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CAUSE NO. 40,551

[redacted] ET AL., Plaintiffs, vs. OWENS CORNING, ET AL., Defendants.) IN THE COUNTY COURT) AT LAW) SMITH COUNTY, TEXAS

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VIDEO DEPOSITION OF
MARK KLEPPER, M.D.
JUNE 20, 2000
VOLUME 1

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VIDEO DEPOSITION OF MARK KLEPPER, M.D., produced as a witness at the instance of the Plaintiffs, and duly sworn, was taken in the above-styled and numbered cause on the 20th of June, 2000, from 2:50 PM to 7:20 PM, before Cinnamon Boyle, CSR in and for the State of Texas, reported by machine shorthand, at the offices of Mark Klepper, M.D., 1305 West 34th Street, Suite 200, Austin, Texas, pursuant to the Texas Rules of Civil Procedure.

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EXHIBITS

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P R O C E E D I N G S

(Exhibit Nos. 1 through 8 were marked)

THE VIDEOGRAPHER: Stand by. Going on record at 2:50.

MARK KLEPPER, M.D.,

having been first duly sworn testified as follows:

DIRECT EXAMINATION

BY MR. BARLOW:

Q. Good afternoon, Doctor.

A. Good afternoon.

Q. Could you introduce yourself to the ladies and gentlemen of the jury?

A. My name is Mark Klepper.

Q. And I call you doctor. Are you a medical doctor?

A. Yes.

Q. What kind of medical doctor?

A. I am a pulmonologist, internal medicine, pulmonary and critical care physician.

Q. And in the past, have you examined Mr [redacted]?

A. Yes, I have.

Q. What was your diagnosis of Mr. [redacted]?
A. When I saw Mr. [redacted] for independent medical evaluation, I determined at that time that he had been

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exposed to asbestos fiber dust in the work place and had made a diagnosis of asbestosis and asbestos-related pleural disease or pleural plaque.
Q. Doctor, what are the health consequences of Mr. [redacted] asbestosis?
A. Because asbestosis is considered to be a progressive disease, this man faces progressive fibrotic lung disease, progressive shortness of breath, cough, right-sided heart failure that we prefer to as cor pulmonale, lung cancer, several types of cancer. And in addition to the fibrosis itself being a comorbid phenomenon, that is any time he gets sick with something else, he may well have more problems related to his asbestos disease.
Q. What is your opinion, Doctor, within a reasonable degree of medical certainty as to whether or not Mr. [redacted] is likely to die of an asbestos-related disease?
A. It's my opinion that his chances are more likely than not that he will die of an asbestos-related phenomenon whether that be cancer, respiratory failure or again a contribution to another disease such as pneumonia.
Q. Doctor, I want to go into more detail in your testimony today, and I want to go over three areas

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basically. I want to go over your background which

qualifies you to diagnose Mr. [redacted] and testify in this case. I want to go over Mr. [redacted] disease, the asbestosis, and I want to go over what Mr. [redacted] can expect in the future as a result of this disease.
A. Okay.
Q. Can we do that? Let's start with your background. Where do you practice?
A. I practice here in Austin.
Q. And tell the jury because they may not have heard yet what a pulmonologist is?
A. I'm a partner in a group of nine pulmonologists, and we do pulmonary and critical care medicine which runs a spectrum of outpatient care of asthma, inpatient care of pneumonia, intensive care work, working with people with life-threatening diseases. We also do some occupational medicine and as well as some internal medicine.
Q. What kind of training and education did you receive to be a pulmonologist?
A. You go through medical school, and then you typically do three years of internal medicine residency.
Q. Doctor, let me stop you. Let's talk about what you specifically did about your educational

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background.
A. Okay. I did college in medical school in six years instead of eight years in Missouri, essentially went year around and then did my training at Baylor in Houston and did three years of internal medicine training and two years of pulmonary fellowship which at the time was a combination of pulmonary and critical

care training. And I finished that in 1991 and came to town here in Austin and joined the group I'm with now.
Q. And the group you're with now, is that the largest pulmonary group in Austin?
A. Yes.
Q. Doctor, have you ever been in the military?
A. I was in the Reserves, the Army Reserves.
Q. Can you tell the jury what you did in the Army Reserves?
A. I drilled on the weekends and did some rotations out of town in military hospitals. I never left the states and did that for approximately five years. I'm out now.
Q. You were serving as a doctor, though?
A. That's correct.
Q. Did you serve -- I think, you may have mentioned this. Can you tell the jury a little bit more about your time as a pulmonary fellow?

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A. Pulmonary fellowship is now three years. When I did it, it was a two-year stint in which you rotate -- I rotated between a county hospital, Ben Taub, the VA Hospital and the private sector which at that time was Methodist Hospital spending approximately one or two months at each facility in a rotational manner doing ICU blocks. I did some research in ICU nutrition. The fellowship involved not only hands-on care but supervision of medical students and residents giving lectures, regular conferences involving pathologists, radiologists, et cetera. And, in fact, at Baylor there are some -- several pathologists that

are interested in asbestos and have done a lot of work in the area of asbestos disease and mesothelioma, and so it's a global type of experience.
Q. Doctor, is your medical license currently on file with the state of Texas?
A. Yes, sir.
Q. Can you tell the jury what a typical day for you is in your practice?
A. We usually work about 12 to 18 hours a day taking night call about twice a week which means getting calls in the middle of the night all night long and usually leaving to come back in at least once for emergency room stuff or ICU consultation. I have three

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half days of office per week where I see people with emphysema and asthma and follow-ups from the hospital. The remainder of that time I spend in the hospitals making rounds. We have a huge practice that spans four acute hospitals and three or four rehab hospitals.
Q. All right. Let's take a break right now.
MR. BARLOW: Go off the record for a second.
THE VIDEOGRAPHER: Going off the record at 2:58.
(Recess taken from 2:58 PM to 3:00 PM)
THE VIDEOGRAPHER: Stand by. Going on record at 3 o'clock.
Q. (BY MR. BARLOW) Doctor, can you tell the jury what kinds of patients, just give them the range of patients that you see, the kind of diseases that they have?
A. In the office we'll see patients with cough,

shortness of breath, previously diagnosed diseases like asthma or fluid collections around the lung, lung masses, abnormal x-rays of various forms. In the hospital, we see people with pneumonia, emphysema, lung cancer, sicker people. And in the ICU, we'll take care of patients post open-heart surgery, typically large vascular surgeries that require prolonged periods in

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the operating room.

Q. Among the patients that you see, are there victims of asbestos exposure?

A. In our day-to-day practice, we see some patients with asbestos exposure and a handful of patients with asbestos disease whether that be pulmonary fibrosis or lung cancer or pleural plaque, but those are relatively rare in the general practice of a pulmonologist.

Q. Are you board certified as a pulmonologist?

A. Yes, sir.

Q. Can you tell the jury what all board certifications you have?

A. I'm board certified in internal medicine, in pulmonary medicine, and both of those require the indicated amount of training and doing, you know, an acceptable job and being recommended and then passing the tests, the board tests, for the two specialties. And it now requires giving -- requires recertification every ten years which is what I'm doing right now for both.

Q. Doctor, have you received any honors over the course of your academic career and in your medical

career?

A. There are several honors noted in my CV. I

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was on the Dean's list in medical school in Kansas City for the first several years. I was in the top five percent of my class, university scholar. We do some work with teaching at the county hospital here in town and was voted the consultant of the year by the residents who we supervise.

Q. Doctor, you mentioned your CV. Why don't we go ahead and do it right now. I have what has been marked as Klepper Exhibit 6. Is that a true and correct copy of your curriculum vitae?

A. Yes, it is.

Q. Okay. Let me just go through a few more things on it. Are you a member of any professional societies?

A. Yes.

Q. Can you name a few of those?

A. I'm a member of the AMA, the American -- I'm a fellow of the American College of Chest Physicians. I am not -- I don't think I'm in the American Thoracic Society anymore.

Q. Have been in the past?

A. I let that drop. It's simply a large sum of money that's given every year. I'm a member of the Travis County Medical Association which most physicians in this county are.

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Q. And you talked a little bit about the teaching that you do. Can you tell the jury a little bit more about that?

A. On a rotational basis, myself and my partners instruct residents from first-year residents to third-year residents in the ICU at Brackenridge Hospital which is what we consider the county hospital and make rounds with them on a regular basis and do talks on a daily basis, lectures and then give them essentially backup support for admissions and problems with their patients, the teaching service. So in essence we're on call for the Brackenridge emergency room every night for real sick patients whose doctor either doesn't want to come and see them or they don't have a doctor.

Q. Finally, Doctor, have you published in the peer review medical literature?

A. Yes. I have two articles that I wrote as a fellow. One was titled "A Case of Mountain Sickness" which is a type of pulmonary change that occurs in people who live at extreme altitude, and I also wrote a paper on pneumocystis in a nonAIDS patient in a kind of a unique setting both which were published in a peer review journal, Chest.

Q. Chest. And can you tell the ladies and

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gentlemen of the jury what Chest is?

A. Chest is one of two or three main journals that a pulmonologist would subscribe to and read on a regular basis.

Q. Do pulmonologists go to Chest -- the Chest journal to find medical articles that they rely on in their practice?

A. Yes, sir.

Q. Doctor, I -- I guess this is probably common sense, but a man of your qualifications doesn't do work for free. Are you charging me for your time today?

A. Yes, sir.

Q. How much are you charging me?

A. $315 an hour.

Q. In the past, have you testified on behalf of defendants in litigation when you agreed with their position?

A. Yes.

Q. Finally, Doctor, I'm about to turn to some medical opinions and ask you to give some medical opinions, and can we have an agreement that any medical opinions you offer today will be within a reasonable degree of medical certainty?

A. Yes, sir.

Q. The first thing I want you to do, Doctor, is

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teach the jury a little bit about asbestosis, the disease that Mr. [redacted] has been diagnosed with. What is asbestosis?

A. Asbestosis is a disease of the lungs that typically manifest as fibrosis or scarring more commonly in the middle and lower aspects of the lungs. It involves certainly an exposure to asbestos fiber dust, that is airborne dust from asbestos materials. It involves a latency period. By that I mean one has to be exposed to the dust, and then it takes a certain period of time for the body to respond to that dust to cause the scarring process. Other manifestations of asbestosis would be crackling or a Velcro kind of sound on physical exam of the lungs. Asbestosis is most

people believe progressive, so it leads to progressive shortness of breath and dyspnea which is shortness of breath, debilitation, impaired ability to exercise and to work for that matter.

