TRIAL PROCEEDINGS  
BEFORE THE HONORABLE GLADYS KESSLER,  
UNITED STATES DISTRICT JUDGE

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1                               AFTERNOON SESSION, APRIL 06, 2005

2                   THE COURT: All right, Ms. Crocker, are you ready?

3                   MS. CROCKER: Yes, Your Honor.

4           CONTINUED CROSS-EXAMINATION OF WILLIAM KIP VISCUSI, Ph.D.

5   BY MS. CROCKER:

6   Q.       Dr. Viscusi, before we took a break for lunch we were  
7 just covering, if you recall, the question in the Annenberg  
8 Survey that was a repeat of your lung cancer question, right?

9   A.       Yes.

10 Q.       And we were also covering the question that was also  
11 asked that added some additional causes of death in that survey,  
12 correct?

13 A.       Yes.

14 Q.       And we had just covered your criticism of that second  
15 question that it was not -- that the Annenberg Survey was a  
16 telephone survey; not a pencil and paper exercise, correct?

17 A.       Among other criticisms, yes.

18 Q.       And also your criticism that people would have difficulty  
19 doing the mental accounting to keep track of their risk  
20 estimates, correct?

21 A.       Yes.

22 Q.       Okay. Now, I'm going to provide you with a copy of  
23 United States Exhibit 93322. And this is an article by  
24 Dr. Slovic entitled: Rejoinder, The Perils of Viscusi's  
25 Analyses of Smoking Risk Perceptions, correct?

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- 1 A. Yes.
- 2 Q. And you're familiar with this article, correct?
- 3 A. I am.
- 4 Q. This is a peer-reviewed article that was published by
- 5 Dr. Slovic in the Journal of Behavioral Decision Making,
- 6 correct?
- 7 A. This is a -- I'm not sure this is peer-reviewed. This is
- 8 a comment on my article.
- 9 Q. You don't know whether or not it was peer-reviewed?
- 10 A. His is peer-reviewed. I know the first article that he
- 11 wrote was peer-reviewed and mine was, but I don't know if the
- 12 rejoinder was.
- 13 Q. So, you just don't know whether or not this article was
- 14 peer-reviewed, correct?
- 15 A. That's correct.
- 16 Q. Now, this article refers to a survey that Dr. Slovic
- 17 conducted, correct?
- 18 A. Yes, it does.
- 19 Q. A survey with 49 students from the University of Oregon?
- 20 A. Yes.
- 21 Q. This is not what we've been referring to as the Annenberg
- 22 Survey, correct, just to be clear?
- 23 A. That's correct.
- 24 Q. So this survey, with the 49 students at the University of
- 25 Oregon, is a different survey than the Annenberg telephone

1 survey that you've just expressed some criticisms of, correct?

2 A. Yes.

3 Q. Let's look at page 2 of the article.

4 THE COURT: By the way, is that number considered quite

5 small for a survey of this nature?

6 THE WITNESS: Yes, Your Honor. This is a convenience -- I

7 think this was his class or students in a class at the University

8 of Oregon, so it's not a representative, meaningful, large

9 sample.

10 BY MS. CROCKER:

11 Q. Thank you. And the paragraph beginning "The strong

12 effect" -- and if you would look at what I have pulled out from

13 page 2 of this article, you'll note that the article indicates

14 that students were provided a two-page questionnaire, correct?

15 A. Yes.

16 Q. And they were asked to, if you see there, "consider a

17 hundred individuals, 50 men and 50 women, who smoke one pack of

18 cigarettes per day of all of their adult lives", correct?

19 A. Yes.

20 Q. And they were asked to make a judgment about how many of

21 these hundred people are likely to die of lung cancer, correct?

22 A. That's right.

23 Q. So this repeats the same experiment that Dr. Slovic,

24 then, performed in the Annenberg Survey, which you discuss in

25 your testimony, correct?

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1 A. I don't know the exact wording of the questionnaire,  
2 because one of the criticisms I have of his earlier survey is --  
3 pertains to the wording where they tell people for the second  
4 question, "think again" which implies --

5 Q. Dr. Viscusi --

6 A. -- that people got the wrong answer the first time.

7 Q. I'm not asking you about the wording, I'm simply asking  
8 if this is repeating the same experiment asking your question  
9 and then asking the question that provided various other causes  
10 of death, and if we pull down to the second paragraph there,  
11 Chris, I think you'll be able to see that.

12 Do you see in that next paragraph on page 2 of the  
13 questionnaire the same respondent was again asked to consider  
14 these hundred smokers, do you see that?

15 A. I do.

16 Q. So, this is the experiment where the question is asked  
17 and then a second question is asked about a hundred smokers, but  
18 looking at each of 15 causes of death rather than a single cause  
19 of death, correct?

20 A. It is the same spirit as the other experiment, but it's  
21 not the same experiment.

22 Q. How do you know that, Dr. Viscusi?

23 A. Because this is 15 causes of death and the other survey  
24 gave people five options instead of 15. That's one difference.

25 Q. Okay. And with that variation, then, it is the same



1 experiment, correct?

2 A. Well, then there's the "think again". I don't know if it  
3 says "think again". What I'm saying is this is in the same  
4 family of experiments, I'm willing to give you that.

5 Q. Thank you. Now, this is a written questionnaire; isn't  
6 that correct, the not a telephone survey?

7 A. That's what he says, that's correct.

8 Q. So this survey wouldn't require anyone to do any mental  
9 arithmetic, correct?

10 A. They could use pencil and paper as well.

11 Q. And in this survey, Dr. Slovic found similar results to  
12 the Annenberg Survey, which I will point you to the second  
13 paragraph there beginning on page 2, "the second estimates for  
14 lung cancer decreased for 45 of the 49 respondents often  
15 precipitously. Moreover, the correlation between the estimate  
16 the person gave to lung cancer alone, page 1, and the estimate  
17 given to lung cancer as part of a larger set, page 2, was only  
18 0.21." Do you see that?

19 A. Yes.

20 Q. Are you also aware of an article entitled: Judging the  
21 Accuracy of a Likelihood Judgment, The Case of Smoking Risk by  
22 Dr. Windschitl?

23 A. Yes, I've seen it several years ago.

24 Q. I'm going to provide you with a copy of that article,  
25 it's U.S. Exhibit 73298. Now, this was a peer-reviewed article

1 that was published in the Journal of Decision Making, correct?

2 A. Well, not all the peer-reviewers recommended publication.

3 Q. But it was published in that journal and peer-reviewed,

4 correct.

5 A. It was peer-reviewed. I know at least one peer-reviewer

6 did not recommend publication.

7 Q. Was that yourself?

8 A. Yes.

9 Q. So you are familiar with this article as you were one of

10 the peer-reviewers, correct?

11 A. Yes.

12 Q. Now, this article is written by Dr. Windschitl, who has a

13 Ph.D. in psychology and is a Professor of Psychology, correct?

14 A. I don't know that. I know he's -- he's at the Department

15 of Psychology, I don't know his credentials, whether he's a

16 student or professor. There he is, he's an Assistant Professor

17 of Psychology. I assume he has a Ph.D., but I don't think it

18 says.

19 Q. And in this article, Dr. Windschitl supports that he

20 conducted a survey of 577 students, and I'll just direct to you

21 page 26. Do you see under the heading: "Method, the

22 participants were 577 students from introductory psychology

23 courses at the University of Iowa. In large group testing

24 sessions, they completed numerous permanent questionnaires and a

25 short survey that was constructed for this experiment."?

1 A. Yes.

2 Q. And this is a pen and paper survey, again, not a  
3 telephone survey, correct?

4 A. As part of a large number of surveys that people did on  
5 the same occasion.

6 Q. So the answer is yes?

7 A. Yes, but -- it's part of a large number of surveys.

8 Q. Now, let's look at the questions and answers that  
9 Dr. Windschitl asked in his survey that are relevant, and let's  
10 pull up on page 26, the third paragraph under experiment 1.  
11 "Experiment 1 of the present paper was similar to Slovic's, but  
12 with two notable differences. First, whereas Slovic used a  
13 within subjects design, which likely enabled participants to  
14 become aware of the manipulation of being tested, this  
15 experiment used a completely between subjects design. Second,  
16 instead of answering a frequency question about smokers dying  
17 from lung cancer, half the participants in the present  
18 experiment answered a probability question about their own  
19 chances of dying from lung cancer. This allowed for a test of  
20 whether smokers' estimates of their own probability of dying  
21 from lung cancer was affected by whether alternative causes of  
22 death were represented implicit or explicitly. In line with the  
23 reasoning described above, it was expected that responses from  
24 smokers and nonsmokers alike would show sensitivity to this  
25 manipulation." And you're familiar with the experiment design

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1 from reviewing this paper as a peer-reviewer on the paper,  
2 correct?

3 A. Yes.

4 Q. So, in this experiment, Dr. Windschitl provided a survey  
5 to students, 577 students, and he asked a question about lung  
6 cancer, that's your question, right, out of a hundred smokers?

7 A. I don't see the question here. I see a different wording  
8 in percentages, "what is the chance you'll die from lung cancer,  
9 place a chance estimate between zero percent and a hundred  
10 percent in the space below" and that's quite different from my  
11 question. Percentage questions are much different than ones if  
12 we're using a population denominator.

13 Q. So, in your opinion, this is not testing a similar  
14 question to yours because it has a different denominator?

15 A. Percentage -- it may seem to people here that a  
16 percentage question and out of a hundred question is the same,  
17 however, studies have shown that asking relative to a population  
18 denominator is something that people interpret much more  
19 reliably than percentage questions, just easier for people to  
20 think about.

21 Q. Dr. Windschitl asked that question and then he also asked  
22 a question that asked students to respond related to various  
23 different causes of death, not a single cause of death, correct?

24 A. That's correct.

25 Q. And let's look at page 28 of this article under the

1 initial question of interest.

2 THE COURT: By the way, when you enlarge that, now this  
3 one looks fine, but the other enlargements were either blurry or  
4 just very hard to read.

5 MS. CROCKER: Sorry, Your Honor.

6 BY MS. CROCKER:

7 Q. Are you with me on that page, Dr. Viscusi?

8 A. What page is this?

9 Q. Page 28.

10 A. Yes.

11 Q. "The initial question of interest in this experiment is  
12 whether responses on the frequency and probability questions  
13 about lung cancer were significantly influenced by whether  
14 alternative causes of death were explicitly represented. As one  
15 can infer from Exhibit 1, the answer is yes for both the  
16 frequency and probability versions. Like the results of  
17 Slovic's study, 2000-B, the mean estimate for lung cancer  
18 frequency was substantially higher when no alternatives were  
19 explicitly represented, M equals 48, than when a set of  
20 alternative causes of death were explicitly represented and  
21 considered by respondents."

22 A. Yes, I see that.

23 Q. "The same type of effect was found for responses to the  
24 probability questions, which asked about personal likelihood of  
25 dying from lung cancer." Do you see that?

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1 A. Yes.

2 Q. So, Dr. Windschitl had findings from his study similar to  
3 the findings from Dr. Slovic's study, and in fact, he cites  
4 Dr. Slovic, correct?

5 A. Yes, he does.

6 Q. And again, this was not a telephone survey, correct?

7 A. That's correct.

8 Q. Now, let's look at page 30 of this study under  
9 "Conclusion from experiments 1 and 2." "I argued that a third  
10 reason for caution when comparing subjective and objective  
11 estimates for an event's probability is that subjective  
12 estimates are often not a reflection of stable well-formed  
13 beliefs, but instead are ad hoc constructions that are highly  
14 dependent on current and recent context. Experiments 1 and 2  
15 were conducted to test the extent to which this argument applies  
16 to the lung cancer question used by Viscusi, 1990. The result  
17 showed that respondents' estimates about the probability or  
18 frequency of smokers lung cancer deaths depended dramatically on  
19 whether the question soliciting the estimates included  
20 alternatives to lung cancer and on the nature of the question  
21 immediately preceding the target question." I'll skip a  
22 sentence.

23 "These findings call into question the validity of  
24 treating responses from any one question about lung cancer  
25 probability or frequency as reflections of stable, well-formed

1 beliefs of the respondents." And that's the conclusion that  
2 Dr. Windschitl reached, correct?

3 A. Yes.

4 Q. And that's the conclusion that's in this published  
5 article, correct?

6 A. That's correct.

7 Q. And it's a 2002 article, correct?

8 A. That's right.

9 Q. Okay. You can put that aside.

10 Now, as you're well aware from reviewing their testimony,  
11 Dr. Slovic and Dr. Weinstein reached the opposite conclusion  
12 from you in this case; they both concluded that most individuals  
13 underestimate the risks associated with smoking, correct?

14 A. They conclude that, but not based on any objective  
15 measures. They base it on --

16 Q. I understand you disagree with their conclusions, but  
17 that is the conclusion they both reach, correct?

18 A. They believe people underestimate the risk, yes.

19 Q. Dr. Slovic is a psychologist, right?

20 A. Yes.

21 Q. Dr. Slovic has studied risk as it pertains to human  
22 judgment for his entire career, correct?

23 A. I don't know what he's done for his entire career, I know  
24 he's done a substantial amount of study on risk.

25 Q. In fact, he's been doing both theoretical and applied

- 1 research into people's risk decisions about risk for 45 years,  
2 right?
- 3 A. I don't know.
- 4 Q. You reviewed his testimony, correct?
- 5 A. Well, I didn't memorize how many years he's been studying  
6 risk.
- 7 Q. Are you aware that Dr. Slovic has either authored or  
8 co-authored over 200 articles in the area of risk perception and  
9 decision making?
- 10 A. Yes, often in the same article, but I am aware of that.
- 11 Q. And Dr. Weinstein also has expertise in psychology,  
12 correct?
- 13 A. He's not a psychologist, although he does publish in  
14 psychology journals.
- 15 Q. Dr. Weinstein has expertise in psychology, correct, he  
16 publishes in psychology journals?
- 17 A. He does publish in psychology journals, but he's not a  
18 psychologist as far as I know.
- 19 Q. You're aware that Dr. Weinstein has studied risk  
20 perception for the last 25 years?
- 21 A. If that's what he said, I believe him, but I have no  
22 reason to know that.
- 23 Q. Are you aware that Dr. Weinstein has published over 65  
24 refereed research articles in the area of risk perception?
- 25 A. I believe that's what he said. I don't have any



- 1 independent knowledge of that.
- 2 Q. And you're an economist, correct?
- 3 A. Yes.
- 4 Q. And you teach at a law school, right?
- 5 A. That's right.
- 6 Q. In fact, you've published a number of articles in law  
7 reviews, correct?
- 8 A. I published a few in law reviews, yes.
- 9 Q. You've also --
- 10 A. 200 and -- about 240 of the 250 are in regular journals.
- 11 Q. You've also recently published a book entitled Smoke  
12 Filled Rooms, a Postmortem on the Tobacco Deal, correct?
- 13 A. Yes.
- 14 Q. Your book is part of a series called Studies in Law and  
15 Economics, correct?
- 16 A. Yes.
- 17 Q. And the book in part is about the Master Settlement  
18 Agreement, correct?
- 19 A. Yes.
- 20 Q. Now, one of the opinions you state in that book, your  
21 recently published book, is about the premature mortality or  
22 early death of smokers due to disease caused by smoking,  
23 correct?
- 24 A. I analyze that, yes.
- 25 Q. And you state, in your recently published book, that due

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1 to the premature death of smokers from disease, one might view  
2 cigarettes as a financial profit center not a costly imposition  
3 on society, correct?

4 A. If I say that in the next sentence or two, I attack that  
5 notion as being, you know, overly simplistic, so I say that's  
6 not a good thing. I've never said that death for smokers --

7 Q. Dr. Viscusi --

8 MR. MINTON: Objection.

9 MS. CROCKER: You'll get your chance on redirect.

10 THE COURT: No, the objection is absolutely sustained. If  
11 that sentence was taken out of context, that would be extremely  
12 misleading, extremely.

13 THE WITNESS: I would like to read the rest of the  
14 paragraph if you could.

15 MS. CROCKER: You would like me to read the rest of the  
16 paragraph into the record?

17 MR. MINTON: Do you have a page, counsel?

18 MS. CROCKER: Yes, it's at page 75 of his book.

19 THE COURT: Well, the direction doesn't turn on paragraphs  
20 or sentences, Ms. Crocker. My direction turns on not taking  
21 anything out of context.

22 MS. CROCKER: And absolutely, Your Honor, I'm not  
23 intending to whatsoever. Let me try to zoom in so we can all see  
24 this together.

25 BY MS. CROCKER:

1 Q. Now, you engage in this chapter of the book in a number  
2 of calculations of the social cost of smokers to society,  
3 correct?

4 A. I focus on the financial costs.

5 Q. The financial costs of smokers to society, and you look  
6 at elements such as the money that society saves in not paying  
7 social security to smokers who are early deceased, correct?

8 A. That's one of the things I calculate.

9 Q. Or the money society saves by not paying for nursing home  
10 or medical care to smokers who are early deceased due to their  
11 smoking, correct?

12 A. Yes, but on the medical care, the net cost is positive  
13 because smokers have higher medical bills while they're alive.

14 Q. So you also look at the cost to society, or the economic  
15 costs of a smoker in terms of the medical costs incurred during  
16 their lifetime, correct?

17 A. Yes.

18 Q. But then that lifetime is shortened due to disease caused  
19 by smoking, correct?

20 A. Smoking kills people, yes.

21 Q. And what I read to you is this paragraph here, "by these  
22 calculations one might view cigarettes as a financial profit  
23 center, not a costly imposition on society. The dollar stakes  
24 involved are enormous. In 1995 the public purchased 23.2  
25 billion packs of cigarettes. A total cost savings of .88 --

1 \$0.88 per pack, including excise taxes, implies a total societal  
2 cost savings of 20.4 billion. If one focuses only on the  
3 financial effects, exclusive of excise taxes, the cost per pack  
4 savings of .32 -- \$0.32, implies an aggregate cost savings for  
5 society of \$7.4 billion." Did I read that correctly?

6 A. Yes, you did.

7 Q. I'm going to ask you about a few articles on the topic of  
8 risk perception and smoking. And the first one I'm going  
9 provide you is U.S. Exhibit 64270. This is an article entitled:  
10 "Is the Smoking Decision an 'Informed Choice'? Effect of  
11 Smoking Risk Factors on Smoking beliefs". Do you see that  
12 title?

13 A. I do, but I don't think I've ever seen the article  
14 before.

15 Q. So you're not familiar with this article?

16 A. I don't believe so.

17 Q. Why don't you take a moment to look through it and  
18 familiarize yourself.

19 THE COURT: How long of an article is that, Ms. Crocker?

20 MS. CROCKER: I think the witness is done.

21 THE WITNESS: It's pretty dense, but I'm ready to go.

22 BY MS. CROCKER:

23 Q. Okay. I'm going to focus your attention on the first  
24 page of this article. And before we start, this is an article  
25 in JAMA, correct?

- 1 A. Yes.
- 2 Q. And that's the Journal of the American Medical  
3 Association?
- 4 A. Yes.
- 5 Q. It's a peer-reviewed publication?
- 6 A. Yes.
- 7 Q. And it's published in June 1987?
- 8 A. That's right.
- 9 Q. Are you familiar with the authors that are listed there,  
10 Howard Leventhal, Ph.D., Katherine Glynn, Ph.D. and Raymond  
11 Fleming, Ph.D.?
- 12 A. No.
- 13 Q. So you don't know that Dr. Leventhal is a Professor in  
14 Psychology at Rutgers?
- 15 A. No, I don't.
- 16 Q. And you're not aware that Dr. Fleming is also a Professor  
17 of Psychology at the University of Wisconsin?
- 18 A. I did not know that.
- 19 Q. And you were not familiar with this article before I  
20 provided it to you, correct?
- 21 A. I don't believe so.
- 22 Q. Now, this article reports upon a survey of 895 urban  
23 young people, correct?
- 24 A. Yes.
- 25 Q. And it found that, and I'm reading here from the abstract

1    there, "The respondents greatly overestimated the prevalence of  
2    adult and peer smoking. Negative attitudes of their peers were  
3    greatly underestimated. A large proportion believed that they  
4    would be less likely than other people to contract a smoking  
5    related illness if they became smokers, and there was a general  
6    lack of understanding of the adverse consequences experienced  
7    upon smoking cessation. These misperceptions were more common  
8    among youngsters who were smokers who intended to smoke, or who  
9    had friends or family members who smoked." Did I read that  
10   correctly?

11   A.     Yes, you did.

12   Q.     Now, the conclusion reached there is, and I'm reading  
13   from that final sentence, "Because misinformation among young  
14   people is widespread and those at a greatest risk for smoking  
15   are the most misinformed, the tobacco industry's argument that  
16   the decision to smoke reflects an 'informed choice' is without  
17   merit". Do you see that conclusion?

18   A.     Yes.

19   Q.     And do you disagree with the conclusion reached in this  
20   article that young people underestimate the risks of smoking?

21   A.     Yes, I do.

22   Q.     I'm going to provide you with another article, United  
23   States Exhibit 63914. I think this is an article that you're  
24   familiar with, Dr. Viscusi, is that's correct?

25   A.     Yes, I've seen this several years ago.

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- 1 Q. And this article is entitled "What Do People's Estimates  
2 of Smoking Related Risk Mean?" Is that right?
- 3 A. Yes.
- 4 Q. It's by Dr. Ron Borland, correct?
- 5 A. Yes, it is.
- 6 Q. And it is dated 1996?
- 7 A. 1997.
- 8 Q. I'm sorry, if you scroll up to the top we can see the  
9 title of the journal there, as well.
- 10 I'm sorry, the journal is 1997; is that correct?
- 11 A. Yes.
- 12 Q. And the journal is Psychology and Health, correct?
- 13 A. That's right.
- 14 Q. This is a peer-reviewed publication?
- 15 A. I don't know anything about this journal.
- 16 Q. Do you have any reason to doubt this is a peer-reviewed  
17 publication?
- 18 A. No.
- 19 Q. I'm just going to ask about the abstract there on the  
20 first page. And do you see in this article that Dr. Borland  
21 concluded under "Based on This Finding". "Based on this finding  
22 it is suggested that the majority of smokers underestimate,  
23 rather than overestimate, risk. It is also concluded that the  
24 majority of respondents do not respond to risk questions in  
25 terms of probabilities and that it is generally inappropriate to

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- 1     assume that they do so." Did I read that conclusion correctly?
- 2     A.       Yes.
- 3     Q.       And you disagree with the conclusion reached by
- 4     Dr. Borland in this article, correct?
- 5     A.       Not necessarily. First, this article is about Australia,
- 6     but second of all, I don't disagree that people don't respond
- 7     well to probability questions or percentage questions, I believe
- 8     people respond well to questions with a population denominator,
- 9     which are different.
- 10    Q.       Do you agree with Dr. Borland that the majority of
- 11    smokers underestimate risk?
- 12    A.       I disagree with that.
- 13    Q.       Okay. So you disagree with that conclusion?
- 14    A.       Yes.
- 15    Q.       Okay. I'm going to provide you with another article,
- 16    it's U.S. Exhibit 63843. And this is an article entitled
- 17    "Perceived Risks of Heart Disease and Cancer Among Cigarette
- 18    Smokers", and you're familiar with this article, correct?
- 19    A.       I not only read the article, but I have their data and
- 20    analyzed their data.
- 21    Q.       So you're very familiar with this article, correct?
- 22    A.       Correct.
- 23    Q.       And this is a peer-reviewed article, correct?
- 24    A.       That's correct.
- 25    Q.       And the two authors are listed there as John Ayanian, who

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- 1 is a medical doctor, correct?
- 2 A. Yes.
- 3 Q. And Paul Cleary, who has a Ph.D., correct?
- 4 A. Yes, he does.
- 5 Q. And do you know that Dr. Ayanian is currently at the
- 6 Harvard Medical School Department of Healthcare Policy?
- 7 A. No, I didn't know where he was now.
- 8 Q. And do you know that Dr. Cleary is currently Professor of
- 9 Medical Sociology at Harvard Medical School?
- 10 A. No, I didn't know that, either.
- 11 Q. Now, let's look at the conclusions they reached there on
- 12 the first page, "most smokers do not view themselves at
- 13 increased risk of heart disease or cancer." Do you see that
- 14 conclusion?
- 15 A. Yes, I do.
- 16 Q. And you disagree with that conclusion, correct?
- 17 A. I do, even using their own data, have a critique of that
- 18 conclusion, yes.
- 19 Q. So you disagree with this conclusion, correct?
- 20 A. Yes, because of the way the question was framed. I'd be
- 21 happy to discuss that.
- 22 Q. Now, I'm going to provide you with another article, U.S.
- 23 Exhibit 93295.
- 24 Now, you're familiar with this article, correct?
- 25 A. I'm not sure I've seen this particular article.

- 1 Q. This is an article entitled, "Are Smokers Adequately  
2 Informed About the Health Risks of Smoking and Medicinal  
3 Nicotine." Is that correct?
- 4 A. That's what it's called, yes.
- 5 Q. Published in Nicotine and Tobacco Research, December  
6 2004, correct?
- 7 A. That's right.
- 8 Q. And that's a peer-reviewed publication?
- 9 A. I know nothing about it.
- 10 Q. You don't know anything that would lead to you doubt it's  
11 peer-reviewed, correct?
- 12 A. Well, it doesn't sound like a well known publication, but  
13 I just don't know anything about it one way or the other.
- 14 Q. You never heard of the publication Nicotine and Tobacco  
15 Research?
- 16 A. That's true -- until today I don't think I ever heard of  
17 this publication.
- 18 Q. Okay. I'm going to direct you to the conclusion reached  
19 in this article. If you briefly look at the conclusion there or  
20 at the abstract, you can see that there is a nationally  
21 representative random digit dial telephone survey of over a  
22 thousand cigarette smokers. Do you see that?
- 23 A. Yes.
- 24 Q. And let's look at the last sentence of that conclusion  
25 there. The article indicates, "the present findings demonstrate

1 that smokers are misinformed about many aspects of the  
2 cigarettes they smoke and stop-smoking medications." Do you see  
3 that?