Q. Has Mr. [redacted] begun suffering these symptoms?

A. Yes, to some extent when I saw him, and that was several years ago. It can lead to a change of the fingers which is actually a change of the bones called clubbing or hypertrophic pulmonary osteoarthropathy.

Q. Doctor, I want to ask you -- I want to show you actually what has been marked as Klepper Exhibit 1.

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Have you -- you've seen that chart before?

A. Yes, sir, or charts like it.

Q. Can you just go through that chart with the jury and explain the diseases that asbestos can cause?

A. Okay. This is a list of many of the things I've just described. Once again, when one breathes in airborne asbestos fibers, it can cause asbestosis, scarring in the lungs. It can cause --

Q. Let me stop you. How does the asbestos fiber actually cause the scarring of the lungs? Can you describe that process a little bit?

A. Well, it's an involved process, and there's probably some difference of opinion as to exactly how it occurs. In simple terms, when you breathe the fibers in, they're typically very small. Some are spiral shaped. The fibers are breathed down into the lung -- the airways and dispersed and usually engulfed by cells. The cells then give off a signal to cause inflammation and scarring, and it's a cascade

phenomenon. Other cells are recruited. The fiber is coated with various materials as it's recognized as a foreign body, and that scarring process starts and is felt to continue.

Q. As the scarring builds up on the lung, what effect does that have on the lung as a whole?

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A. The scarring causes stiffness of the lung which we refer to as compliance. The lung is normally spongy and elastic. When you get more and more scarring, it's almost rock hard at its in-stage. So it's more firm because of the change in the elasticity, that's what causes the shortness of breath or part of what causes the shortness of breath and increased work of breathing to expand the lung to fill it with air, and they also affect the microvasculature of the lung. Remember that the exchange of gas from the air phase into the capillary is a microscopic process, and the fibrosis in the lungs can obliterate that microscopic network of tiny air sacs and capillaries. And as that becomes obliterated, gas exchange is impaired and that also leads to worsening shortness of breath and low oxygen levels, et cetera.

Q. (BY MR. BARLOW) Okay, Doctor. We've discussed the scarring of the lung that asbestos can cause. I think the next thing on the chart is plaques and pleural thickening. Can you tell the jury a little bit about that?

A. Pleural plaque is -- well, backing up a step. The lining on the lung and inside the chest wall consists of a membrane that is very thin, paper thin. And normally on an x-ray, you see that lining in

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profile and because it's so thin it doesn't appear. We don't really know how this happens. But in some people when they inhale asbestos dust, they get a thickening of that lining around the lung either the thickening on the lung itself or inside the chest wall. And if you can look inside, you would see a homogeneous typically white shiny material almost like cartilage that ranges from dime sized rounded or irregular changes to large areas of thickening. The thickening can be two millimeters too as much as ten millimeters thick in areas, and it can envelop the divisions between the lung. It can depending on where it occurs cause substantial problems with breathing.

Q. Does Mr. [redacted] have these pleural plaques?

A. Yes, sir, he does. He has asbestos-related pleural disease, I believe, on one side.

Q. Okay. Let's go on. Now, you mentioned earlier, I think, that asbestos can cause pleural -- cor pulmonale, excuse me.

A. Cor pulmonale is another term for right-sided heart failure. What happens in many lung diseases is that the vascular flow, the blood flow through the lungs is -- the small vessels are obliterated or obstructed, that causes the pressure between the right side of the heart and the lung to rise. The right side

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of the heart doesn't like a pressure-loading phenomenon, and this leads to dilatation of that chamber, the right-sided chambers, and blood then backs up into the liver, the abdomen, the legs. And though

they may not sound like an important phenomenon, it's very important because it causes liver damage. It is a common thread or accompaniment of death in patients with COPD, emphysema, advanced asbestosis, again, causing liver failure. It's very difficult to treat. Oxygen is one of the few things that helps.

Q. Is Mr. [redacted] at an increased risk for cor pulmonale?

A. Yes, he is.

Q. What about the cancers? I see on the chart mesothelioma of the heart, lung and stomach is listed. Can you tell the jury very briefly what mesothelioma is?

A. Mesothelioma is that and malignant melanoma in my thinking and, I think, most physicians would agree are some of the most aggressive cancers one can get. It is very, very rare if not -- well, it's very, very rare to survive mesothelioma. Mesothelioma of the chest would involve a tumor that spreads circumferentially around the lung itself incasing the lung and spreading and invading contiguous surfaces

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including the center of the chest, the chest wall itself. It is a horrible cancer, and there really is no effective treatment. These people have terrible pain because it invades nerves. The -- the treatment -- the only really effective treatment is what's called a pleural pneumonectomy where not only is the lung removed but the entire lining around the lung is removed from one side of the chest which is a huge operation. I've seen several patients undergo that. It almost always comes back and kills them.

Q. Is mesothelioma an asbestos cancer?
A. Mesothelioma occurs in people who have never been exposed to asbestos. We do know that asbestos increases one's risk of getting mesothelioma.
Q. Is Mr. [redacted] at an increased risk of getting mesothelioma?
A. Yes, sir.
Q. What about lung cancer? I think the jury is probably familiar with what lung cancer is, but is Mr. [redacted] at an increased risk for that?
A. Mr. [redacted] is despite being a nonsmoker at an increased risk of getting lung cancer. There are four general kinds of lung cancer, and all four have been linked to asbestos exposure and asbestosis.
Q. And then there's also listed on the chart

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laryngeal, esophageal and G.I. cancer.
A. Yes, sir.
Q. Does asbestos cause all those diseases?
A. Yes. If you think about it, any dust that one would inhale, some of those particles are going to adhere or stick to the upper aerodigestive system. So those particles would be swallowed, and although colon cancer is a relatively common cancer, it once again is linked to or there's an increased risk of getting colon cancer when one has been exposed to asbestos.
Q. And Mr. [redacted] is at an increased risk for these as well?
A. Yes, sir.
Q. Doctor, is asbestosis a progressive disease?
A. Yes, sir.

Q. Can you explain to the jury what is meant when doctors say that asbestosis is a progressive disease?
A. Well, asbestosis is a spectrum from exposure. I've mentioned the latency period. At some point in time the asbestos scarring is visible on the x-ray, and it is felt that it progresses at a fairly steady rate over time leading to more and more scarring, more and more shortness of breath and the complications that I've described. People often require oxygen supplementation as the disease progresses. They -- one

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of the features of asbestosis is a cough. It's a dry cough, a hacking tickling cough which is very difficult to treat.
Q. Is there any medicine that can be given to Mr. Vaughn that will keep his asbestosis from progressing?
A. No, sir.
Q. Is there any treatment that can be done to keep it from progressing?
A. No, sir.
Q. Doctor, I want to show you what has been marked as Klepper Exhibit 2. And this is the testimony of Dr. Holstein. Is this among --
MS. POWELL: Objection, misstates the evidence.
Q. (BY MR. BARLOW) Is this among the information that you rely on in forming your opinions about the progression of asbestosis?
A. Well, as you indicated, this is a statement of a pulmonary physician describing in essence what I've already described, which is progression of scarring and

the symptoms that accompany that progression of scarring which include debilitation, exercise limitation. And as it goes through its spectrum, one gets to the point or may reach the point where they're

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short of breath at rest requiring oxygen. That in a nutshell is what this describes, and that is --
Q. Well, can you read it to the jury and then tell them what parts that you agree with or disagree with?
A. Certainly. The main symptom of asbestosis is progressive shortness of breath. When this has its onset in its typically insidious and gradual manner, the individual thinks that he is getting older or a little overweight, comma, he can't run as fast as he used to or gets out of breath more easily than he used to and attributes this to the aforementioned facts, getting older and gaining weight, quote, unquote. A little later on, the person begins to notice that, in fact, he or she can't do the many things that other people the same age can do. As time goes on, the dependence on younger workers becomes greater assuming they're still working, until pretty soon the individual is experiencing the fact that he or she can't carry out the job without such dependence on coworkers. Eventually, in the very severe cases, a person's life consists of sitting in an armchair on the ground floor with an oxygen tank and disconnecting it just long enough to go to the bathroom and back.
Q. Is this a fair depiction of asbestos or

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asbestosis progression?
A. Yes. I would say it describes the entire spectrum of no disease to serious disease with serious impairment.
Q. Doctor, can just a little bit of exposure to asbestos cause asbestosis?
A. Just a little bit, one can theoretically be exposed to asbestos over a short period of time. The exposure to a dust relates not only to the time factor one is around it but to the circumstance. And by that, I mean there are workers that are exposed over, for example, three, months of work that may work in an enclosed area with no ventilation in situations where the asbestos is either pulverized, cut, sanded, et cetera, and the concentration in the air is very high. They can thus be exposed to large amounts of dust and, yes, this after an adequate or appropriate latency period can lead to clinical asbestosis.
Q. When you examined Mr. [redacted], what was his chief complaint if you need to refer to your --
A. May I?
Q. Yes.
A. Well, in all fairness, the patients don't typically come complaining of things -- symptoms. What I described or what I get from them are the questions

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that I ask. And this man had cough. He had cough on approximately half of the days. His cough was dry. He had shortness of breath, and he described to me that he could only walk about a block on level ground without having to stop and catch his breath. And once again, asking him about his exercise tolerance he was only

able to go up one flight of stairs. So that was his chief complaint, if you will.

Q. Okay. What was the cause of his shortness of breath and cough?

A. It's my opinion that the cause of that cough and shortness of breath is -- was his asbestosis or is his asbestosis.

Q. Can you explain to the jury the steps you went through in examining Mr. Vaughn?

A. When I see a patient for a medical evaluation of this sort, I'll go through a general history of whether they have no lung disease. I'll get a history of any current symptoms like cough, coughing up blood, et cetera. Then I'll very carefully go through their occupational history, try and go back to high school. And if they worked during high school, we try to record that also.

Q. What was significant to you about Mr. [redacted] occupational history?

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A. This man told me that he had worked at Tyler Pipe, which is a cast iron foundry, between [redacted] and [redacted] and I -- he had described a number of different jobs that he had had in that work place which is fairly typical. People tend to do different things over time in the work place.