4 A. Yes.

5 Q. And would you agree or disagree with that conclusion?

6 A. I certainly disagree with whether they're misinformed  
7 generally about the risks of cigarettes, and I've never studied  
8 stop-smoking medications.

9 Q. Okay, we can take that down. And you recall earlier  
10 today before the break we also discussed an article by  
11 Dr. Windschitl, correct?

12 A. Yes.

13 Q. And you also disagreed with the conclusion that  
14 Dr. Windschitl reached, correct?

15 A. Could you remind me of what that conclusion was?

16 Q. You know, your testimony will stand in the record as it  
17 was earlier today, I'm not going to go back over that and waste  
18 our time.

19 And you will recall that we also discussed earlier  
20 published work by Mr. Hanson at Harvard Law School, correct?

21 A. Yes.

22 Q. And you indicated you also disagree with his conclusions  
23 in his published work, correct?

24 A. In his law review article, yes.

25 Q. Now, in your direct examination, you cite no risk

1 perception or judgment researchers that agree with your  
2 conclusion that smokers overestimate the risks associated with  
3 smoking, do you?

4 A. I don't believe so. I don't believe I cite any other  
5 researchers.

6 Q. In your direct testimony you state that you do not agree  
7 with Dr. Slovic's theory the affect heuristic?

8 THE COURT: H-E-U-R-I-S-T-I-C.

9 MS. CROCKER: Exactly right, Your Honor.

10 THE WITNESS: I don't think much of his theory, that's  
11 correct.

12 BY MS. CROCKER:

13 Q. Are you familiar with Dr. Daniel Kahneman?

14 A. Yes, I am.

15 Q. And that's K-A-H-M-E-M-A-N. He's a leader in the field  
16 of the human judgment and decision making, correct?

17 A. And a friend of mine as well, yes.

18 Q. He's a psychologist, correct?

19 A. Yes.

20 Q. And since he's your friend, you must be aware that he  
21 received the Nobel Prize for Economics in 2002, correct?

22 A. That's correct.

23 Q. And that's for having integrated insights from  
24 psychological research into economic science especially  
25 concerning human judgment and decision making under uncertainty,

1 correct?

2 A. That's correct.

3 Q. And let me provide you with an article provided by  
4 Dr. Kahmeman, which is U.S. Exhibit 93266. Have you seen this  
5 article before?

6 A. No, I have not.

7 Q. I'm just going to direct you to one short passage of it.  
8 If you look at the bottom of the first page at the editor's note  
9 -- I think I mean the page after that, Chris -- the editor's  
10 note indicates that this article is based on the author's Nobel  
11 Prize lecture, delivered at Stockholm University on December 8th  
12 2002, correct?

13 A. I've read the other version of the article that they  
14 referred to there.

15 Q. And let's look at page 710 of the article in the section  
16 entitled The Affect Heuristic.

17 The article indicates "the idea of an affect heuristic,  
18 Slovic et al. 2002, is probably the most important development  
19 in the study of judgment heuristics in the past few decades.  
20 There is compelling evidence for the proposition that every  
21 stimulus evokes an effective evaluation, which is not always  
22 conscious." I'll omit the cites.

23 "Affective valance is a natural assessment and therefore a  
24 candidate for substitution in the numerous responses that express  
25 attitudes. Slovic and his colleagues, Slovic et al. 2002,

1 discussed how a basic affective reaction can be used as the  
2 heuristic attribute for a wide variety of more complex  
3 evaluations, such as the cost benefit ratio of technologies, the  
4 safe concentration of chemicals and even the predicted economic  
5 performance of industries. Their treatment of the affect  
6 heuristic fits the present model of attribute substitution." Did  
7 I read that correctly?  
8 A. Yes, you did.  
9 Q. So, Dr. Kahmeman, the psychologist --  
10 THE COURT: Let me interrupt you for a minute. What is  
11 the term "affective valance" mean, if you know?  
12 THE WITNESS: I have no idea. I don't know.  
13 BY MS. CROCKER:  
14 Q. Dr. Kahmeman is a psychologist, correct?  
15 A. Yes.  
16 Q. And you're an economist, correct?  
17 A. Yes.  
18 THE COURT: We do all speak English, Ms. Crocker. Anyway,  
19 go ahead.  
20 MS. CROCKER: Yes, Your Honor.  
21 BY MS. CROCKER:  
22 Q. So Dr. Kahmeman, who has just one a Nobel Prize in  
23 Economics, called Dr. Slovic's theory of the affect heuristic  
24 "the most important development in the study of judgment  
25 heuristics in the past few decades", correct?

1 A. Probably, yes.

2 Q. Well, I've highlighted it for you there on the screen.

3 A. No, he said "probably", that's all.

4 Q. Probably the most important?

5 A. Yes.

6 Q. Okay.

7 MS. CROCKER: I have no further questions of this witness,

8 Your Honor.

9 THE COURT: I don't think we need to take a break at this

10 point, do you, Mr. Minton?

11 MR. MINTON: I don't think so, Your Honor, but I do want

12 to renew our objection to the whole --

13 THE COURT: Well, I think --

14 MS. CROCKER: That --

15 THE COURT: There are certain issues that should be

16 discussed outside of the presence of the witness. So if you

17 would just wait outside, please, for maybe five minutes.

18 THE WITNESS: If I can be on the hallway cruising.

19 (Witness left the courtroom.)

20 THE COURT: All right, Mr. Bernick.

21 MR. BERNICK: Your Honor, I stood this morning to lodge an

22 objection just because I was concerned about a potential waiver

23 and I apologize for interrupting the proceedings but I felt I

24 didn't have too much choice, and on the assumption that I thereby

25 got my stake in the ground on a timely basis, I want to state the

1 basis for the objection. The objection relates to that  
2 unpublished article that was done by, I guess, people from the  
3 Gallup Organization.

4 As we saw from the examination --

5 THE COURT: It's not clear, by the way, whether it's  
6 unpublished. This witness did not -- well, first of all,  
7 Mr. Minton gets redirect. He may establish through his witness  
8 that it was unpublished, but on cross that was not Ms. Crocker's  
9 aim, and consequently it is not in the record. What's in the  
10 record is, I think a suggestion by the witness, although he  
11 wasn't questioned directly and it was an aside.

12 MR. BERNICK: Fair enough, Your Honor.

13 The article was then used in a very, very broad fashion.  
14 The article actually incorporated what appeared to be or  
15 purported to be the testimony, or at least the characterization  
16 of the testimony of an expert witness called by the tobacco  
17 industry in another case, a Dr. Ford. And essentially what the  
18 government did was to use Dr. Ford's purported testimony  
19 through -- as interpreted by the authors of this article, as a  
20 foil for recording the criticisms that those authors then would  
21 have made, presumably, of Dr. Viscusi's testimony. In other  
22 words, Dr. Ford was set up as a foil for Dr. Viscusi, and the  
23 suggestion that was made by the government, at least as I heard  
24 the testimony, was that Dr. Viscusi's testimony is subject to the  
25 same criticisms that were being lodged by these Gallup



1 researchers against Dr. Ford.

2 THE COURT: But all of that is argument as to the weight  
3 of the cross-examination.

4 MR. BERNICK: But here's where I'm going, Your Honor. I  
5 think that that was an improper document to use for any purpose  
6 under the Federal Rules of Evidence. You cannot -- it cannot,  
7 obviously, be used to establish the truth of the matter because  
8 the witness isn't subscribing to it. It was, I believe, used for  
9 that purpose to the extent that as an effort to criticize the  
10 witness, the statements in the article had to have been taken as  
11 being true, otherwise there's no reason why it would have gone to  
12 the credibility of this witness. The witness has never reviewed  
13 the article. So, essentially, it can't be used to impeach him on  
14 the grounds that he read it and failed to acknowledge it or its  
15 force, it can't be used for impeachment on the ground that he  
16 should have read it because it's not even established that it was  
17 available to him in the literature. So it can't be used really  
18 as impeachment.

19 But secondly, the rules do call out -- and part of the  
20 reason I was a little bit slow in getting to my feet is I didn't  
21 realize it hadn't been published either, and when the witness  
22 said, I'm not sure this is whatever it was suggesting it might  
23 not have been published I took out the rule book because I don't  
24 believe an unpublished treatise could be used for any purposes  
25 under the rules, and I believe this is addressed in 80318 which

1 deals with learned treatises. And I can't represent to the Court  
2 that I've done all the research on this, I'm just seeking to look  
3 at the rules. It says "to the extent called to the attention of  
4 an expert witness upon cross-examination, cross-examination or  
5 relied upon the expert witness in direct examination, statements  
6 contained in published treatises, periodicals or pamphlets on the  
7 subject of history, medicine or other science or art establishes  
8 a reliable authority by the testimony or admission of the witness  
9 or by other expert testimony, or by judicial notice."

10 Now, if you take a look at the advisory notes it's quite  
11 clear that there's a long history and different decisions that  
12 have been rendered on the circumstances in which a learned  
13 treatise can be used on cross. Does the witness himself, or  
14 herself, have to acknowledge that it's authoritative to be used.  
15 Some of the cases so held. This rule, as per the advisory  
16 committee notes, rejects that approach and allows it to be --  
17 allows the authority to be established either through the witness  
18 or through somebody else. Nobody else has ever established the  
19 authoritative nature of this article.

20 Moreover, it says clearly, "published", that is to be used  
21 properly to cross-examine a witness, there has to be some  
22 indication of reliability, it has to rise to a certain level, and  
23 that, obviously, has not been -- at least established  
24 affirmatively by the government in this case. And I think,  
25 therefore, when you take the fact that it does not appear that

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1   that document really could be properly used on cross-examination  
2   at all, and then you see the length to which it was put, really,  
3   to set up this parallel between the testimony that's never  
4   even -- not even before the Court, Dr. Ford never testified, we  
5   don't know what his testimony was and we don't know that the  
6   article is an accurate rendition of that testimony. And to  
7   suggest that that article really constitutes an expert analysis  
8   by other people recognized in the field that is contrary to  
9   Dr. Viscusi, I think is completely misleading. And I would renew  
10   the motion to strike the cross-examination to the extent that it  
11   emanates from that article. That would be my motion, Your Honor.

12           MS. EUBANKS: Your Honor, all of this is to say that  
13   that's entirely premature. The United States hasn't even offered  
14   the document, besides which the learned treatise exception that  
15   Mr. Bernick cites to applies to exclude inadmissible documents.  
16   As we discussed last week, 703 of the Federal Rules of Evidence  
17   does permit expert witnesses to rely upon evidence that is  
18   hearsay, by definition.

19           Witnesses -- as I said, it's premature. We haven't  
20   proffered it, we think that the testimony of the witness is  
21   clear. A motion to strike is one thing, but certainly, given our  
22   discussion last week, it's fair to say that Mr. Bernick was  
23   certainly aware of the learned treatise exception and the  
24   interplay with Rule 703.

25           Rule 702, which gives rise to expert testimony which is to

1 assist the Court is also pertinent here. The main reason for  
2 that, Your Honor, is that this gives rise to an ability to weigh  
3 the credibility of the witness's testimony and his judgment in  
4 these matters when making the assessment of whether to -- how  
5 weighty his testimony is based upon what he specifically said  
6 regarding particularized questions in that document, whether or  
7 not it's published.

8 Certainly, in this case there's been no ruling that  
9 something must be published in order for a witness to testify on  
10 it. Dr. Dixon testified about documents that were attached in  
11 his CV, statements that were made at meetings that he had  
12 attended. In fact, this witness had testified as to one of the  
13 documents that was handed to him but not questioned on that it  
14 was a draft of something.

15 The United States has produced thousands of pages of draft  
16 documents in this case, and it's constantly been the practice  
17 here in the Court that a document is shown that says it's a draft  
18 or a whatever, if it's stamped "draft", does not lead  
19 automatically to the preclusion of evidence, particularly here  
20 where the testimonial evidence is what we have in the record.

21 Now, when the United States, should it proffer the  
22 document itself at the conclusion of the testimony, then those  
23 arguments are more appropriately heard by the Court. But the  
24 Court ruled on a number of objections during the testimony of the  
25 witness and allowed the testimony in based upon the objections

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1 that were made, including a hearsay objection, if I recollect  
2 correctly.

3           So it seems to me that the matter has been decided and  
4 should the United States proffer the document, if it does, then  
5 we can cross that bridge and address those issues, but a motion  
6 to strike the testimony under these circumstances would be highly  
7 prejudicial to the United States because the testimony has gone,  
8 we've concluded our cross-examination of this witness, and we  
9 would ask the opportunity, if the testimony is to be struck, to  
10 ascertain A, whether the document was published, if not in the  
11 publication that was indicated there, somewhere else. We would  
12 ask to bring in evidence and there does exist evidence in, I'm  
13 sure, some other proceeding about this document itself. I have  
14 not looked at it myself, but I know that it's there. My  
15 understanding of the other evidence that concerns this document  
16 is that it's hearsay because it's not the first time it's come up  
17 in a case. So we think, Your Honor, should we proffer the  
18 document, we can address those questions, but that the testimony  
19 should come in and it has been ruled upon.

20           THE COURT: The motion to strike is denied, although  
21 without prejudice. It may come up again.

22           Mr. Minton wanted to raise a preliminary issue before we  
23 start redirect.

24           MR. MINTON: I'm ready to go, Your Honor.

25           THE COURT: Oh, all right. And do you still estimate less

1 than an hour?

2 MR. MINTON: I believe so.

3 REDIRECT EXAMINATION OF WILLIAM KIP VISCUSI, Ph.D.

4 BY MR. MINTON:

5 Q. Dr. Viscusi, let's begin where the cross-examination  
6 ended. Ms. Crocker put up on the board an article reflecting  
7 Dr. Kahmeman's address?

8 A. Yes.

9 Q. The reference there is to Slovic 2002, and the Court's  
10 already heard testimony about that particular article which  
11 contains a statement in it which Dr. Slovic confirmed in his  
12 testimony in this Court, that the affect heuristic hypothesis  
13 remained to be tested. Let me ask you this: When Ms. Crocker  
14 asked you the questions about the affect heuristic in the  
15 reference in this article, did she mention to you that that very  
16 article says that the affect heuristic hypothesis remains to be  
17 tested?

18 A. No, she did not.

19 Q. Did she mention to you Dr. Slovic's testimony at page  
20 10333, lines 10 through 12, that the relative use of affect  
21 versus analysis, as far as he is concerned, is still an open  
22 question for further study?

23 A. She did not indicate that.

24 Q. And did she mention to you, when she asked that you  
25 question, Dr. Slovic's testimony at 10335, lines 3 through 13 of

1 the trial transcript, that he hasn't made any attempt to  
2 directly measure affect in terms of how it may influence  
3 people's decision to smoke?

4 MS. CROCKER: Objection, Your Honor, leading.

5 THE COURT: No, the objection's overruled.

6 THE WITNESS: She did not read me any of those.

7 BY MR. MINTON:

8 Q. You were asked a number of questions about how long you  
9 had been retained or a consultant to the tobacco industry. How  
10 long have you been testifying for the United States government  
11 or representing them in a consultant or expert capacity,  
12 Dr. Viscusi?

13 A. It's about two decades -- over two decades for EPA. And  
14 I've been working nonstop for EPA since 1983.

15 Q. Have you been retained by and testified on behalf of the  
16 United States Department of Justice?

17 A. I've been retained as an expert on three different  
18 classes of issues by the U.S. Department of Justice.

19 Q. Do you recall a Gallup document that came up at the  
20 beginning of your cross-examination?

21 A. Yes.

22 Q. And that was U.S. Exhibit 93264. Let me ask you a couple  
23 questions about that. First of all, it mentions two people on  
24 the first page. Do you know who they are?

25 A. I don't.

- 1 Q. Do you know what their credentials are?
- 2 A. No, I don't.
- 3 Q. Do you know if they have any expertise at all in that
- 4 area?
- 5 A. No, I don't.
- 6 Q. You mentioned that it was your impression this was a
- 7 draft?
- 8 A. It's a draft, it says so, presented at a conference.
- 9 Q. All right. And are you aware of this document ever
- 10 having been published anywhere?
- 11 A. I am not aware of it being published.
- 12 Q. Are you aware that it's ever even been submitted for
- 13 publication to any peer-reviewed journal?
- 14 A. I don't know if it's ever been submitted.
- 15 Q. Do you have any means of evaluating the accuracy of any
- 16 of the statements that are made in that document about Lacy
- 17 Ford's testimony?
- 18 A. No, because I've never reviewed Lacy Ford's testimony.
- 19 Q. Did you ever suggest in your testimony that the heard or
- 20 read 1954 Gallup question in there, that -- "have you heard or
- 21 read that cigarettes cause lung cancer", that that equals a
- 22 belief that cigarettes cause lung cancer?
- 23 A. No, I've never equated the information people have heard
- 24 with their risk beliefs.
- 25 Q. And did you include that question and that answer in your



1 written direct to illustrate the problems of the message that  
2 was being sent in 1954?

3 MS. CROCKER: Objection, Your Honor, leading.

4 BY MR. MINTON:

5 Q. Why did you make reference to that question and that  
6 answer?

7 A. As I indicated, when evaluating the informational  
8 environment, the first question we have to address is whether  
9 people receive the message, and this poll indicates that people  
10 did receive the message.

11 Q. Did you ever suggest in your written testimony that the  
12 levels of actual "has heard" belief, not heard or read, but the  
13 actual levels of "has heard" belief had reached saturation in  
14 the '50s or '60s?

15 A. I never said that.

16 Q. And as a matter of fact, do you describe in your written  
17 direct how people's risk perceptions increased in the 1950s and  
18 in the 1960s?

19 A. Yes, they did increase and I described that in my written  
20 direct.

21 Q. All right. Now, you mentioned during the questions that  
22 were asked of you about this document, that there were problems  
23 with respect to the use of cause in this timeframe. What were  
24 you referring to?

25 A. When people interpret a survey question "does smoking

1    cause lung cancer", what might be going through their head is,  
2    if you smoke you definitely have to get lung cancer.  So I would  
3    prefer wording something such as "does smoking increase the risk  
4    of cancer" so that they'd know that it's a risk factor but not  
5    everybody has to get lung cancer in order to answer the question  
6    yes.

7    Q.     When was it that the Surgeon General said that smoking  
8    was a cause of lung cancer?

9    A.     1964.

10   Q.     All right.  And when did people, according to your  
11   testimony, reach levels of saturation with respect to the  
12   salient risks of smoking?

13   A.     It was after the Surgeon General's Report, after warnings  
14   on cigarettes, so it was in the '70s and '80s.

15   Q.     Some 20 or 30 years after the time period that's  
16   referenced in the Gallup document?

17   A.     Yes.

18   Q.     All right.  Now, I'd like to show you one page that  
19   Ms. Crocker didn't show you in that document, and that's page 16  
20   of 23, at least on the fax copy that we have.

21   A.     Table 5?

22   Q.     It's just above Table 5.

23   A.     All right.

24   Q.     And what does the text say there, Dr. Viscusi?

25   A.     "When the question was next asked in 1969, belief that

- 1 smoking causes cancer had jumped to 70 percent."
- 2 Q. All right. And if we go on, then in the next paragraph,
- 3 is there a reference to a universal or near universal belief?
- 4 A. Yes, 1990 they stopped asking the question because it
- 5 represented a new universal belief in the cigarette-cancer
- 6 connection.
- 7 Q. Is that consistent with the opinions you've expressed in
- 8 your written testimony?
- 9 A. Yes, it is.
- 10 Q. You were asked a number of questions about four surveys
- 11 that you point to in your written direct, one done in 1985, one
- 12 done in 1991, one done in 1997 and one done in 1998. Two of
- 13 those were done by Audits & Surveys, right?
- 14 A. Yes.
- 15 Q. One was done by Roper and Starch, right?
- 16 A. That's right.
- 17 Q. And one was done by you, right?
- 18 A. That's correct.
- 19 Q. Is Audit & Survey a reputable survey firm?
- 20 A. Yes, they were, they're a survey firm based in New York,
- 21 a reliable firm.
- 22 Q. How about Roper?
- 23 A. They're a very well known, respected firm.
- 24 Q. Did you make your own analysis of the instruments and the
- 25 data in connection with your review and your presentation of the

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- 1 results?
- 2 A. Yes, I did.
- 3 Q. And what did you find?
- 4 A. After I got the survey, the first thing did I was study  
5 the survey questions to see if the survey itself was fair.  
6 Second, I obtained a copy of the data and discussed it with  
7 Audits & Surveys, how they ran the survey. Third, I analyzed  
8 the data, but then I didn't stop there, I tried a number of  
9 different variations of the question to see whether the findings  
10 would be sensitive to the way they asked the question. And the  
11 reason I did all this is that if I was going to go out with a  
12 conclusion that smokers overestimated the risk, I wanted to be a  
13 hundred percent right.
- 14 Q. Okay. And have those results been published in  
15 peer-reviewed journals?
- 16 A. They've been published in the top peer-reviewed journals  
17 in economics, as well as peer-reviewed books, both by University  
18 of Chicago press and Oxford University press.
- 19 Q. Has anyone ever suggested that those results were not  
20 honestly obtained?
- 21 A. No one has ever suggested that.
- 22 Q. Now, at page 53 of your written direct, you point to data  
23 from surveys other than those four surveys as well, don't you?
- 24 A. Yes, including surveys written by Dr. Slovic and  
25 Weinstein.

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1 Q. All right. And that's Annenberg 1, Annenberg 2 and  
2 Weinstein and Slovic 2001?

3 A. Yes, those are the three other surveys I point to.

4 Q. All right. And did those surveys ask questions that were  
5 similar to the questions you had asked with respect to the  
6 quantitative estimation of the risk?

7 A. Yes, they did.

8 Q. All right. And what were the results that they showed?

9 A. The results were actually higher in terms of the risk  
10 beliefs than the numbers I got.

11 Q. And Ms. Crocker actually put up on the screen, didn't  
12 she, a page from Dr. Slovic's written direct where he said when  
13 he asked those questions he got results that showed 58 to 60 out  
14 of a hundred in terms of the responses people gave, correct?

15 A. That's correct.

16 Q. All right. Now, let's talk about the re ask of your  
17 question in Annenberg 2. Explain to the Court what happened  
18 with respect to question 1 and question 3 in Annenberg 2.

19 A. Well, first asked my question, the lung cancer question,  
20 and then two questions later they told respondents first, think  
21 again, implying to respondents that they maybe didn't get the  
22 answer right the first time, and then they were asked to tell  
23 how many of a hundred smokers would die from the following  
24 causes of death. The first three causes presented the  
25 respondents were heart disease, stroke and automobile accidents,

1 and these were randomized but these were always the first three  
2 that were given to respondents. The fourth cause was lung  
3 cancer, lung cancer is always held in the fourth position and  
4 the fifth would be any other cause of death.

5 Q. All right. Before we talk about the results that you  
6 did, analyzing those data, what is the scientific survey  
7 literature tell us about randomizing three responses in front of  
8 a fourth response that you hold constant? What does it tell us  
9 is going to help.

10 A. This tells us that this is a thoroughly dishonest survey  
11 that's been designed to depress the lung cancer estimates by  
12 always holding it in the fourth position and not rotating it  
13 along with the other three causes of death. So it always puts  
14 it at a disadvantage relative to the other three causes of  
15 death.

16 Q. All right. And did you do your own analysis in this case  
17 which demonstrates what was the affect of randomizing those top  
18 three?

19 A. I did.

20 Q. And what did it show?

21 A. Whichever one was first, always got a higher score than  
22 it did when it was second or third. Second, some people ran out  
23 of the hundred deaths, they hit their hundred death quota before  
24 they even got to the lung cancer question, and a lot of other  
25 people, once they got to the lung cancer question, had to use up

1    whatever remaining deaths they could attribute out of the 100.

2    Q.     Okay. Well, let's talk about where people -- there was a

3    difference between the mean estimate that people gave in

4    response to question 1 and question 3 with respect to lung

5    cancer, right?

6    A.     There was.

7    Q.     It went down, right?

8    A.     Yes.

9    Q.     All right. Where did it go?

10   A.     It didn't go far in the sense that even with all of these

11   biases in the structure of the survey, people still greatly

12   overestimate the risk of lung cancer, and to the extent they

13   pushed down the lung cancer risk estimate, what they've done is

14   shift that risk estimate to heart disease and stroke. From my

15   standpoint, I don't care if people think smoking will kill them

16   from lung cancer, heart disease or stroke, so long as they know

17   smoking is deadly.

18   Q.     So they took -- whatever they took away from lung cancer

19   they put into other smoking-related diseases?

20   A.     Yes.

21   Q.     All right. Now, there were two other studies that were

22   put up during the cross-examination. There was Dr. Slovic's

23   experimental study, which showed a mean response of 56 to the

24   lung cancer question in the first stage and then he says that

25   decreased by a mean of 20. Would that mean that in the second

- 1 way he asked the question he still got a mean of 36 out of a  
2 hundred?
- 3 A. Yes, he got a number like my number, 36 out of a hundred.
- 4 Q. Okay. And Dr. Windschitl -- you didn't establish that he  
5 was a doctor -- but in the Windschitl paper, the mean -- the way  
6 the question was asked the first way was 38 smokers out of a  
7 hundred, the mean -- the question was asked, the second way, was  
8 30 out of a hundred, correct?
- 9 A. Yes. People still greatly overestimate the risk.
- 10 Q. So we've got nine surveys that have been put into  
11 evidence. Is there a single one where no matter how they bias  
12 the question, that smokers have ever done anything but  
13 overestimate the actual biological risk of lung cancer?
- 14 A. We have no surveys indicating that people don't  
15 overestimate the risk of lung cancer.
- 16 Q. All right. Now, you were asked a couple questions about  
17 Professor Hanson, and in particular whether any scholar had ever  
18 suggested the level of awareness that you were testing was  
19 superficial, and there was reference to Dr. Hanson's law review  
20 article. Do you recall that?
- 21 A. Excuse me, not Dr. Hanson, Mr. Hanson.
- 22 Q. I'm sorry, I made the mistake myself, Mr. Hanson. He's a  
23 law professor, junior law professor at Harvard?
- 24 A. That's correct.
- 25 Q. Okay. And just so we're clear, did Dr. Hanson -- or



1 Professor Hanson, seek to testify in the Falise case?

2 A. Yes, he did.

3 Q. And if we look up here at page 466 of the Falise  
4 transcript, is this the same Professor Hanson that Judge  
5 Weinstein is referring to saying "he's not an expert on those  
6 topics and he's not qualified as an expert to testify this way".  
7 Is that the same Professor Hanson?