Q. Was -- did he have exposure to asbestos?

A. Yes, he did.

Q. In addition to the occupational history that you took, did you perform a physical examination?

A. Yes, sir.

Q. Was there anything remarkable about the physical examination?

A. The things that specifically I look for are crackles or rales, which I had mentioned the Velcro sound in the lungs. He did not have that. He did not have any wheezing which might indicate something like asthma or emphysema. We look for clubbing or the changes of the more distal bones of the finger that go along with asbestosis as well as other diseases.

Q. His general appearance on physical examination, was it fairly normal at this time?

A. I don't make a comment to that effect, and this was in 1997. So I don't picture the man. He was not in distress at the time I saw him. And in general,

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my examination showed only his scar from his sternotomy, his open-heart surgery.

Q. Would it be unusual for someone with asbestosis, even severe asbestosis, to appear normal on the outside to the naked eye?

A. Wouldn't be unusual, no.

Q. Did you do a smoking history?

A. Yes.

Q. And what was Mr. [redacted] smoking history?

A. He told me at the time he did not smoke and never had --

Q. Is that --

A. -- substantial.

Q. Is that significant to you?

A. Yes, it is.

Q. How so?

A. If someone has had a substantial smoking

history, I -- No. 1, if they actively smoke, I counsel them about the effect of smoking on lung cancer and the effect or the additive effect of smoking and asbestos exposure, so that's important. No. 2, in my assessment of their symptoms and their pulmonary functions, it's important for me to know whether they were smokers or not and if so when they quit. And it's also important even if they were smokers and quit for me to explain

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their relative risk of lung cancer. As we all know smoking causes lung cancer as well as asbestos causes lung cancer, and I try to give them some sense of their relative risk of cancer and the need for follow-up.

Q. Did you examine x-rays of Mr. [redacted]?

A. Yes, sir.

Q. What was significant, if anything, about the x-rays?

A. I had an x-ray on this gentleman dated 6/13/96. It was a front and side view, and that x-ray showed what we call irregular opacities or little dots and spots in the lungs in the mid and lower part on both sides which is --

Q. Let me ask you. When you're seeing the -- what are you seeing -- is that the scars you're seeing show up on the x-rays?

A. Yes. That's the scarring not the asbestos fibers themselves.

Q. Okay.

A. It's the result of the fiber and the subsequent fibrogenic cascade, if you will.

Q. What is significant about the scarring in the

mid and lower regions of the lungs?

A. Well, classically asbestosis causes -- asbestosis is seen as scarring in the mid and lower

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zones. Certainly it can occupy to some extent the upper zones but is more prominent in the middle and lower parts of the lungs. This gentleman also had pleural plaque or thickening around the lung on the left side along the axillary or armpit area.

Q. The pleural plaque, is -- what does that tell you about whether or not his disease is related to his asbestos exposure?

A. Pleural plaque is important to me in that if I find no other cause for pleural plaque like a prior surgery, rib fractures, trauma, et cetera, if I definitely see changes compatible with pleural plaque, it supports my suspicion of asbestos exposure. And if I think someone has asbestosis, it helps confirm that question or that issue. And it's my opinion that this gentleman has or had at the time pleural plaque. It certainly hasn't gone away.

Q. Doctor, I want to ask you about an excerpt from a medical article by Hillerdall.

MR. BARLOW: And let me go ahead and mark this as Klepper Exhibit -- what number are we on -- 9, Klepper Exhibit 9.

MS. POWELL: Can I see his B Reader report?

(Exhibit No. 9 was marked)

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Q. (BY MR. BARLOW) Doctor, let me ask you about this excerpt from an article by Gunner Hillerdall

entitled "Plueral Plaques and Risks for Bronchial Carcinoma and Mesothelioma, A Prospective Study."

Would you read that to the jury?

A. It says, and I quote, Thus pleural plaques on chest roentgenogram, chest x-ray, indicates significant exposure to asbestos with an increased risk for mesothelioma and possibly also for bronchial carcinoma, end quotes.

Q. Do you agree with that statement?

A. Yes, sir.

Q. Is Mr. [redacted] at an increased risk for the mesothelioma and bronchial carcinoma?

A. Yes, sir.

Q. And is this among the body of literature that you rely upon for your opinions?

A. Yes, sir. I would consider that common knowledge in this area and a standard belief.

Q. Doctor, did you also perform a pulmonary function test on Mr. [redacted]?

A. Yes, sir.

Q. And I want you to use page 3 of your report which has been marked as Klepper Exhibit 7 and just go through it and explain to the jury using that sheet and

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whatever else you need to, what was significant about the pulmonary function test that you performed?

A. Okay. Pulmonary function tests are assessments of airflow, airway resistance, lung size which reflects emphysema or scarring. It reflects lung compliance. And the third part of the test is what we call the diffusing capacity, which is the ability for a

gas to get from the air into the blood. This gentleman -- and by the way, we have a very, very high quality sophisticated machine that we use to do this with. The technician that does this has -- is -- has been doing this sort of work for many, many years -- 30 years. And I trust his abilities, and I think he's top notch. And that's important because one needs to know what they're doing to do a good test and get good results.

Q. So Mr. [redacted], what were his results and what were significant about them?

A. The first part of it is called spirometry, and spirometry looks primarily at airflow and airway resistance. In general, we would say that someone is obstructed or restricted or normal. He had a slight reduction in his spirometric numbers in a parallel fashion. When someone is obstructed, they'll have -- and I need to be kind of specific to explain my point.

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Q. Tell us what line you're referring to there.

A. On the third line of the spirometry printout. There is a phenomenon or a reading that we call the FEV 1, slash, FVC, and that's a ratio, and that tells us about airflow obstruction.

With airflow obstruction one would see that -- a normal ratio is 80 percent. As one gets older, that normal ratio for the older person is reduced. Significant obstruction might be a ratio of 50 percent or even 60 percent of -- an absolute value of 50 or 60 percent. This man's predicted value was 78 percent. That is if he's normal, his ratio should be 78 percent. His ratio was 76 percent which is normal.

That speaks very strongly against substantial obstruction. Doesn't rule it out, but certainly does not indicate significant obstruction.

Q. What did -- what kind of lung problems did Mr. [redacted] have?

A. The second part of the test looks at his lung size, and what we tend to see with advanced fibrosis from any cause including asbestosis would be restriction, and that is small lung volumes. We do a measurement called the total lung capacity. 80 percent to a hundred percent is considered the normal range. On this day, his total lung capacity was 72 percent or

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predicted which I would call mild restrictive physiology or mild restriction.

Q. As Mr. [redacted] disease progresses, will his restriction progress from mild to worse or what are your expectations on that?

A. It should get worse, yes. As his fibrosis worsens, his restrictive physiology should worsen.

Q. And is restriction a classic hallmark of asbestosis?

A. Yes, sir.

Q. Okay. Is there anything else significant about the pulmonary function test that the jury needs to know about?

A. No, sir.

Q. Let me ask you. We talked briefly about this. I want to go into more detail. Is Mr. [redacted] at an increased risk for lung cancer?

A. Yes.

Q. Can you explain to the jury how much of an increased risk and why that is?

A. There are various reports as to the relative risk or the relative increased risk of lung cancer, bronchogenic lung cancer, mesothelioma, et cetera. Generally speaking, what I tell these patients is that their relative risk of lung cancer in a nonsmoking

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asbestos exposed person with substantial pulmonary fibrosis or asbestosis is that the risk is about 20 times higher than the normal person, the normal nonsmoking, nonexposed person.

Q. Can Mr. [redacted] expect his breathing to get worse over the rest of his life?

A. Yes.

Q. Can Mr. [redacted] expect to have physical pain and suffering in the future as a result of his asbestos disease?

A. Yes.

Q. Can you explain some of the types of physical suffering that he may expect in the future?

A. I actually have taken care of a patient or had. He died about six months ago, and I think this kind of describes the phenomenon of progression and suffering. These patients develop increasing shortness of breath so they're less active. They get to the point where they're kind of stuck in the wheelchair. They use oxygen at night initially and then start wearing oxygen 24 hours a day. They tend to start gaining weight. They tend to have problems with thinning of the bones, compression fractures. The patient that I recall developed vertebral compression

fractures which is where from simply moving or coughing

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the vertebral bodies compress and fracture which is an extremely painful condition. This gentleman developed on several occasions rib fractures from coughing, just coughing over and over and very hard, it's not uncommon to develop rib fractures.

This man was short of breath all the time. He was short of breath at rest in his wheelchair. And so I saw him literally every three months from the time I came to Austin to the time he died. And his last three to five years were miserable with pain and shortness of breath. And part of the focus of the treatment in a patient like I describe and perhaps in this man is treatment for his dyspnea. These people suffocate, and the treatment is narcotics which suppress the sensation of shortness of breath.

MS. POWELL: Just a minute. Objection, nonresponsive; objection, form.

Q. (BY MR. BARLOW) Okay. Based on your experience as a doctor and a pulmonologist treating patients like Mr. [redacted] what reasonable and necessary future medical expenses can Mr. [redacted] expect as a result of his asbestos-related disease?

A. That is a really difficult question to answer because there are many variables to consider. And there is a huge range. We know that asbestosis

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progresses. We know that sick people need to see the doctor more often. They come into the hospital more often. They stay longer, so -- if you got lung cancer,

that's going to be a much bigger problem than if you didn't. I would say a reasonable range of his medical costs assuming a life expectancy of between five and ten years would be on the order of 150 to $250,000.

MS. POWELL: Objection, form.

Q. (BY MR. BARLOW) Did you advise Mr. [redacted] that he had asbestosis -- progressive asbestosis, an increased risk of lung cancer and mesothelioma?

A. Yes, I did.

Q. Based on that, would it be reasonable for Mr. [redacted] to have concern over his future health?

A. Yes.

Q. Would it be reasonable for him to have mental anguish over that?

A. Yes.

Q. Doctor, based on his increased risk for all of these diseases, and I want to show you -- let me show you first Klepper Exhibit 3. Based on Mr. [redacted] increased risk for various diseases, is it more likely than not that he will die of an asbestos-related disease?

MS. POWELL: Objection, form.