8 MS. CROCKER: Objection, Your Honor, that's hearsay and  
9 Mr. Viscusi is clearly offering that for the truth of the matter  
10 stated in that out-of-court statement. And I move to strike that  
11 question and answer.

12 MR. MINTON: Well, I think it goes directly to Dr. -- or  
13 Mr. Hanson's credibility.

14 MS. CROCKER: Dr. Hanson is not on the stand here, we have  
15 Dr. Viscusi on the stand here.

16 THE COURT: Well, it certainly goes to his credibility.  
17 The question is whether I can accept it on redirect for that  
18 basis because it is a ruling, obviously, or I believe by Judge  
19 Weinstein.

20 MS. CROCKER: Your Honor --

21 MR. MINTON: I agree with you, Your Honor, except they're  
22 the ones that raised it. They asked whether or not -- they asked  
23 Dr. Viscusi if Professor Hanson had criticized him in a law  
24 review article. They opened the door on it. I think I'm  
25 entitled to address what other -- what other observers have said

1 about Professor Hanson and his law review article, and the  
2 observer in this case happens to be Judge Weinstein.

3 MS. CROCKER: Mr. Minton is simply saying he wants to  
4 address what another observer has said, an out-of-court statement  
5 about Dr. Hanson as an expert in this field in a case in which I  
6 didn't even examine this witness about. This would -- I can't  
7 imagine how this wouldn't open up to a request for recross on  
8 this issue. I haven't had a chance to examine on this issue and  
9 it's simply hearsay being offered for the truth of the matter  
10 asserted.

11 THE COURT: I'll allow the cross-examination. First of  
12 all, the transcript contains a ruling by a Judge, and that ruling  
13 itself constitutes a public document, even though there might not  
14 have been a written order. There might have been, but there  
15 might not have been as well. However, I do take into account the  
16 government's objection that they haven't had any chance to  
17 explore this ruling and it's certainly not entirely clear.

18 By the way, what does "junior professor" mean? Does that  
19 mean he's an adjunct or is he just a lowly assistant professor?

20 THE WITNESS: He's younger, he's actually now a tenured  
21 professor, he just does not have an endowed share.

22 MR. MINTON: I see.

23 THE COURT: Is he a full professor?

24 THE WITNESS: He's now a full professor, at the time he  
25 wrote this he wasn't.

1 THE COURT: So he's not so lowly, I guess.

2 MR. MINTON: I don't think he's lowly. He's come up in  
3 the world.

4 MS. CROCKER: Your Honor, are you going to allow us to do  
5 further cross on this issue?

6 THE COURT: No, I'm not, the issue is not that  
7 significant. Go ahead, please.

8 MS. CROCKER: And I'm sorry, Your Honor, I don't of a copy  
9 of that transcript and I didn't use it this morning.

10 BY MR. MINTON:

11 Q. Is the Professor Hanson that's being referred to there,  
12 was he the plaintiff's expert that was called to contest the  
13 testimony you were offering in the Falise case?

14 A. Yes.

15 Q. Dr. Viscusi, you mentioned that there were problems with  
16 qualitative type questions in surveys on cross-examination.  
17 What did you mean by that?

18 A. What I meant was that we don't really know what people  
19 mean when they say something's very risky or somewhat risky.  
20 It's hard to compare that to the actual risk, and those people  
21 really do overestimate the risk, underestimate the risk, or have  
22 an actual perception of it.

23 Q. Let me put up or put on the screen a demonstrative that  
24 you were shown, which is 17782 A, and it includes a question  
25 from the Robert Wood Johnson Survey. Do you recall being asked

1 questions about this document?

2 A. Oh, yes, I do.

3 Q. First of all, did you receive, as they were produced to  
4 us, the actual data underlying this response last week?

5 A. Yes, I did.

6 Q. All right. And was the question that was asked that's  
7 being inquired, is that -- was that an open-ended question in  
8 that survey?

9 A. Yes, it was.

10 Q. All right. And what are the problems with an open-ended  
11 question of this nature in a telephone survey?

12 A. This is a very long telephone survey where if you count  
13 the actual questions asked of people, it's over 50 questions.  
14 The incentive of respondents in a long telephone survey, which  
15 lasted an average of 15 minutes, even though it was 50  
16 questions, is to try to get it over as fast as possible. So  
17 when they're asked an open-ended question such as there, "name  
18 the causes of death or the illnesses caused by smoking  
19 cigarettes", they're not going to sit there for a long time  
20 enumerating the different causes, they're going to give the  
21 survey -- the person doing the coding one or two things and then  
22 move on to the next question.

23 Q. All right. Did the Weinstein Slovic study actually  
24 mention to people up front how long the survey was going to  
25 take?

1 A. Well, they told them it would be 10 minutes, on average  
2 it lasted 15, and even though they told them 10 minutes, once  
3 they told them that, just that one piece of information, I  
4 think, led a couple thousand people to slam down the phone  
5 according to their coding sheets.

6 Q. Have you looked at the actual response data that  
7 Weinstein Slovic got with respect to the 2001 survey?

8 A. I have.

9 Q. And does it indicate that people were generally tending  
10 toward a willingness to spend a lot of time answering that  
11 survey or not?

12 A. Well, the response rate is about a tenth of what you  
13 would expect from the telephone survey, so that, plus the slam  
14 down, suggests that a lot of people simply didn't want to invest  
15 the time in taking a long survey, which would affect these  
16 answers.

17 Q. Is it well understood in the scientific literature on  
18 telephone surveys, Dr. Viscusi, that in general, if you're  
19 asking people for -- to catalog knowledge or to give some sort  
20 of comprehensive knowledge, that there's a difference between  
21 surveys in terms of which is better, telephone survey versus  
22 some other type of survey?

23 MS. CROCKER: Objection, leading.

24 THE COURT: What is the understanding in the literature on  
25 this subject, please?

1           THE WITNESS: Long, long telephone surveys or telephone  
2 surveys generally are not a good way to elicit these answers.  
3 Generally, when we run these surveys for EPA, we also follow the  
4 open-ended questions with prompts for the specific ailments, such  
5 as, you know, lung cancer, et cetera.

6 BY MR. MINTON:

7 Q.       All right. And as a matter of fact, Dr. Weinstein  
8 himself relied on an article by Klesge that used the format that  
9 you just referred to and recommended, didn't he?

10 A.       Yes.

11 Q.       And is that the 1998 -- or 1988 article by Dr. Klesge?

12 A.       Yes, it is.

13 Q.       That's being shown. And just give the Court an overview  
14 of what it was that Dr. Klesge did in this survey.

15 A.       It's the same kind of thing except instead of asking  
16 people the open-ended question about what illnesses are caused  
17 by smoking, Dr. Klesge asked people specific illnesses so they  
18 could answer yes or no regarding them.

19 Q.       And what did he get, what kind of responses did he get  
20 when he did that?

21 A.       Well, for all the major illnesses that we think of with  
22 respect to smoking, heart attack, stroke, emphysema, bronchitis  
23 lung cancer and mouth cancer, you get an overwhelming share of  
24 the population indicating yes, smoking is related to this  
25 disease.

1 Q. All right. And is this consistent or inconsistent with  
2 the open-ended data from Weinstein and Slovic 2001 and Annenberg  
3 2?

4 A. It's inconsistent because people when prompted are able  
5 to name many more diseases than if they're given an open-ended  
6 question in a rushed telephone survey format.

7 Q. And what does the scientific survey literature tell us is  
8 the preferred way of eliciting that knowledge?

9 A. If you do open-ended you have to follow it with prompted  
10 questions such as this.

11 Q. You were shown 17787 during your cross-examination,  
12 Dr. Viscusi. It refers to Hints 2004. Have those data ever  
13 been produced to you?

14 A. I never received them and I've never been able to look at  
15 the raw data.

16 Q. Do you know if the plaintiffs ever produced those data to  
17 the defendants in this case?

18 A. I believe they have not.

19 Q. All right. And let's look at the response scale that is  
20 at the top of that survey instrument. First of all, do we know  
21 that that's the question that was actually asked in the Hints  
22 2004 survey?

23 A. No, because we don't have the actual survey text.

24 Q. Let's just assume that that was the question that was  
25 asked and those are the response categories that were given.

- 1 What is "anchoring", Dr. Viscusi?
- 2 A. Anchoring occurs in a survey when you give people answers  
3 that are likely to affect their responses.
- 4 Q. All right. Yes or no, does this -- if these were the  
5 actual categories that were presented to those survey  
6 respondents in that survey, is there any question that there's  
7 an anchoring bias present?
- 8 A. There's rampant anchoring here.
- 9 Q. And why is that?
- 10 A. Because the correct answer, 10 or more times, the  
11 non-smokers risk, is the only one that's correct. All the other  
12 multiple choices that are given to respondents are underestimate  
13 the risk. Same cancer risk, a little higher risk, twice the  
14 risk, four times the risk, so four out of the five options are  
15 biased in terms of leading people to underestimate the risk.
- 16 Q. When you know as a surveyor -- well you believe what the  
17 actual response is, does the scientific survey literature tell  
18 you that it's appropriate to put the actual biological response  
19 or the actual true response at one extreme of the scale? Is  
20 that what the scientific survey literature recommends?
- 21 A. It's exactly what you shouldn't do. In fact, the surveys  
22 we just ran for EPA you want a 50/50 split around the truth, so  
23 the right answer should be, ideally, in the middle.
- 24 Q. Okay. Let's try and do two at the same time here on  
25 this. We're going to be discussing 17792 and 17790, more or



1 less simultaneously. Both of these questions ask people to  
2 compare themselves to the average smoker. 17792 deals with ease  
3 of quitting and 17792, which isn't up on the screen yet, deals  
4 with the number of categories. But let's talk about the  
5 comparison of comparing to the average smoker. First of all, is  
6 it rational for a person to rate their risk of smoking-related  
7 disease as being lower if they smoke less?

8 A. Yes, particularly if they smoke less they'll have lower  
9 risk.

10 Q. And have you analyzed, in terms of the answer to both  
11 this question and the answer to the questions about other  
12 dimensions of risk in the Annenberg 2 and the Weinstein and  
13 Slovic 2001 data, with respect to the youth smokers, whether  
14 it's 14 to 22 in Annenberg 2 or 15 to 19 in Weinstein and  
15 Slovic, how much they smoke compare to the older categories of  
16 people?

17 A. I've linked the amount of cigarettes they smoked to the  
18 actual responses and what you find is that teen smokers smoke  
19 far less than do adults, and in fact, many of them smoke one to  
20 five cigarettes, it's a very low amount of consumption.

21 Q. So when you adjust these responses or control these  
22 responses to the actual amount that those people reported that  
23 they smoke, what do you get? What's the result?

24 A. Well, if people say it's easy for them to quit it's  
25 probably because they don't smoke very much or hardly at all.

1 Q. And you made that actual comparison in these data?

2 A. Yes, that's based on analysis of the average number of  
3 cigarettes smoked by the same respondents that I matched to the  
4 easy, hard, very hard answers.

5 Q. All right. Let's look at another demonstrative that you  
6 were shown, 17783. You recall being shown that demonstrative?

7 A. Yes.

8 Q. And you made your own estimate of -- well, first of all,  
9 let me ask you this: Has it ever been shown anywhere in any  
10 study that you're aware of that people's perception of how long  
11 you have a disease before you die has influenced their estimate  
12 of the number of smokers who die from a smoking-related disease  
13 or from lung cancer?

14 A. No, that's never been shown.

15 Q. Okay. And again, is there any evidence of anchoring or  
16 an anchoring bias in 17783, Dr. Viscusi?

17 A. Yes. We're back to the anchoring phenomena again where  
18 all administrative questions were open-ended in the sense that  
19 they gave no anchors. This question, the first category they  
20 gave people one to two years is what they view as the correct  
21 answer. The other three categories that they offered to  
22 respondents as possible answers were all overestimates of the  
23 survival time, and as you might expect, giving people that set  
24 of three overestimate options pushes people to the right, to the  
25 three to five year category.

1 Q. And I want to show you another demonstrative you were  
2 shown, 17789. Do you recall that?

3 A. Yes.

4 Q. That refers to Hints 2004, same answer with respect to  
5 the question and whether or not you've ever seen the data?

6 A. That's correct, I never got the data.

7 Q. And with respect to the types of questions that are being  
8 asked there -- first of all, with respect to the third question,  
9 are you aware of any expert in this case that has testified that  
10 there's an actual biological risk of getting cancer if someone  
11 only smokes a few years?

12 A. No, I'm not.

13 Q. And is there any evidence that people's answers to those  
14 types of questions influence their answer to the number of  
15 smokers out of a hundred who will die or get lung cancer or die  
16 of some other smoking-related disease?

17 A. No, there's not.

18 Q. Let me show you 17791. That's from Weinstein & Slovic  
19 and it asks: "Do you consider yourself a smoker?" Did you look  
20 at the data with respect to both the teens who responded yes or  
21 no to that question by the amount that they smoked and also how  
22 easy or hard that they said it would be for them to quit?

23 A. Yes.

24 Q. All right. And who was it that was reporting that they  
25 didn't consider themselves smokers among the teens in the

1 Weinstein Slovic data?

2 A. Those were the ones who smoked very few cigarettes.

3 Q. Was it largely confined to the category of under one  
4 cigarette a day or one to five cigarettes a day?

5 A. Those are the two categories.

6 Q. All right. And were those also the categories that  
7 responded that it would be easy for them to quit?

8 A. Yes, the same people who hardly smoke at all are the same  
9 ones who think it's easier to quit.

10 Q. All right. I want to show you 17786. Do you recall  
11 being shown that demonstrative?

12 A. I do.

13 Q. In order to make a decision to smoke, do people need to  
14 be able to estimate the death rates for automobile accidents or  
15 AIDS or gunshot wounds?

16 A. No, because the decision to smoke is not a choice between  
17 whether you should drive a car or whether you should have a  
18 cigarette. If that was the comparison people were making, then  
19 that's what you would want to know. In fact, I believe  
20 Dr. Weinstein didn't even know how many people were killed in  
21 car crashes.

22 Q. But he said that was essential information, didn't he?

23 A. He did.

24 Q. All right. Well, let me show you -- Jimmy, can you bring  
25 up JE 077940?

1 MS. CROCKER: Your Honor --

2 MR. MINTON: At page 20.

3 MS. CROCKER: I hate to interrupt. Are you planning to  
4 take an afternoon break?

5 THE COURT: We'll take about 10 minutes. Is this an  
6 appropriate time in terms of your redirect?

7 MR. MINTON: I'm nearly done. I mean, I -- it knocks next  
8 to me if I take a break now.

9 THE COURT: I have learned never to believe counsel. All  
10 right. Let's take just 10 minutes, then, please.

11 (Thereupon, a break was had from 3:10 p.m. until 3:23  
12 p.m.)

13 THE COURT: All right, Mr. Minton.

14 MR. MINTON: Thank you, Your Honor.

15 BY MR. MINTON:

16 Q. Dr. Viscusi, when we broke, we had just looked at the  
17 list that's on 17778 with respect to causes of death. And as  
18 you have seen in Dr. Weinstein's testimony, he suggested that  
19 people need to know about those in order to judge the smoking  
20 risk. And there was a reference to one of Dr. Slovic's articles  
21 during the cross-examination on a similar topic.

22 Let's look at whether or not there's ever been a public  
23 health agency or public health authority that has suggested  
24 whether or not knowledge of those sorts of areas is important  
25 and in what context.

1           Are you familiar with the media strategy guide for  
2   smoking controls that was issued by HHS and NIH in 1988?

3   A.       Yes, I am.

4   Q.       All right. And if we look over at page 20 of that  
5   document, it says: "If you were to rush into a newsroom waving  
6   aloft a copy of the 1964 Surgeon General's Report crying,  
7   'Extra, extra, smoking found hazardous to our health,' you would  
8   be viewed as" -- actually, one of my favorite phrases in the  
9   whole case -- "as a raving loony."

10           All right. And over on page 21, do they indicate at the  
11   bottom why it is that you might be viewed as a raving loony?  
12   It's right under "Creative Epidemiology" and it begins the third  
13   line down from there and it says: "The news about smoking  
14   hazards is hardly new."

15           Do you see that?

16   A.       Yes.

17   Q.       And they go on at the bottom of page 21 to describe what  
18   creative epidemiology is and they quote -- or they make  
19   reference to "the ability of a good epidemiologist to rework  
20   data so that what is essentially the same information can be  
21   presented in a new and interesting form." That carries over on  
22   page 22.

23           And then at the bottom of page 22, it says: "Appendix C  
24   contains a list of prime illustrations of effective, creative  
25   epidemiology." Do you see that?

- 1 A. I do.
- 2 Q. All right. If we flip over to page 39 in Appendix C,  
3 under "Creative Epidemiology," do you see any resemblance to  
4 what the NIH says is creative epidemiology and what  
5 Dr. Weinstein has suggested is essential knowledge for the  
6 smoker?
- 7 A. Yes. For example, the second one, creating -- "Cigarette  
8 smoking causes more premature deaths than do all the following  
9 together: AIDS, cocaine, heroin and alcohol, fire, automobile  
10 accidents, homicide and suicide."
- 11 Q. Right. So if we flip back over to the ELMO, the risk of  
12 things on 17786 is in fact the same risk that NIH gave as  
13 "creative epidemiology"; in other words, recycling old news?
- 14 A. Yeah, if you equate "guns" with "homicide," but all the  
15 rest of them are right on point.
- 16 Q. And are you aware of any public health agency that has  
17 ever suggested that what the NIH said was "creative  
18 epidemiology" or a way of recycling old news was essential in  
19 terms of people understanding the risks of smoking?
- 20 A. No.
- 21 Q. All right. You were asked a couple of questions about  
22 your 2002 book, Smoke-Filled Rooms. I have only one question  
23 about that. Have you ever suggested that smoking-caused death  
24 is a good thing from an economic standpoint or any other  
25 standpoint?

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- 1 A. I always said it's a bad thing. It's harmful to the  
2 individuals involved and I've always, you know, said that the  
3 death of smokers is a bad thing.
- 4 Q. All right. Now, you were asked some questions about the  
5 Ayanian and Cleary article. Do you recall that?
- 6 A. Yes.
- 7 Q. All right. And you studied the Ayanian and Cleary  
8 article, haven't you?
- 9 A. And I analyzed their original data.
- 10 Q. It says there in the abstract that you were read that  
11 most smokers don't view themselves at increased risk of heart  
12 disease or cancer.
- 13 First of all, did the survey that Ayanian and Cleary  
14 used -- did they actually ask questions about health risks  
15 separately from questions about smoking so that you could parse  
16 people's responses of overall risks that were attributable to  
17 smoking from their other perception of the risks?
- 18 A. No, they didn't.
- 19 Q. All right. And how does that impact the results in  
20 Ayanian and Cleary?
- 21 A. Well, among other things, we don't know what the  
22 reference group was that people were thinking about when they  
23 compared themselves to the average.
- 24 Q. All right.
- 25 A. So were they thinking of the average smoker as being



1 their reference point, for example?

2 Second, looking at the data, these are questions that  
3 asked people to compare themselves to the average: Are you  
4 above average in heart disease risk, below average or average?  
5 Smokers more than nonsmokers indicated that they were above  
6 average risk for heart disease and cancer. And some people  
7 viewing the data, such as Judge Easterbrook, have concluded that  
8 this is like the glass is half full, at least this far.

9 Next, many smokers said their risk was average. And they  
10 called this a risk underestimate. But this was another one of  
11 these long surveys and what happens in a long survey is that  
12 people try to get through the survey quickly.

13 So what I did is I looked at the people who answered  
14 average for the heart disease risk or the cancer risk and looked  
15 at their answers to other questions where they were asked were  
16 they above average, average or below average? And sure enough,  
17 the people who thought they were average in heart disease risk  
18 also thought they worried an average amount, thought that they  
19 had average income and so on down the line. That was their way  
20 of getting through the survey quickly.

21 Q. Let me ask you one more question about Ayanian and  
22 Cleary. When they asked people to compare themselves to others,  
23 did they give them a reference point in terms of were smokers  
24 supposed to compare themselves to nonsmokers or to other smokers  
25 or did the survey instrument not say?

- 1 A. It is an undefined reference point, so people might think  
2 it's people like themselves.
- 3 Q. And what does the survey literature tell us? What  
4 predictably will people do under those circumstances?
- 5 A. Normally, when people think of a reference group, they  
6 think of the group they are in.
- 7 Q. All right. You were shown a 2004 article from Nicotine  
8 and Tobacco Research and I just want to show you one statement  
9 in there on page 337, Dr. Viscusi.
- 10 Well, first of all, have you ever heard of Dr. Michael  
11 Cummings before?
- 12 A. Yes. He's been a plaintiff's expert in many cases.
- 13 Q. Plaintiff's expert testifying against the tobacco  
14 industry?
- 15 A. Yes.
- 16 Q. All right. And when you were asked questions about this  
17 article, was the first sentence of the "Results" section -- was  
18 that mentioned to you?
- 19 A. No, they didn't mention that sentence.
- 20 Q. Okay. What is that -- what does the first sentence of  
21 the "Results" section say? When they asked people straight up,  
22 "Do you think you have adequate information about the health  
23 risks of smoking," how did people respond?
- 24 A. 94 percent said yes.
- 25 Q. How would you rate that number in terms of estimates that

1 people give in surveys and what you can reasonably expect as a  
2 practical maximum?

3 A. It's very hard because you can't get above a hundred  
4 percent and it's very hard to get a hundred percent, so  
5 94 percent is almost a clean sweep.

6 Q. All right. You were asked a couple of questions about  
7 the Robert Wood Johnson Foundation on cross-examination. Let me  
8 put something up on the ELMO here.

9 I didn't know you were going to be asked about the Robert  
10 Wood Johnson Foundation so we took this off of the website  
11 today. But with respect to whether or not the Robert Wood  
12 Johnson Foundation is an independent agency or whether or not  
13 it's involved in any litigation efforts, let me ask you whether  
14 or not this document indicates, according to Robert Wood  
15 Johnson's own website, that their "Future funding will focus on  
16 two key areas -- sustaining the tobacco policy change  
17 infrastructure," and then it goes on, "and strengthening the  
18 evidence-based policy changes that work to curb tobacco use."

19 Do you see that language?

20 A. Yes, I do.

21 Q. All right. Now, let's go to another website. This is  
22 the Tobacco Control Research Center website. And do you know  
23 who Professor Dick Daynard is?

24 A. Yes. He's a leading anti-tobacco activist.

25 Q. All right. And does the Tobacco Control Research Center

1 website indicate that they receive funding from the Robert Wood  
2 Johnson Foundation?

3 A. Yes, they do.

4 Q. Okay. And this is the Campaign For Tobacco-Free Kids  
5 website. Did they indicate they also receive funding from the  
6 Robert Wood Johnson foundation?

7 A. Yes, they do.

8 Q. Okay. Dr. Viscusi, how long has the economic model of  
9 rational decision-making been in the academic literature and  
10 tested with empirical data?

11 MS. CROCKER: Objection, Your Honor. This is beyond the  
12 scope and also is covered in the direct examination. I didn't  
13 ask about this on cross-examination. There's no need to cover it  
14 on redirect.

15 MR. MINTON: I beg your pardon. There were  
16 cross-examination questions asked about who's in a better  
17 position to judge rational decision-making and "he's only an  
18 economist" was the thrust of the cross.

19 THE COURT: I'll allow a few questions.

20 BY MR. MINTON:

21 Q. All right. How long has the economic model of rational  
22 decision-making been in existence?

23 A. It's been in existence for centuries and economists have  
24 been analyzing health and safety risks and those decisions for  
25 several decades.

1 Q. And how well or poorly do the empirical data on smoking  
2 fit the model of rational decision-making in terms of whether  
3 people are in fact making rational decisions to smoke?

4 A. They fit the model very well if you go point by point.  
5 We've shown that the empirical evidence is consistent with the  
6 pattern you would expect if people are rational. And to the  
7 extent that people err, we've shown that people overestimate the  
8 risks.

9 Q. And have the empirical data validated or shown that  
10 smoking is driven by affect or the affect heuristic?

11 A. No, they have not. And if anything, the affect there,  
12 according to Dr. Slovic's own research, is negative, not  
13 positive. So it's not alluring to smoking; it's -- people are  
14 deterred from smoking by whatever he calls "affect."

15 Q. And have the empirical data validated or shown that  
16 people have an information deficit when it comes to the risks of  
17 smoking?

18 A. No. The information deficit hypothesis has been  
19 rejected, according to the Surgeon General in the 1994 Report  
20 and it's been rejected as a result of the COMMIT study as well  
21 as the Hutchinson study.

22 Q. Thank you, Dr. Viscusi.

23 That concludes my redirect examination, Your Honor.

24 THE COURT: Let me ask you just a couple of questions.

25 There was a lot of testimony about who was funding

1 different surveys. I don't think you were asked, however, who  
2 funded the small survey that you did in North Carolina.

3 THE WITNESS: I took this out of my own personal research  
4 budget, so I hired a graduate student who made the phone calls  
5 and I did the work for free. And the tobacco industry did not  
6 even know I was doing the survey.