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A. There is -- there are a number of articles, papers, works that suggest that in the setting of asbestosis, asbestos exposure that the patient is more likely than not to die of an asbestos-related disease whether it's cancer, pulmonary fibrosis or complications of fibrosis.

Q. (BY MR. BARLOW) And Exhibit 3 is an epidemiological study. Can you explain that to the jury and explain to them whether or not that forms part

of the basis for your opinion about Mr. [redacted] expectations?

MS. POWELL: Objection, form.

A. very briefly. This is an excerpt from one of the many papers by Dr. Selikoff and Siedman, and they looked at asbestos workers insulators and found that at least 50 percent or greater, their cause of death was related to the asbestos exposure, once again whether it was death from cancer or death from fibrosis or death from G.I. malignancy, colon cancer, et cetera. There are many ways in which asbestos contributes to death and debility, and that's simply what this describes.

MS. POWELL: Objection, form.

MR. BARLOW: I'm sorry. Before we go on, can you go ahead and give me the basis in case I need to fix it?

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MS. POWELL: Nonresponsive.

MR. BARLOW: To my question I wanted to have him answer. You objected to form of the question or are you only objecting to his answer?

MS. POWELL: That objection was to his answer.

MR. BARLOW: Right. But I wanted him to go ahead and get his answer, then I might want to re-ask that question. What was the basis of your objection?

MS. POWELL: The one to your question?

MR. BARLOW: Yeah.

MS. POWELL: Was leading and -- it was leading.

MR. BARLOW: Okay.

Q. (BY MR. BARLOW) Doctor, if Mr. [redacted] had not been exposed to asbestos on the job, would he be suffering from asbestosis today?

A. No.

MR. BARLOW: Pass the witness.

CROSS-EXAMINATION

BY MS. POWELL:

Q. Dr. Klepper, my name is Lisa Powell, and I represent Swan Transportation in this case, and I have some questions for you. Have the plaintiff's attorneys

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talked with you about whether or not you will be appearing at trial?

A. I can't answer that. Typically when trials come up, depositions come up, it goes through our office through my nurse, and I only know when it's going to happen several days before --

Q. Okay.

A. -- so, no, it's not clear to me that I was asked to do anything different than what we are right now.

Q. Okay.

MS. POWELL: Can I see Dr. Klepper's CV, please?

MR. BARLOW: Sure.

Q. (BY MS. POWELL) Dr. Klepper, when you were talking about your training, you mentioned that, I believe, you did your residency at Baylor College of Medicine?

A. Yes, ma'am.

Q. And you indicated that there was some

pathologists there who were interested in asbestos and had done research in it; is that correct?
A. Yes, ma'am.
Q. Would one of the pathologists that you're referring to be Dr. Phillip Kagel?

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A. He would be one of them, yes.
Q. And I take it that you respect Dr. Kagel?
A. Yes.
Q. Now, you said that you dropped your membership in the American Thoracic Society because the dues were too high?
A. Well, there was just really no reason to spend a thousand dollars a year to say I was a member of it. You get the journal, but I can access that through others, and that's -- goes the same for several of those memberships and societies.
Q. That you've dropped some of them?
A. Yeah. It's not absolutely necessary.
Q. But I take it you still consider the publications by the American Thoracic Society to be authoritative?
A. I respect their work and have no reason to disbelieve consensus statements, et cetera.
Q. All right. And you mentioned the publication chest. I believe you published something in that publication?
A. Yeah. I've written two articles that were published.
Q. And I take it that you consider that publication to be authoritative?

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A. Once again, I'm not sure exactly what you would mean by authoritative. It's not the last word, nor the only word in a given area, but, yes, it's a peer review journal, and I would respect what comes from it.
Q. All right. Doctor, have you written anything specifically on asbestos?
A. No, ma'am.
Q. All right. Now, I'd like to talk with you one more thing about your training before we move on. Are you a B Reader?
A. Yes, ma'am.
Q. Could you explain to the jury what is a B Reader?
A. A B Reader indicates that you have taken the x-ray reading tests that is sponsored and given by NIOSH.
Q. And NIOSH is for the jury?
A. The National Institute of Safety & Health.
Q. Okay.
MR. BARLOW: Occupational Safety & Health.
A. There's also ALOSH, the appellation something. Typically the test is given in Morgantown, West Virginia which is kind of their base.
Q. (BY MS. POWELL) All right. And when did you

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receive your B Reader certification?
A. In '97.
Q. Okay. And when did you first take the course that's necessary to obtain the B Reader certification?
A. You don't have to take the course to get the

certification. One can given if -- given their M.D. apply, pay their money and take the test. There is a course or used to be a course put on by the American College of Radiology where one would go and for two and a half days hear lectures from experts in the field and then on the last day you would take the test if you wanted to.
Q. Did you attend that course?
A. I've attended that course twice.
Q. And when did you first attend that course?
A. I think about 1992.
Q. Okay. Did you elect to take the test at that time?
A. Yes, ma'am.
Q. And could you explain to the jury how the test is conducted? Is it a written test where you answer essays or --
A. No. It's a test where you have, I believe, 120 x-rays and you're given 60, and then three hours to score them on the worksheet. So you go and read the

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x-rays. You have standard x-rays that you compare the x-rays in question to. You grade them and look for all the different abnormalities, give it a score, and -- once again, you have to go very fast, and it's very difficult, and the pass/fail rate is less than 50 percent. The majority of the people who take it are radiologists. Pulmonologists are a small fraction, and occupational medicine doctors are a small fraction.
Q. All right. And I take it from your statement that a radiologist would have more training than a

pulmonologist in reading expert -- x-rays?
A. Theoretically, yes, because that's all they do is read x-rays. I would like to think that a pulmonologist is almost as good if not as good in reading a plain chest radiograph as a radiologist.
Q. Now, when you first took this test, and I believe you -- did you say, I'm sorry, 1990?
A. I think I said '92.
Q. Right. '92, did you pass it that time?
A. No, ma'am.
Q. All right. And when was the next time you took the course -- the test?
A. Well, I took the course then the test about two years later.
Q. So that would be about 1994?

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A. Yes.
Q. And did you pass it then?
A. No, ma'am.
Q. And when was the next time that you took either the course or the test?
A. I took the test only in '97 and passed it.
Q. And that's when you passed it?
A. Yes, ma'am.
Q. All right. When did you first begin doing what I will call medical legal examinations?
A. Approximately 1992.
Q. And how did that come about?
A. That came about as -- myself and Dr. Harford came to town at the same time and joined Dr. Frank Mazza in partnership. And at that time, Dr. Mazza was interested in taking the B Reader course and doing some

pneumoconiosis evaluations or reading x-rays, and we all three started looking into it to some extent and started doing a little bit of work with a company, Baron & Budd, and that's kind of how that started.

Q. And how many individual persons -- either records or physical examinations have you conducted for Baron & Budd would you say?

A. That is really difficult to say because I've worked with a number of groups. I would estimate I've

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seen 200 patients for IMEs for Baron & Budd.

Q. When you say patients, do you consider these people that you're examining on behalf of Baron & Budd to be your patients?

A. I don't consider them my patients, but as a physician, there's just something that doesn't sound right about calling someone a client, so I don't know what else to call them.

Q. All right. They're not a patient, and you don't like the word client?

A. Correct.

Q. Okay.

A. Well, they're a patient, but there is not a doctor-patient relationship because they're sent to see me by someone else.

Q. All right. But you don't treat these people, do you, Doctor?

A. No. I don't prescribe them medication. I talk to them. I counsel them. I -- if I see something on an x-ray, for example, a cancer, I would take time to make sure that that's clarified and that they get

adequate follow-up.

Q. But you see them one time usually; is that correct?

A. Yes, unless they're local, and then they may

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come back to see me for follow-up, but that's --

Q. But that wouldn't be the general rule?

A. No, ma'am.

Q. All right. And of the law firms for which you do these examinations, which law firm do you do the most for or have you done the most for?

A. Probably Silber and Pearlman.

Q. Okay. And what about Baron & Budd? Where do they kind of fit in that hierarchy?

A. Probably about third or fourth.

Q. Oh, really. Who is second now?

A. Mr. Heffner.

Q. Okay. Of the individuals that you see in the context of these medical legal examinations, about what percentage are asbestos versus silica?

A. In the first several years, it was primarily asbestos disease, and more recently we're seeing more and more silica or mixed dust disease. So now I would say that it's 50/50, silicosis/asbestosis.

Q. Can you estimate for me how many of these examinations where you actually examined the person you conduct in a given year?

A. Approximately 500 to 700 a year myself.

Q. Do you know if that would hold true for Dr. Harford?

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A. He would do fewer.

Q. Is there anyone else here today that examines the individuals?

A. Dr. Perret.

Q. About how many would he do a year?

A. About half of what I do.

Q. What about Dr. Harford? How many would he do?

A. About three-fourths of what I do.

Q. And you also sometimes examine x-rays and provide a report even if you don't see the individual; is that correct?

A. That's correct.

Q. About how many of those would you say that you see a year?

A. Several thousand.

Q. Would that be 2,000, 3,000, 4,000?

A. 2 to 3,000.

Q. Okay. And how much do you charge for the examination of individuals in these legal medical -- in the legal medical context?

A. Our charge is $225 per client or patient for the examination, history and physical.

Q. And then is there additional charge for the pulmonary function testing?

A. Yes, ma'am.

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Q. And how much is that?

A. It would be the difference between $560 and 225.

Q. So the total charge is $560?

A. Yes, ma'am.

Q. And how much do you charge to review an x-ray?

A. $32 to do a B reading.

Q. Then do you also receive income from testifying, obviously, can you estimate how much you receive for that each year?

A. $10,000 total.

Q. Is there any other type of compensation you receive from legal medical examinations?

A. No. And all the money that I bring in goes to the group. We divide it up evenly.

Q. I'm not very good at math, and hopefully you're better than I am, but if you see 500 to 700 patients charging $560, would that be income for you something over $250,000 a year?

A. Well, that would be a accredited to me, but once again, that goes to the group. So it's divided among eight people.

Q. Right. Do you know about the total amount of income that the group receives per year from these medical legal examinations including B reads, et

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cetera?

A. From the three physicians and Dr. Mazza and Dr. Clark who don't travel or see people anymore but do go to court occasionally, that is about 25 percent of our income total.