7 THE COURT: And were you at Harvard at that point?

8 THE WITNESS: I was at Duke University in North Carolina.

9 THE COURT: That's what I thought. Can I safely assume  
10 that you subscribe to the Law and Economics school of analysis?

11 THE WITNESS: I'm in the Law and Economics field. I don't  
12 agree with everything that comes out of University of Chicago, if  
13 that's what you mean by the Law and Economics School. But yes,  
14 I'm a card-carrying economist and I believe in economics.

15 THE COURT: Is it fair to say that that school has its  
16 believers and its nonbelievers?

17 THE WITNESS: In fact, even I question some of the things  
18 that have come out of the University of Chicago, but some people  
19 disagree with that school's thought; other people don't. So yes,  
20 you're right.

21 THE COURT: In some ways, are you and Dr. Slovic -- and  
22 I'll put Dr. Weinstein in the same category as Dr. Slovic --  
23 essentially talking about apples and oranges? And let me explain  
24 my question.

25 Your analysis goes to quantifiable factors that people

1 take into consideration in making decisions. Dr. Slovic's  
2 analysis, it seems to me, goes to factors that are essentially  
3 affective, emotive, probably nonquantifiable; isn't that correct?

4 THE WITNESS: Yes. There's a difference in our  
5 methodologies along those lines. I focus on quantifiable risk  
6 beliefs and he focuses on subjective or qualitative risk beliefs.

7 THE COURT: And never the twain shall meet, correct?

8 THE WITNESS: Well, we've met in print, but --

9 THE COURT: True.

10 THE WITNESS: -- I think we share -- I certainly have a  
11 critical view of the qualitative questions in that I don't think  
12 they can get you to the answer of whether people overestimate or  
13 underestimate the risk, no matter how you do it. So the only way  
14 we can get at that question, whether people's risk beliefs are  
15 above or below the true risk, is with some quantitative measure,  
16 so that's why I focus on quantitative measures.

17 THE COURT: And you, of course, have concluded that in  
18 general, people overestimate the risks; that's number one. And  
19 number two, that in general, people believe that they have  
20 sufficient information about the health risks of smoking.

21 And so where does that get you in terms of any conclusions  
22 about public policy issues or, let us say, remedies issues in  
23 this case regarding either cessation of smoking or regulation of  
24 smoking in any way?

25 THE WITNESS: I think the --

1           THE COURT: And I realize this is nobody's expert witness  
2 on remedies. I know that.

3           THE WITNESS: I think the net effect of the past four  
4 decades of information provision regarding the risks of smoking  
5 has been a tremendous success and that people have the message,  
6 so I don't view there to be a problem to be remedied. So if you  
7 look at the Hutchinson study and the COMMIT study that have been  
8 very ambitious informational interventions, they didn't  
9 accomplish anything. And you'll observe a situation where you  
10 don't accomplish anything if you've already accomplished your  
11 mission. And this is one area where I think we can declare  
12 victory in terms of disseminating the information to the public.

13          THE COURT: Are there criticisms in the literature -- and  
14 I know I'll probably hear more about this at a different portion  
15 of our trial, but are there criticisms in the literature of how  
16 those two major studies were carried out?

17          THE WITNESS: No. I know the follow-up to the Hutchinson  
18 study was this study was the gold standard; now it's back to the  
19 drawing board to try to figure out why -- how can we do better?  
20 And nobody's done better.

21          The COMMIT study was another multi-million dollar study  
22 and at the time they launched the study, they predicted there  
23 would be dramatic effects in smoker quit rates, so they actually  
24 expected a huge effect and when they came up empty-handed, this  
25 was another failure.

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1 THE COURT: Okay. Thank you. You may step down at this  
2 time.

3 MR. MINTON: Your Honor, may I follow up on two of the  
4 questions the Court has asked?

5 THE COURT: All right.

6 BY MR. MINTON:

7 Q. Dr. Viscusi, are any of your analyses or conclusions  
8 dependent upon any critical theory of the Law and Economics or  
9 Chicago school?

10 A. No.

11 Q. All right. And with respect to empirical data and  
12 whether you categorize the affect heuristic as objective or  
13 subjective, is the only way to test the hypothesis of affect  
14 with empirical data?

15 A. That's the only way you can test any hypothesis.

16 Q. And as of today, there's been no successful test of that  
17 hypothesis, correct?

18 A. Yes, according to both me and Dr. Slovic.

19 THE COURT: All right. Thank you. You may step down.

20 THE WITNESS: Thank you, Your Honor.

21 THE COURT: We have some procedural issues that I want to  
22 address, everybody, in a minute.

23 All right. Two things, and then I gather that  
24 Mr. Frederick has a procedural issue he wants to raise. And I'm  
25 certainly prepared to talk about the objections regarding

1 tomorrow's testimony.

2 MS. EUBANKS: Your Honor, we're not prepared to discuss  
3 the objections regarding tomorrow's testimony. That's going to  
4 be Mr. Schwind, who will be -- I'm sorry.

5 Mr. Schwind will address those, including the motion to  
6 strike that we filed last night --

7 THE COURT: All right.

8 MS. EUBANKS: -- with respect to the new exhibits, and I  
9 will be doing the cross of Mr. Szymanczyk.

10 THE COURT: The motions to strike or the oppositions?

11 MS. EUBANKS: The opposition. And as I stated yesterday,  
12 we will be filing an opposition and a combined motion to strike.  
13 That was filed last night.

14 There are the objections that were filed pursuant to 471  
15 and then we received notice on the Friday before the Monday  
16 filing that there would be new exhibits. I think it was 11 new  
17 exhibits.

18 THE COURT: Correct.

19 MS. EUBANKS: And we opposed the addition of those  
20 exhibits in a combination of an opposition/move to strike.

21 THE COURT: I have that. All right. So people aren't  
22 going to be ready to deal with that until tomorrow?

23 MS. EUBANKS: First thing tomorrow morning we can deal  
24 with that, Your Honor.

25 THE COURT: Mr. Frederick, is that something you were

1 going to deal with?

2 MR. FREDERICK: Yes. I'll deal with that tomorrow.

3 THE COURT: All right. And is that the issue that you  
4 wanted to raise today?

5 MR. FREDERICK: No, Your Honor. Tom Frederick, for the  
6 record.

7 Very briefly, you'll recall -- and I sent the government  
8 an e-mail last night and I don't know if they have any thoughts  
9 on this, but on March 24th, you may recall, we had an extended  
10 discussion of Dr. Heaton's testimony and whether she can testify  
11 about two American Journal of Public Health articles in which she  
12 participated. One was a 2002 article and the other was a 2005  
13 article.

14 Where we ended up at the end of that discussion was a  
15 direction from the Court to file a praecipe on that discovery,  
16 which we did.

17 Before that direction was given, there was a discussion  
18 where the Court indicated that the defendants -- if the  
19 defendants could not get the underlying information they needed  
20 from the University of Michigan with respect to the 2005 article,  
21 Dr. Heaton wouldn't be permitted to testify. And the question  
22 is simply whether the instruction to file a praecipe superseded  
23 the instruction to pursue the University of Measure, because if  
24 we're supposed to pursue the university, I have to serve them  
25 with a subpoena.

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1           And it's simply one or the other. We're happy to serve  
2   the subpoena, but if the Court doesn't want us to, we will not  
3   serve the subpoena. But that's the issue.

4           MS. EUBANKS: Your Honor, I received an e-mail from  
5   Mr. Frederick about 9:11 last night that attached a copy of a  
6   subpoena to issue from the Eastern District of Michigan to the  
7   University of Michigan.

8           Insofar as the issuance of the subpoena is concerned, I  
9   think it's important for the Court to know procedurally where we  
10   are on the issue. The Court ordered the parties or permitted the  
11   parties to file praecipes dealing with this issue and that's  
12   pending before the Court.

13          THE COURT: And when was that due?

14          MS. EUBANKS: Those have been filed, Your Honor.

15          MR. FREDERICK: Those were filed.

16          MS. EUBANKS: And there was a response to the praecipe  
17   that the defendants filed as well, but this is the issue here  
18   that -- in terms of looking at it and what's to be done.

19          That was on the 24th of last month that the Court made the  
20   statements that Mr. Frederick is referring to with respect to the  
21   University of Michigan, but we have to go back all the way to  
22   July of last year to understand that that is the point in time  
23   when defendants were upon notice of this data, number one.

24          Number two, it's extremely important to note that  
25   Dr. Healton is in no way any new remedies evidence.

1           Number three, Dr. Healton's testimony, written direct, was  
2   filed back in February of this year. We think this request at  
3   this point in time, the 6th of April now, has problems with  
4   respect to timeliness, especially in light of the procedural  
5   history.

6           But I will say insofar as the documents at the University  
7   of Michigan are concerned, I'll tell the Court what my  
8   understanding is after having reviewed the subpoena and having  
9   spoken with Ms. Vargyas, the General Counsel at Legacy.

10          First, Legacy did not have the underlying documents that  
11   are called for in the subpoena and there are certain subsets of  
12   the data which this subpoena, if it were served, would call for  
13   that are publicly available. The specific level of data that was  
14   used in the Farrelly article that is appended to the subpoena  
15   here is in fact, my understanding, protected by statutes or  
16   regulations. And that is how the responders are informed when  
17   they participate in the surveys, that the data that is being  
18   collected is subject to certain privacy interests that they have,  
19   and they participate in the studies.

20          My understanding of what the university does, and this  
21   understanding is based upon a conversation with the General  
22   Counsel of Legacy, is that for researchers at least, I know -- I  
23   don't know if for others or if there's some regulation that  
24   limits it to just researchers -- but the university does take  
25   requests from individuals outside the university and will run

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1 certain searches on the data.

2 A subpoena, however, is not likely to result in obtaining  
3 the data. And I'm concerned that it will set us up for further  
4 procedural matters with a subpoena issuing from the District  
5 Court in Michigan to the University of Michigan from this case  
6 when discovery has long since been cut off and since defendants  
7 have known of the existence of this data since July of last year.

8 So it seems to me that the timeliness insofar as where we  
9 are in these proceedings is important to consider, especially in  
10 light of -- and I understand the Court's position on new remedies  
11 witnesses. This is not a new remedies witness and not a new  
12 issue.

13 THE COURT: And she's a fact witness.

14 MS. EUBANKS: She's a fact witness, Your Honor.

15 THE COURT: So why are we evenly exploring this now at  
16 this point?

17 MR. FREDERICK: Your Honor, Ms. Eubanks just reargued the  
18 issue you ruled on on March 24th. The reason we're revisiting  
19 visiting it is because until they submitted Dr. Healton -- first  
20 of all, yeah, we deposed her last July and we had zero right at  
21 that time, as Mr. Brody noted, last week discussing discovery, we  
22 had no right whatsoever to issue a subpoena at that time for the  
23 University of Michigan.

24 When we got Dr. Healton's testimony in this case, she  
25 testified about the 2005 article. We moved to strike that

1 testimony as improper expert testimony. On March 24th, the Court  
2 denied that motion.

3 All right. Now we have to cross her -- we may have to  
4 cross her on that article. We had a very extensive discussion on  
5 March 24th about the very issues -- most of the issues  
6 Ms. Eubanks has just raised and the upshot was at one point in  
7 the discussion -- and I can refer the Court to the transcript --  
8 at pages 16922 and -23 of the transcript, the instruction was  
9 that -- "I don't know how the defendants are going to go about  
10 dealing with the University of Michigan in terms of getting that  
11 data, but as a matter of fundamental fairness, my ruling is that  
12 unless the defendants can somehow -- that's up to them -- get  
13 that data on whatever conditions of confidentiality might be  
14 imposed -- that unless they can get such data, then the witness  
15 cannot testify about that particular article."

16 So that was the ruling. We just revisited the ruling. I  
17 had a much simpler question, and that is: Should I issue my  
18 subpoena or not, or should I wait for the Court to rule on the  
19 praecipe request? That was the simple issue I raised today.

20 MS. EUBANKS: Your Honor, to speak to that point of the  
21 so-called ruling, that's a complete mischaracterization because  
22 Mr. Webb asked the Court specifically after we discussed this  
23 matter whether the Court would entertain further papers on it.  
24 That's how we got into the praecipe situation. And then that's  
25 why the praecipes were filed.

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1           But if this is something that -- if the Court is looking  
2   at the preclusion of evidence insofar as Dr. Healton's testimony  
3   is concerned, that issue has not squarely been placed before the  
4   Court. And that's something that, if that's going to be  
5   precluded for some of the reasons that I set forth here, we  
6   certainly would want to brief it.

7           My concern is simply that if we open this up to a  
8   subpoena, I don't think that a subpoena is reasonably  
9   calculated --

10          THE COURT: When were the praecipes filed? I'm sorry. I  
11   have not seen those.

12          MR. FREDERICK: On March 25th, the next day.

13          THE COURT: I don't -- at least I don't remember seeing  
14   them.

15          I will rule on the praecipes this week and then, of  
16   course, whatever follows from that will follow. And today, it's  
17   obviously only Wednesday and I will try -- I might get them done  
18   today or I might get them done tomorrow.