Q. Can you give me a dollar figure on that?

A. Do I have to?

Q. I'm asking the question.

A. A million. That's pretty close.

Q. And that's per year?

A. Divided by eight.

Q. For you?

A. No, divided by eight, so I would get --
Q. All right. But a million dollars total per year for the partnership?
A. Exactly.
Q. Okay.
MR. BARLOW: A million dollars for you or a million dollars for, like, the whole partnership?
THE WITNESS: Well, the way she described it was from all the doctors and all the x-rays and the doctors who testified that don't travel.
Q. (BY MS. POWELL) Correct.
A. That whole amount would be roughly a million dollars.

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Q. All right. Doctor, since 1992, has the number of 500 to 700 patients that you conduct these medical legal examinations stayed constant, are you doing more now than you used to or --
A. The 500 to 700 is the peak, and it's maybe a little bit less right now that is for the last year, and between '92 and '96 it was about half that.
Q. Okay. And, Doctor, can you give me an idea of the map -- percentage of cases in which you make a positive finding of pneumoconiosis?
A. When I go to evaluate and actually lay hands on?
Q. Yes.
A. A good 95 percent of the people I see are positive for pleural plaque, asbestosis, silicosis, lung cancer, something like that.
Q. Okay. What about in the x-rays that you

reviewed when you don't see the patient?
A. Right. That varies. It depends on the population. It depends on the age and their exposure, so it could be as low as 50 percent positivity and could be as high as 90 percent.
Q. Well, I'm asking you, can you tell me in a given year approximately if it's more to the 50 or more to the 90 percent?

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A. It's more to the 50, and I quite honestly don't keep track because I try to stay honest, and I try to read the x-ray blindly, if you will, so I don't keep track of my positivity rate. I'm sure someone does.
MS. POWELL: Object to the nonresponsive portion of the answer. I'm just doing this for the record. Please don't take it personally.
Q. (BY MS. POWELL) So, Doctor, if you're reading -- strike that. How many x-rays do you usually see for a person? Do you get two x-rays per person when you're just doing your B reading?
A. For an individual?
Q. Yes.
A. You get a front and a side view.
Q. So if you read 2,000 to 3,000 x-rays, that's probably a thousand to 1500 individuals?
A. Well, the charge is on a set of x-rays. In fact, the test is on the PA only. Usually you're supplied the lateral view also. It's not an additional charge.
Q. So when you say 2,000 to 3,000, you're probably reading the x-rays for 2,000 to 3,000

individuals?
A. Correct.

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Q. Is that correct?
A. Correct.
Q. And you're saying that you're finding positivity in approximately 50 percent which would mean that you're finding pneumoconiosis in a thousand to 1500 individuals a year, fair?
A. Yes, that or plaque. I mean, if you consider plaque in pneumoconiosis.
Q. Well, I probably don't, but do you?
A. Yes.
Q. Okay. All right. Have you ever seen any statistics which any official body keeps on the incidence of pneumoconiosis in the United States?
A. No.
Q. Do you have any idea if the number of positive findings which you yourself are finding would be greatly in excess of what any government agency is finding in the United States?
MR. BARLOW: Object to form.
A. I wouldn't be surprised if a simple screening operation of healthy workers would have a far lower positivity rate than I have.
Q. (BY MS. POWELL) And why is that?
A. That is because the x-rays I'm sent to look at typically are selected from groups that have -- have a

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suspected exposure and are of an age that there would be a reasonable latency period.

Q. Let me ask you this. Suspected by whom?
A. By the union, by the law firm that --
Q. Conducted the screening?
A. -- sends me the films.
Q. All right. Well, now, I'm not asking you about a positivity rate. I'm asking about absolute numbers. Do you know how the number of positive findings you were making compares to the number of reported cases of pneumoconiosis kept by any governmental agency?
A. I don't know.
Q. You were finding in a relatively large number of people who suffer from pneumoconiosis --
MR. BARLOW: Object to form.
Q. (BY MS. POWELL) -- wouldn't you agree? In absolute numbers, I'm not talking --
A. No.
Q. You don't think a thousand to 1500 is a large number?
A. No.
MR. BARLOW: Object to form.
A. A thousand people might work at one aluminum plant.

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Q. (BY MS. POWELL) Do you think it would be worthwhile for you to investigate to determine if the absolute number of positive findings which you yourself are making is disproportionate to those found by any governmental agency?
A. I don't see the value in that.
Q. Well, I guess I'm wondering if perhaps it might be -- if a government agency might want to know

about the incidence of pneumoconiosis that you yourself are finding?

A. Well, I suppose if they requested that information, I would be happy to give it.

Q. Okay. But otherwise you don't plan to contact any government agency?

A. No, ma'am.

Q. Okay. Now, I want to ask you specifically about the screening program regarding the Tyler Pipe Foundry in Tyler, Texas. Now, you yourself reviewed some of the x-rays, correct, while you were here in Austin?

A. I've seen lots of x-rays from workers from Tyler Pipe.

Q. All right. And the -- when you review the x-rays as opposed to when you were also examining the individuals but when you are just looking at x-rays,

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where are you physically located?

A. Upstairs.

Q. Okay. Who sends you the x-rays?

A. In my office. There are a variety of firms that -- I don't know the term for it, but get patients from Tyler Pipe.

Q. Okay. So the law firm sends you these x-rays, correct?

A. Correct.

Q. Did you yourself supervise the taking of those x-rays?

A. No.

Q. And do you know anything about the conditions

under which those x-rays were taken?

A. Yes.

Q. Okay. What do you know?

A. Well, what I know is what the x-ray looks like, the quality and the technique. So that's part of the assessment, not only is there disease or not, is this a good x-ray.

Q. Other than what you see in the physical x-ray, what I'm trying to get at, has anybody told you about anything about how the x-rays were taken?

A. No.

Q. Do you have any information about the x-ray

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screening process other than the x-ray itself?

A. I'm not sure what you're getting at. I do know there are mobile x-ray units that will occasionally go to a site and x-ray people. I personally have met and talked with people who do that and have never found any reason to be concerned about their equipment or their technique or their motivation.

Q. Where did you personally examine this equipment?

THE VIDEOGRAPHER: Going off the record at 4:14.

(Recess taken from 4:14 PM to 4:28 PM)

THE VIDEOGRAPHER: Stand by. Going on record at 4:28.

Q. (BY MS. POWELL) All right. Dr. Klepper, I think when we took break, we were talking about the screening processes or programs, and you said that you had seen a mobile x-ray unit?

A. Yes.

Q. Was that at Tyler, Texas?

A. No. The unit that I saw and the people who were doing the x-rays I saw in Galveston.

Q. Okay. Do you know who had sent that mobile unit there? Do you know if it was a law firm, union?

A. I don't remember.

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Q. Okay. Now, what, if anything, do you know about the screening program up in Tyler? Do you know who was responsible for it?

A. No, ma'am.

Q. Now, do you know if there was any doctor or physician who had ordered the x-rays on the individuals that you had reviewed?

A. By law there has to be a physician's order, and I don't know whose order that was. Occasionally, I will be asked to sign a document so a group of people can be x-rayed.

Q. But you didn't do that up -- for the ones at Tyler?

A. I don't recall honestly. I could have. I don't think I did.

Q. When you do that, is it a blanket because -- do you know the names of the people who are going to be screened ahead of time or how does that work?

A. It is for small groups of people, 50, 75, a hundred. And, once again, they need a physician's order, and if I am going to be the one reading the x-rays, it makes sense to ask me to sign to give the okay for them to have an x-ray done.

Q. All right. Are you telling me that when you

do that it has a list of the names of the persons --

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A. No, it does not. And I've done this about three times.

Q. Okay. Well, in the times that you did it, could you explain to me how you were able to order x-rays for an unnamed group of people?

A. Well, the document says something like we have X number of workers from X plant who need chest x-rays done, and I have signed for that to be done, authorized that.

Q. All right. But you don't believe you did it for the x-rays at the Tyler --

A. I don't think I did. Like I say, I've only done it a few times. It seems a little unusual, but if you think about it, in a small town not a lot of doctors are going to be wanting to get involved with a lawsuit from the largest company in ten states. So they often have difficulties finding a doctor to kind of back up this process, and it is illegal, I believe, to do x-rays on people without a doctor's order.

Q. That would make sense. In the instances in which you have signed such an order, do you know anything about the equipment that will be used ahead of time?

A. No, ma'am.

Q. All you know is that an x-ray is ordered,

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correct?

A. Correct.

Q. And then is it your understanding there would be a licensed x-ray technician who would actually take

the x-ray of the person?
A. Yes, ma'am.
Q. Going back now to the Tyler facility, you personally don't know who the physician was that ordered the x-rays or if, in fact, there was a physician for that matter?
A. I don't know if there was a physician, and I don't know who it was if there was.
Q. And you don't know who the technician was?
A. There could have been multiple technicians and multiple x-ray screened groups and, in fact, probably were because there were so many workers.
Q. Okay. And you don't know what type of x-ray equipment was used, fair?
A. Correct.
Q. And there are certain standards that would govern the testing and maintenance of x-ray equipment, correct?
A. Yes.
Q. You don't know if those were followed in this case, fair?

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A. That would be a fair statement.
Q. And let me ask you this. On the x-rays you reviewed where you acted as the B Reader or the ones that you reviewed for these individuals at all from the Tyler facility, is there anything on the x-ray that makes reference to the physician who ordered the x-ray?
A. Typically not, no.
Q. Is that typically done in the hospital?
A. You know, I don't know for sure. It may have

a physician's name on the -- in the label section. That has nothing to do with the patient. It may have been the first doctor that saw him in the emergency room.
Q. But typically in the hospital if an x-ray is taken, the name of a physician that is somehow connected to that patient will appear on the x-ray; is that correct?
A. Like I said, I honestly don't know. We could go look, but it really matters not.
MS. POWELL: Object to the nonresponsive portion of that answer.
Q. (BY MS. POWELL) Doctor, do you read chest x-rays frequently in the course of your practice?
A. Yes, ma'am.
Q. And the x-rays that you see are generally

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taken where?
A. The x-rays in the hospital you mean?
Q. Yes.
A. They're taken in radiology in various hospitals. We have an x-ray machine in our office also, so I look at those x-rays.
Q. And you're telling me that generally those x-rays would name -- have the name of the physician on them?
A. They may or may not.
Q. You just can't say one way or another?
A. I can't, and I'm not being purposely evasive, it just -- it doesn't matter.
Q. To you?
A. As long as the patient's name is on it and the

date and identifying information, that's what matters to me.
Q. All right. So you're saying you don't really pay attention to it because it's not material to you?
A. It doesn't matter to me what physician's name is on the x-ray, correct.
Q. And as you sit here today, you can't tell me if it's the practice of hospitals to put the name of the physician -- of a physician connected with a patient on the x-ray? That's all I'm asking.

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A. I think it is, but that's not my main focus --
Q. Okay.
A. -- when I'm looking at a film.
Q. All right. Now, in this case and specifically with respect to Mr. [redacted] you did a B reading of his x-ray sometime prior to conducting a physical examination?
A. No. I did an A reading. I was not a B Reader at the time.
Q. All right. And if you could explain to the jury the difference between an A read and a B read?
A. An A Reader is someone who has taken the B reading test and not passed it.
Q. Now, is the form that you used in doing your A reading the same form that would be used for a B read?
A. Correct.
Q. And who -- or what organization prescribes the form?
A. That worksheet that you have in your hand comes from NIOSH, I believe.

Q. And, Doctor, I'm going to show you what's been marked as Klepper Exhibit 8 and ask if you can identify it?
A. It's -- there is a B reading or an A reading worksheet. And at the top, it says type of reading,

0063
and it has A, B and P. I'm not sure what P is. Then it has the boxes where you grade the x-ray, the date of the x-ray, the abnormalities and an area for other findings, and the other sheet is simply a narrative summary of what is checked off on the worksheet.
Q. And what is the date of the -- of your report?
A. The date of the x-ray was 6/13/96, and the date of the report was October the 31st, '96.
Q. And do you know who sent you the x-ray for Mr. [redacted]?
A. Probably Todd Heffner since he's the one that's listed as the attorney at law and has the address.
Q. All right.
A. Probably.
Q. All right. When you received the x-rays from the Tyler Pipe facility, did you receive them all about the same date, if you know, or did you receive them over time?
A. Over time, 50, a hundred, 200 at a time.
Q. Okay. Do you know when you first received any x-rays from the Tyler Pipe facility?
A. No, I don't.
Q. All right. And before we talk about the specifics of the B read, I would just like to get a

general frame work. At some point later, you went to Tyler; is that correct?

A. Yes. We've seen patients in Tyler five or six times --

Q. Okay.

A. -- over the last three to four years.

Q. Okay. Now, I'd like to ask you personally when did you go to Tyler?

A. I can't give you the dates.

Q. Well, with respect to Mr. [redacted], when did you see him?

A. 1/17/97.

Q. So it looks like the x-ray of Mr. [redacted] was taken in June of '96, correct?

A. Yes.

Q. Then you did your A read review in October?

A. Yes.

Q. And then you physically examined him in January?

A. Yes, of '97.

Q. All right. And how many times -- have you personally been to Tyler about five times to see --

A. Yes, ma'am.

Q. When you went to Tyler, did anyone else from the partnership go with you?

A. Our pulmonary function technician and a nurse.

Q. Okay. And your pulmonary function technician's name is?

A. Mike Chestnut.

Q. Okay. And the nurse's name?

A. We've had a number of nurses working with us, and I might be able to tell from the writing. I can't say for sure. I believe it was either Linda Holland or Linda Beaver.

Q. Okay. When you went to Tyler, did any of the other doctors go with you at the same time?

A. No.

Q. And when you examined patients in Tyler, where were you physically located?

A. We have seen patients or clients there in several different areas. We've worked primarily out of small doctor's offices that are either vacant or they kind of closed down for the week, and we move in and work there.

Q. Do you bring your own pulmonary function testing equipment?

A. Yes, ma'am.

Q. And that's equipment from the partnership?

A. Yes.

Q. Is there any other type of equipment that you bring with you?

A. Blood pressure cuff and a stethoscope.

Q. And are you compensated for your travel time?

A. Yes.

Q. On those five times that you visited Tyler, can you tell me who compensated you for your travel time?

A. The same group that we're seeing the patients for.

Q. Okay. Was that one law firm on all five times or different law firms?

A. I don't know.

Q. Okay. Would you have records which would reflect which law firms have retained you?

A. Well, we're not -- I'm not sure what you mean by retained. I think of getting money up front. But, yes, we would have a record of what trip was organized by whom and when.

Q. All right. Is it your recollection that Baron & Budd sponsored one of those?

A. I don't know.

Q. Okay. And typically how much time do you charge for travel to and from a place like Tyler?

A. Well, I charge 315 an hour to travel, and it's four or five hours, I think, something like that.

Q. And when you conduct your physical examinations of the patients or the individuals, do you review any x-rays at that time?

A. Yes, ma'am.

Q. And do you take any x-rays at that time or order any x-rays be taken?

A. If -- my personal policy is that if it's been more than a year since the original screening x-ray, we do a new x-ray. I say we. An x-ray is done either in the facility where we're working or we might have to send them to a hospital. They may then bring the x-ray with them to the evaluation. If it's been less than a year or less than six months between the screening x-ray and the evaluation, I typically don't do another x-ray. But I will have that original screening film to look at, at the time.

Q. When do you typically draft your evaluation reports?

A. I will look at the x-rays, see the patient, get a complete history, examine them, explain to them what I think is going on. And within an hour, I dictate a report that includes everything, the evaluation, the x-ray report, the pulmonary function that's in my assessment.

Q. Now, when you did the B read report for Mr [redacted] which is Klepper Exhibit -- I'm sorry, the A reader report which is Klepper Exhibit 8, did you follow the B read procedures?

A. Yes, ma'am.

Q. And that would include viewing the x-ray in a darkened room?

A. Yes, ma'am.

Q. And you would have one of these standard x-rays there with you to compare against the x-ray?

A. Yes, one or more. I don't do A or B readings at the scene where I am seeing the patients. This was done probably on site in our office simply because I don't want to hurry. I want plenty of time. I need to put up different standards to make a decision, so I practically never do an official A reading or B reading of the films in the field. It's done on site or it's done beforehand.

Q. All right. Well, let's talk a little bit about your A reader report in this case and looking at the second page which is the form that you say that NIOSH issues, film quality, how have you rated the film quality of the x-ray?

A. One.
Q. And what category is that?
A. That means it's a good x-ray with no

0069
significant technical flaws and no changes that would greatly alter the interpretation.
Q. In Section 2A asks are there any -- if you could tell me what Section 2A asks so I don't mispronounce it.
A. Section 2 asks if there are any parenchymal, that is, any lung field abnormalities with pneumoconiosis.
Q. And what is pneumoconiosis so that the jury --
A. Pneumoconiosis in this context indicates dots, opacities, spots, et cetera. And the answer in this case was, yes, there are opacities, and then you grade those opacities as far as the zones and the density or intensity of the profusion. You identify the shape and the size, and there's primary and secondary. So you look at it and -- what do you see most of, and that would be the primary opacities, and then is there a different kind of opacity present; and if so, that might be the secondary opacities or the secondary finding.
Q. What shape -- or what size did you find the opacities were in the case of Mr. [redacted]?
A. Well, I read his as a TT which indicates irregular opacities of 1.5 millimeters to 3 millimeters.

0070
Q. And how does that rate on that scale as far as

small or medium?
A. Medium.
Q. All right. Would that be a medium -- medium opacity in the category small?
A. No. That would be a medium sized irregular opacity.
Q. All right. Then what is the section on this form that's entitled "Large Opacities"?
A. Large opacities are most commonly seen with silicosis. And by nature silicosis is composed of rounded opacities more like beebees or pellets which tend to coalesce or come together. And in its spectrum, those opacities come together and will actually form one larger spot that can look like a cancer, the size of a dime or a quarter, and the ABC indicates the size of those opacities.
Q. You didn't find any large opacities pursuant to that form?
A. Correct.
Q. And the opacities you indicated in the section of the form listed or entitled "Small"?
A. Right. It's kind of confusing. I see what you mean.
Q. Well, it's kind of clear, actually, isn't it?

0071
I mean, it's entitled "Small Opacities"?
A. Right, but there are small, medium and large small opacities.
Q. Correct. So it's a medium opacity in the category of small?
A. Right.
Q. And profusion, what is profusion?

A. Density, how much -- how many opacities per volume of lung.
Q. Would it be fair to say the denser the opacity, the more advanced the disease?
A. Exactly.
Q. And what are the categories of profusion under this form?
A. Well, there's a table of 12 scores that range from a completely normal absolutely negative x-ray to what is described as a three-plus which would be the most fibrosis you would see, and they're arranged in groups of three.
Q. Now, each of those boxes actually has two numerical indicators with a slash?
A. Right.
Q. Could you explain to the jury what those two numbers mean?
A. When you read the x-ray, you put up -- in the

0072
low profusion film, you'll put up a 0/0 standard and a 1/1, and there are several 1/1 standards that match a type of opacity that you see. So you'll put up, in this case, a 0/0 and a 1/1 TT and compare them, and does it look more like a 1/1 or more like a zero. Is it completely negative or are there opacities present, and you have to make a decision based on the film technique, the profusion, the positioning, comparing it with those standard films, and I gave this a score of 1/1 which means it is positive. It's -- I did not consider a 0/0 as a possibility.
Q. Which would be totally negative?

A. Well, a 1/0 would be, I think, this is abnormal, but it's got -- it's close to -- close to normal, but I think it's positive. And a 0/1 would be I think this is negative, but I see some spots so that's a 0/1, 1/0, 1/1. That is the difficulty of B readings. That's a difficulty of the test.
Q. All right. But just so the jury understands what these numbers mean, generally zero would be no disease or abnormalities?
A. 0/0 is negative. A 0/1 is -- it's a little abnormal but considered negative. A 1/0, in my opinion, is a positive film, very mild. A 1/1 is an x-ray that you put it up and you say that's positive.