19          MS. EUBANKS: And, Your Honor, I would further state that  
20   in the e-mail from Mr. Frederick last night, he did not state  
21   with forceful clarity that he thought the Court had ruled on this  
22   either. The reason that he states that he sent the e-mail with  
23   the attached proposed subpoena from Michigan was so that we could  
24   have some clarification from the Court as to whether it had been  
25   ruled upon.



1           And it's our position that any exclusion of the testimony  
2   that was filed by Dr. Heaton in February is something that would  
3   need to be briefed with the Court if that is to be excluded. The  
4   discovery issue is separate and apart from that.

5           THE COURT: Well, I'll look at the transcript, everybody.

6           MR. FREDERICK: And just so we're all clear, the reason I  
7   asked is I wanted to be clear I should issue the subpoena. I  
8   take it the direction from the Court is to hold off on the  
9   subpoena, pending the praecipe result.

10          THE COURT: There are two other matters I want to raise.  
11   Everybody has been suspiciously silent about the scheduling -- I  
12   don't want to know anything else -- about the scheduling  
13   regarding your work on discovery issues for new remedies  
14   witnesses.

15          Given our schedule and the way things are moving along,  
16   certainly by Monday, I expect some kind of update from everybody  
17   as to where you all are. Actually, I thought I would get it  
18   before then, but I can wait until Monday, but certainly by then.  
19   And I'm not asking for it now because I'm not even sure that it  
20   would be useful, Mr. Bernick and Ms. Eubanks, to hear from you  
21   all right now. Sometimes silence is a good thing, especially  
22   when parties are trying to work things out. I learned that a  
23   long time ago.

24          But I am telling you by Monday, I need an update because I  
25   can't let these issues hang.

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1 MS. EUBANKS: That's certainly fine, Your Honor, but could  
2 we have three more hours? We agreed to 12, but could we have  
3 three more hours?

4 THE COURT: When do you mean? On Monday?

5 MS. EUBANKS: We had agreed -- no. We'll report on  
6 Monday. We don't want to talk about it now either, but if we  
7 could have three more hours, that would be very helpful. Three  
8 more hours. We had agreed to a maximum of 12 with Judge Levie,  
9 but I think three more hours would be great.

10 THE COURT: That's fine.

11 MR. BERNICK: And we're completely agreeable with that.

12 THE COURT: All right. That's fine. And I wanted to tell  
13 you one other thing in terms of my schedule. I already, of  
14 course, have the defendants' list of people for next week.

15 My understanding is that the Mulholland motion, which I  
16 haven't looked at, although I have a pretty good idea of what  
17 it's all about, is not fully briefed yet.

18 MS. EUBANKS: As of last night, Your Honor, the United  
19 States filed its reply.

20 THE COURT: Last night?

21 MS. EUBANKS: We filed it last night, Your Honor.

22 MR. FREDERICK: They filed the opposition. I would hope  
23 to have the reply filed by tomorrow.

24 THE COURT: All right. Well, I'll obviously get to that  
25 as soon as it gets ripe.

1           Final thing I wanted to mention is -- well, actually two  
2 more things. Wednesday afternoon of next week, I'm going to let  
3 everybody go after lunch. I have another sentencing lunch and  
4 then a tenure meeting -- Disabilities and Tenure Commission  
5 meeting at 3:30. It's just not a good use of your time to have  
6 an hour here.

7           So we will go Wednesday until 12:30. We will have full  
8 days Monday, Tuesday and Thursday.

9           MR. BERNICK: Can I raise a question about that? We had  
10 arranged for Dr. Heckman to appear next Wednesday as a date  
11 certain. He'll probably -- he will be our last witness, with the  
12 exception of Dr. Mulholland, who's kind of on a somewhat separate  
13 track.

14           Dr. Heckman is an extraordinarily busy man so it was  
15 difficult to get on his dance card. I think the estimate we've  
16 heard from the government about their cross is two to  
17 three hours.

18           MS. BROOKER: Your Honor, we only just received the  
19 Heckman testimony. I can't say how long the cross-examination  
20 will be. I think I have until midnight tonight to take a look at  
21 it.

22           THE COURT: And it's fairly short testimony, but I don't  
23 even know what it's about.

24           MS. BROOKER: Your Honor, I can't say now. Hopefully, it  
25 won't last more than three hours, but I'm still taking a look at

1 that, and I'm the person who will be cross-examining Dr. Heckman.

2 THE COURT: Is Mr. Willard going to get done in a day?

3 MS. BROOKER: Yes. That should happen on Monday, Monday  
4 morning first thing, correct?

5 THE COURT: And Mr. Beran, a day?

6 MR. BERNICK: I think it would probably less than that, I  
7 would suspect.

8 MS. BROOKER: I'm sure that that's true with Mr. Beran,  
9 too.

10 THE COURT: Do you want to put Dr. Heckman on on Thursday?

11 MR. BERNICK: That's the problem. I don't know -- I don't  
12 know if Dr. Heckman is even available on Thursday because we --  
13 at least I personally -- I'll take responsibility -- I wasn't  
14 aware that Your Honor had other matters on for Wednesday, so we  
15 got him committed to a day on the theory that he would be on and  
16 off and, recognizing Your Honor's schedule, I think it would  
17 probably still be worthwhile to come back in the hopes of  
18 finishing his testimony.

19 THE COURT: Why don't you at least ask him about Monday or  
20 Tuesday? We'll have full days either of those days.

21 MR. BERNICK: We did before and it was difficult to get  
22 done. He's giving lectures all this week at Princeton and I  
23 think it -- it spills over. So we can certainly ask about his  
24 availability for Tuesday, but I'm somewhat doubtful that in fact  
25 he is available on Tuesday.

1           I don't even -- I just don't know about Thursday. It may  
2 be that Thursday is available. I just don't know, but I want to  
3 alert Your Honor to the fact that if we had an hour in the  
4 afternoon, it might make all the difference and then we would  
5 be -- we would be done.

6           So if Your Honor can at least hold that open for now,  
7 we'll be in contact with his people as soon as we possibly can  
8 and I hope we can tell the Court tomorrow morning where all  
9 that's coming out.

10          MS. BROOKER: Your Honor, just given the length of time  
11 that it took -- I mean, I don't expect it to be long, but it  
12 might be preferable if we move it to Thursday and we can get  
13 finished, if that's possible. I mean, if Mr. Bernick would just  
14 ask Dr. Heckman if he could do it because, obviously,  
15 Mr. Bernick's estimate of time on redirect is always a little bit  
16 longer than we all think.

17          So I'm not sure we can get him done. Certainly, I can't  
18 imagine we would get him done with me and Mr. Bernick by the time  
19 that Your Honor has to break on Wednesday. That doesn't seem  
20 likely.

21          MR. BERNICK: Well, it's not -- as I indicated, we will  
22 put it to Dr. Heckman, but this was a prearranged date certain  
23 for Dr. Heckman and I just don't know -- I think, in fact -- I  
24 think the problem was that on the far end, he was leaving for  
25 Ireland and it's just a question of when exactly he's leaving for

1 Ireland. He's coming back from Princeton just to -- he's going  
2 to appear here and then he's leaving for Ireland. And that's why  
3 we picked Wednesday.

4 THE COURT: Well, you have to get more details on his  
5 schedule.

6 MR. BERNICK: I would certainly be happy to.

7 THE COURT: We'll talk about it tomorrow.

8 MR. BERNICK: His testimony -- and counsel will,  
9 obviously, be their own judge, but his testimony is focused on  
10 the principles of the scientific method, which is -- he got a  
11 Nobel laureate and that's one of his areas of specialty as an  
12 economist, and then on youth advertising, what the youth  
13 advertising data shows. So that's what his testimony is.

14 I think the Court's already very familiar with those  
15 studies and I think counsel is familiar with those studies, so my  
16 hope is it won't take quite as long as other witnesses. But it's  
17 obviously their decision.

18 If in fact we finish on Wednesday, if that's possible, and  
19 even if we spill over a little bit until Thursday and he's  
20 available to spill over until Thursday, I still also think  
21 that -- we're prepared to, and I think that Jonathan has had some  
22 discussions about the idea of -- we want to do our interim  
23 summation, now that our case will be ending, and we were hoping  
24 and expecting that the Court would entertain that on Thursday, so  
25 that we actually would be done --

1           THE COURT: Unless you put Dr. Mulholland on on Thursday,  
2 depending on how I rule.

3           MR. BERNICK: Is that really -- I don't even know if  
4 that's achievable because we -- but you know --

5           MR. FREDERICK: I don't know whether it's achievable.  
6 Obviously, he's an FTC employee and the FTC is not here. I just  
7 don't know. They were expecting to have some time to correct his  
8 testimony after the Court ruled, so I don't know where they're  
9 at.

10          MS. EUBANKS: Just to remind the Court, when the FTC was  
11 here, what counsel for the FTC said was that one of the issues  
12 surrounding Dr. Mulholland's testimony was one of privilege in  
13 terms of objections that they likely would have. I remember  
14 distinctly that he stated that that was an issue concerning the  
15 proposed testimony from Dr. Mulholland and that was a concern  
16 that the Commission had.

17          I haven't spoken with the Commission attorneys since we  
18 were right here before the Court. We served a copy of our brief  
19 on the Commission last night by e-mail as well, but I do know  
20 that even if the testimony comes in, there may be issues of  
21 courtroom closure and so forth, just based upon what counsel for  
22 the FTC stated when he was here.

23          MR. FREDERICK: And actually, I echo that, Your Honor.  
24 I'm anticipating they will raise certain privilege issues and he  
25 will not be ready to testify next Thursday.

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1           THE COURT: All right. The final thing I want to say is  
2 this: Depending, of course, how we work out some of the  
3 scheduling we've just talked about, I see no reason why we  
4 shouldn't be preceding the week after next with the,  
5 quote-unquote, "old" government remedies witnesses. There aren't  
6 all that many of them, I know that; but I don't see any problem  
7 with that. If that's part of your discussion with the Special  
8 Master --

9           MR. BERNICK: That is --

10          MS. EUBANKS: No.

11          MR. BERNICK: That is -- well, I'd feel very  
12 uncomfortable --

13          THE COURT: Then let's not discuss it at all.

14          MR. BERNICK: But probably the best idea is to address all  
15 that we can about that on Monday. And in fact, we may be even  
16 prepared to do that, depending on what happens tomorrow, by the  
17 end of the day tomorrow. I don't know. We anticipated that Your  
18 Honor would be raising exactly these issues just because there  
19 has been silence.

20          THE COURT: It was a very loud silence.

21          MR. BERNICK: A very loud silence. But all of this is  
22 part of, from our point of view, the discussion that we're having  
23 with the Special Master --

24          THE COURT: That's fine.

25          MR. BERNICK: -- which, incidentally, has been very



1 helpful to have his help.

2 I would also raise, though, Your Honor, that there are a  
3 couple witnesses who are not swept up in that process, per Your  
4 Honor's order. Cheryl Heulton was one of them. The other was  
5 Mr. Matt Myers and we did move for the issuance of that  
6 subpoena --

7 THE COURT: I know.

8 MR. BERNICK: -- and at some point, particularly as I  
9 anticipated, Your Honor wants to move forward promptly with the  
10 remedies part of the case, we do need to try to resolve that  
11 problem.

12 Now, I'm also happy, although it will add a further burden  
13 to the -- to Judge Levie's process, to have that slotted in as  
14 well. Maybe we can --

15 THE COURT: No. I'll be dealing with that this week.

16 MR. BERNICK: I'm sorry.

17 THE COURT: I will be dealing with that this week,  
18 definitely.

19 MR. BERNICK: Okay.

20 THE COURT: Now as to tomorrow, are we definitely going to  
21 be able to finish that witness tomorrow?

22 MS. EUBANKS: I believe so. I have about three hours of  
23 cross-examination and, obviously, it depends on the redirect  
24 examination. The objections -- I mean, we're very disturbed by  
25 the late production of documents rolling in.

1 THE COURT: Well, we'll talk about that tomorrow.

2 MS. EUBANKS: That may take some time, Your Honor.

3 THE COURT: And you'll be doing the evidentiary matters.

4 And who will be --

5 MR. FREDERICK: Mr. Webb will put the witness on.

6 THE COURT: All right. 9:30 tomorrow, everybody.

7 (Proceedings adjourned at 4:04 p.m.)

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10 C E R T I F I C A T E

11

12 I, Scott L. Wallace, RDR-CRR, certify that the  
13 foregoing is a correct transcript from the record of proceedings  
14 in the above-entitled matter.

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16 -----  
17 Scott L. Wallace, RDR, CRR  
18 Official Court Reporter

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Official Court Reporter

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## I N D E X

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3 Examinations

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5 CONT. CROSS-EXAMINATION OF WILLIAM KIP VISCUSI, Ph.D. 17968  
BY MS. CROCKER

6

7 REDIRECT EXAMINATION OF WILLIAM KIP VISCUSI, Ph.D. 18001  
BY MR. MINTON

8

## E X H I B I T S

9 Description

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