0073
Q. Okay.
A. And it's mild.
Q. Right. All right. And that's what I wanted to get at. One would be mild; is that correct?
A. 1/0 is the first positive grade, 1/1, 1/2 all the way up to 3/3 and 3 plus.
Q. But the mild categories would be at the bottom of a positive finding 1/0 then increasing in severity, 1/1 and then 1/2?
A. Correct.
Q. And then the next category is 2?
A. 2/1.
Q. And that would be the moderate finding, correct?
A. Yes.
Q. And three would be severe; is that correct?
A. Yes.
Q. So in this case, you rated Mr. [redacted]

opacities within the mild category; is that correct?
A. Well, you're using the term "mild." In my experience looking at a lot of x-rays, I'm surprised and impressed when I see a 1/2 or a 2/1 x-ray.
Q. Those are rare in your experience?
A. Because that's significant disease. Those people are symptomatic. I almost never see threes.

0074
They're dead, and I see -- I rarely see two category films, 2/1s, 2/2, 2/3. That's bad disease.
Q. All right. So most of your findings are in the category of one, correct --
A. Yes.
Q. -- when you're making a positive finding?
A. Yes.
Q. But nonetheless for purposes of this form and the question I'm asking you is that is a finding of a mild profusion, correct?
A. Yes.
Q. Now, going on to the pleural thickening that you found, how -- how does a plaque relate to pleural thickening?
A. A plaque is pleural thickening. Pleural thickening can be circumscribed or diffused. When you look at an x-ray and you see a mesa or an area that is well circumscribed, you can see the borders that is circumscribed pleural plaque, and there is a box to check those. If the plaque is everywhere or difficult to define its borders and particularly if it involves the costophrenic angles, that is the sharp angles at the bottom, then it's by convention considered diffuse

pleural thickening which is usually on the lung, not on the chest wall, and those are kind of different

0075
diseases.
Q. Just so I understand, the plaque that you found on Mr. [redacted] was it on the chest wall or the outside of the lung?
A. Chest wall.
Q. All right. And since you're calling it a plaque, it by definition is circumscribed?
A. Yes, ma'am.
Q. All right. And are there categories as well for the pleural thickening on the form --
A. Yes.
Q. -- the A reader form? Could you describe for me how you categorized the pleural plaque of Mr. [redacted]?
A. Pleural plaque is graded as to the width less than five millimeters, five to ten millimeters and greater than ten millimeters; A, B and C. Then the height or the total extent in a vertical orientation would be a third of the height or less as a one-half or less is a two and more than half of the vertical orientation of the chest wall would be a three, and then the plaque can wrap around either in the front or back, and you'll see a hazy change, that is also graded in a similar way as to its extent, vertical extent, and this requires some estimation.

0076
Q. Well, in this case, how -- what size did you find the plaque?
A. This man had a very small pleural plaque. He

had an A -- an A1 which means that it is no longer than that and no thicker than five millimeters.
Q. So was that the smallest category of plaques that you found?
A. Yes, ma'am.
Q. And --
A. And that was the only pleural disease he had.
Q. Did you find any other -- or make any other comments concerning that x-ray?
A. Yes. He had bypass surgery so you could see the sternal wires. You could see the clips that they used to clip off vessels. And that was apparent, and I made comment to that.
Q. All right. I'd like to talk with you a little bit about the exam that you conducted of Mr. [redacted]. How important is the individual's other medical history?
A. It's very important because as I -- I consider that as a big part of my function of seeing these patients which is to identify other causes for plaque, for example, surgery, trauma and to identify other causes of pulmonary fibrosis. Occasionally, people

0077
will have an exposure that they got rheumatoid arthritis, and they've been on several drugs that can cause scarring in the lungs or they may have an underlying fibrotic disease for 20 years, and that's what they've got, not asbestosis.
Q. Well, while we're on this topic, asbestosis is a form of what disease, interstitial fibrosis?
A. It causes interstitial fibrosis of which there

are at least a hundred different causes.
Q. Okay. When you look at an x-ray and you see interstitial fibrosis, can you always determine the cause?
A. Not always. You can rule out some things, but you can't be a hundred percent certain short of a large piece of lung tissue or an autopsy.
Q. What is the standards you use for diagnosing asbestosis?
A. A substantial exposure, a substantial or significant latency period and an abnormal x-ray, interstitial fibrosis. My cutoff is typically a 1/0. I think a 1/0 is positive. In actuality, you can have interstitial fibrosis that does not appear significant or may not show up at all on an x-ray, nevertheless that is fibrosis due to asbestos exposure and therefore asbestosis. So it is possible to have asbestosis with

0078
a normal occurring plain chest x-ray.
Q. Now, the criteria that you have given for diagnosing asbestosis --
THE VIDEOGRAPHER: Going off record at 5 o'clock.
(Recess taken from 5:00 PM to 5:04 PM)
THE VIDEOGRAPHER: Going on record at 5:04.
Q. (BY MS. POWELL) Doctor, you've described for me the criteria you use in diagnosing asbestosis. Are those criteria based on any guidelines issued by any scientific or medical body?
A. The ATS has a consensus statement that is widely used.

Q. And is -- is the criteria and the ATS consensus statement the same as yours?

A. No, not exactly. What they require is an exposure and latency period. They -- the wording is something like they would like to see or suggest the finding of an abnormal x-ray, and I think what they quote is a 1/1. They would like to see restriction. They would like to see a depressed diffusing capacity. They would like to see rales and clubbing.

Q. All of those or one or more of those?

A. It's not clear.

0079

Q. So it's fair -- and you said that you will diagnose asbestosis based on a 1/0 x-ray, correct?

A. Yes, ma'am.

Q. And you've said that the guidelines by the ATS would not allow that; is that correct?

A. No, that's not what it says. It doesn't say it's not allowed to make that diagnosis. It is a suggested finding. Given that asbestosis is a spectrum, the more scarring you have the more certain you can be that that's a disease and the more important it is, but what you're saying as a B Reader or A Reader when you say a film is a 1/0 you're saying it's positive.

Q. Okay. Right now I'm asking you about what the ATS, the American Thoracic Society, about their guidelines and your understanding of what those guidelines are. And you've told me that the ATS would require exposure and latency and x-ray under the -- with the category 1/1, and are you saying that the

American Thoracic Society would also require a restrictive defect to be found?

A. They don't require that, and they don't require a 1/1. They suggest or prefer that finding, a 1/1 or greater.

Q. And they would also suggest a finding of a

0080

restrictive defect?

A. Well, that adds to the diagnosis. There are about five other phenomenon that one looks for that make the diagnosis more certain and stronger.

MR. BARLOW: I have the article here if you want to ask him about it.

MS. POWELL: Sure.

Q. (BY MS. POWELL) Now, which criteria -- criterion does the ATS consider to be the most important?

MR. BARLOW: I would ask though if you're going to ask him questions about it --

Q. (BY MS. POWELL) Here. I'm sorry, Doctor.

A. I don't need to see it.

Q. Well, that's good. I do, but I'm gad you don't.

A. Go ahead.

Q. Which criteria --

A. There are two, exposure and a latency period.

Q. They consider to be the most important?

A. My understanding.

Q. Well, Doctor, I call your attention to the statement in this last full paragraph on page 367 where -- and ask you if you still believe that the ATS finds that the latency and exposure period are the most

0081

important?

A. Well, what it says is exposure and latency are necessary, period. It says that the findings on the x-ray are the most important of these other four criteria. Those four criteria are described as having recognized value. So it -- I guess -- it doesn't say that you have to have that absolutely, and it does not say that a 1/0 cannot mean asbestosis or not be a disease of asbestosis. I would agree that the next most important phenomenon or finding would be an x-ray showing fibrosis.

Q. Doctor, what do you mean by a substantial exposure?

A. I was afraid you were going to ask that. The caddy answer would be enough exposure to cause a disease.

Q. That's sort of circular logic, isn't it?

A. But it's true. The point is that people respond to an insult in different ways, a physical insult. And I have seen people with identical exposures, they worked together for 30 years, and they have very different findings. One may have plaque. The other has a 1/1 fibrosis. A substantial exposure could be measured in a low level exposure over 30 years, dust out in the open or it could be -- or

0082

consist of six months in a shed cutting asbestos gaskets or grinding asbestos-containing materials and causing dust. So it relates to the concentration of fibers in the air whether or not they use respiratory

protection, what they were doing at the time. If they were doing intense physical activity, they're breathing harder; they're going to breathe in more airborne fibers.

Q. All right. Well, what do you know about the occupational history of Mr. [redacted] which leads you to believe that he has a substantial exposure?

A. Well, as with every patient I have ever seen for this purpose, all I can do is ask them about their work place and what they did. And this man worked in what's called cupola which is a type of furnace that melts cast iron, and the cupola is made of, among other things, fire brick and a mortar that contains asbestos. That stuff breaks up, becomes friable, has to be patched. Occasionally, it's completely removed and replaced. They have -- this man also worked around the pouring operation, I believe, which requires using ladles or large steel pots on wheels that are lined with firebrick, insulation, asbestos-containing mortar turned refractory, refractory cement.

Q. Let's back up a little bit, Doctor. How do

0083

you know that in this case the cupola at the Tyler Pipe facility contained asbestos mortar?

A. Well, it's what he told me. It is what hundreds of people have told me about that work place. And I suppose I assume that they were telling me correctly. I've never been told otherwise. And if you consider it logically, it makes sense.

Q. Well, Doctor, what do you know about asbestos? Let me ask you this. What is the temperature rating for it?

A. The temperature rating for asbestos?
Q. For asbestos mortar, yes, sir.
A. You know, I'm not an expert in mineralogy. I've never been in a foundry. I never worked in a foundry. I've never done this sort of work, so what I do is get an overall exposure and do my best to quantify it. But without being there and actually looking at the bags, I can't be more certain than that.
Q. All right, Doctor. So as you've stated you're not an expert in asbestos products used at a foundry; is that fair?
A. That's fair.
Q. All right.
A. Yes.
Q. And as you sit here today, you can't tell me

0084

what the temperature rating was for mortar -- asbestos-containing mortar, fair?
A. Well, I'll ask you what do you mean by the temperature rating?
Q. Well, do you know is asbestos able to withstand heat?
A. Yes.
Q. To any degree?
A. It's able to withstand molten cast iron which is several thousand degrees, I believe.
Q. So it's -- as you sit here today, you believe that asbestos-containing insulation products would be able to withstand temperatures as high as 2,000 degrees?
A. Yes.

Q. Okay. And your opinion that Mr. [redacted] suffers from asbestosis is based in large part on your belief that the mortar used around the cupola and in the ladles was asbestos containing?
A. Not only the mortar but the bricks themselves and the insulation placed before the bricks are laid, yes.
Q. And as you've said yourself, you're not an expert in asbestos-containing products, correct?
A. No.

0085

Q. If you assume with me hypothetically that evidence were developed -- was developed that the products you've identified did not contain asbestos, would that affect your diagnosis?
A. Yes. If you can tell me that none of the products this man said he handled had asbestos in them, that would affect my diagnosis.
Q. Now, let's talk about the latency period. What latency period -- strike that.
What is a latency period?
A. The period between first exposure and appearance of disease, probably radiographic appearance but possibly symptoms, but I think most people would say that that means x-ray appearance of fibrosis.
Q. So -- I'm sorry. Did you say it runs from date of first exposure?
A. Yes, ma'am.
Q. And in this case, I believe Mr. [redacted] claims exposure from approximately 1951 to 1976; is that correct?
A. I think I said '55 to '76.

Q. Okay.
A. But I'll take '51.
Q. All right. We're in the same ballpark. Do you have an opinion as to whether the exposure early on

0086

versus later on is more significant?
A. I don't. It's real hard for these people to remember what they did in year to year. It kind of runs together, and at 75 it's hard to know.
Q. And do you have an opinion or do you know if asbestos-containing products were generally used more commonly say in the '50s than in the '70s?
A. I would --
MR. BARLOW: Object to the form. Go ahead.
A. I don't know. Sometime around the mid '70s, it would be my opinion that asbestos was used significantly less if not starting to be phased out. But I don't have an opinion about the relative use and frequency of use between '55 and '75.
Q. (BY MS. POWELL) And if I wanted to find out generally whether exposures to asbestos-containing products and occupational settings was greater in say the '50s versus than the '70s, would you agree with me that the proper professional to speak with would be an industrial hygienist?
MR. BARLOW: Object to the form.
A. An industrial hygienist might know. I'm not sure there was such a thing in 1955.
Q. (BY MS. POWELL) Well, I'm not asking about

0087

talking to industrial hygienists in '55, I mean talk to one today to find out about the relative exposures over time of individuals in occupational settings.
MR. BARLOW: Object to the form.
A. I'm not sure they could do much better than me taking a history from this gentleman. They might have a better opinion about relative use and the activity over that time as it relates to asbestos-containing products.
Q. (BY MS. POWELL) And, Doctor, how important to you in your diagnosis of asbestosis is Mr. [redacted] complaint that he had trouble going upstairs or that he was out of breath upon exertion?
A. Well, that is not a diagnostic of anything. It's simply a way to quantify any injury or deficit at this time and to kind of prognosticate. I think it's important to know how sick someone is at this time or at the time of the evaluation. So it's important to some degree, but it doesn't make the diagnosis nor rule it out if he said he could run a mile.
Q. Well, do you believe that his complaints about shortness of breath are related to his asbestosis?
A. Quite likely. He has restriction on his PFTs, and he's a nonsmoker.
Q. All right. Well, why don't we look at that

0088

since we're talking about it. I'm not sure I followed your testimony. Which test result did you say was abnormal?
A. The lung volumes -- actually in both the spirometry and the lung volumes are abnormal. But based on our PFTs, this man has mild restriction.

Q. Okay. Well, on the spirometry, was there one particular test that you said he had an abnormal finding on?

A. Yes, there is -- well, I take that back. His predicteds for his FEC and his FEV-1 were normal, and I said that his airflow was in essence normal. So I retract my statement. The abnormality is primarily in his lung volume assessment which is diagnostic of restrictive physiology.

Q. Okay. So on the spirometry results, you're stating the results were normal; is that correct?

A. Yes.

Q. And what standards do you use to determine whether test results are normal?

A. Well, the ATS criteria for spirometry is that FEC and FEV-1 are 80 percent to 100 percent. That's the normal range. And the ratio of the two which we spoke about is given there at 78 percent. That's as an absolute value, and he has 76 percent. His mid flow

0089

rates, the FEF 2575 is 75 percent of predicted. That is a supersensitive indicator of airflow, and in healthy nonsmoking people, it's often reduced to this extent with age.

Q. So at least -- so we can help clarify for some of us who aren't experts in this, under the section of the -- your tests results, lung mechanics, the results were normal?

A. Yes.

Q. All right. And the abnormal finding that you made is under the section entitled "Lung Volumes;" is

that correct?

A. That's correct.

Q. Just trying to simplify this. And was there any one specific test under that section entitled "Lung Volumes" that you found to be abnormal?

A. His total lung capacity, the TLC.

Q. And that's the TLC, all right. And is -- it was 72 percent predicted, correct?

A. Yes, ma'am.

Q. What criteria would you follow to make your determination that that's abnormal?

A. The same standards are applied to lung volumes. Remember that some people can start out over a hundred percent. It's not uncommon to see values of

0090

120 percent in healthy people.

Q. Now, is that one finding sufficient under the ATS guidelines to make a finding of restrictive defect?

A. Yes.

Q. Just that one finding alone?

A. That's how the diagnosis is made.

Q. All right. Now, did you consider whether there were any other possible causes for this test result, any other medical conditions which Mr. Vaughn might have which could cause this test result to be low?

A. Yes.

Q. And what did you consider?

A. I considered his prior surgery, and typically a sternotomy does not lead to restriction. When they split the sternum and rewire it, it's pretty stable -- in fact, it's totally stable and doesn't cause any

significant chest compliance changes. A thoracotomy, an incision on the side, is a different story. So I considered that, and I don't think that it's important.

Q. Okay. Similarly when you viewed Mr. [redacted] x-ray, did you consider any other causes for the increased markings you saw on his x-ray?

A. Yes.

Q. And what were some of the other potential

0091

causes that you considered?

A. Heart failure, changes related to his surgery. Occasionally people will have complications and require a tube to be put in the side, and so I typically ask about that and look at their chest for scars, and I didn't find any other plausible or significant reason for this man to have interstitial fibrosis or interstitial changes or the pleural plaque.

Q. What about age? Do markings increase with age?

A. No.

Q. Do most individuals have some markings on their lungs?

A. Well, markings are a normal phenomenon. You have airways and blood vessels, and so, yes, every human -- every mammal has markings. It is -- it's a relative phenomenon. Age alone does not call pulmonary fibrosis.

Q. What about obesity? Does that play any role in changes that you might see on x-rays?

A. It certainly can.

Q. Did you consider that in the case of

Mr. [redacted]?

A. Yes.

Q. And I take it you ruled it out?

0092

A. Well, you take that into account -- to account when you read the x-ray because as you're getting at, you have overlying soft tissue. It's like putting a pillow over your chest or -- and so it can accentuate interstitial changes. So when you read the x-ray, that's one of the things you're thinking about, is this person fat and are these changes related to normal lungs enclosed in a fat body, and I don't think that that's the case in this man's x-ray either.

Q. I take it you found that he was not obese?

A. Well, he's five-foot six and weighs 184 pounds. That's big, but that's not obese.

Q. And so in this case, you did not think that his weight and -- was not a significant factor in the results you saw in his x-ray?

A. That's correct.

Q. Do you believe that the restrictive defect you found for Mr. [redacted] is affecting him symptomatically today or at least at the time you saw him?

A. Yes.

Q. So that he would feel tired because of this restrictive defect?

A. Tired or short of breath when he exerts.

Q. Did he have any other medical conditions which -- did he have any other medical conditions which

0093

might cause him to feel fatigued?

A. He had a history of a bypass as we've

discussed. And in the setting of heart failure, that can cause fatigue. When I examined him, I didn't find any evidence of congestive heart failure.

Q. How would you -- strike that.

What would be the signs which would lead you to believe someone has congestive heart failure?

A. Well, we'd be talking about decompensated congestive heart failure because you can have that beyond therapy and have no physical findings. What you would look for would be distended neck veins, i.e., high pressures in the vascular system, edema, peripheral edema, swelling in the feet. Listening to the heart, you might find what's called S3 which is a gallop which means the heart's big and when it fills it makes an extra sound, and I didn't find any of those exam findings in him nor did his chest x-ray look consistent with heart failure. You would see fluid that layers out on the bottom, and there are particular changes that can be settled, but that was not my impression.

Q. What about his diabetes?

A. Controlled diabetes doesn't cause fatigue, shortness of breath.

0094

Q. What type of diabetes did Mr. [redacted] suffer from?

A. Sugar.

Q. Type 1, Type 2?

A. Let me look at his medications and I might be able to tell you. He almost -- well, he takes insulin. That doesn't mean -- he takes insulin, and it doesn't

mean he has Type 1. I don't know.

Q. What is the difference between Type 1 and Type 2 diabetes?

A. Type 1 diabetics have a lack of insulin. Type 2 diabetics typically have insulin resistance. They're typically fat, and they have a normal amount of insulin, they just have too few receptors.

Q. Is that --

A. They can be treated without insulin sometimes.

Q. And is Type 2 diabetes that you said is many times attributable to fat, something which usually occurs after childhood?

A. Yes.

Q. Sometimes called late onset?

A. Could be, yes.

Q. Okay. Does the fact that -- strike that. Do you know how long Mr [redacted] had been taking insulin?

A. No, ma'am. Let me look at my worksheet. I

0095

might be able to answer that. He had been a diabetic for six years. I don't know how long he had been on insulin, and he was not on an oral hypoglycemic, so he could have been on insulin up to six years.

Q. Would that lead you to believe that he had late onset diabetes?

A. Well, no matter what he had late onset diabetes if he only had it for six years and he's 75.

Q. Would that lead you to believe that it's Type 2?

A. It would support that diagnosis.

Q. And as you said, that many times is attributable to the person being overweight?

A. Yes.

Q. So is that something that you took into consideration when ruling out his fat from affecting his x-ray findings?

A. No. I didn't link the diabetes with his mild obesity and his x-ray. I mean, you look at the x-ray, you quantify that. You don't need to think about his diabetes. It didn't. It's not part of the equation.

Q. It wasn't significant to you?

A. Correct.

Q. Now, you've talked about, and we'll go into more detail, your opinion about asbestos leading to

0096

disability. Do you know if Mr. [redacted] was already disabled at the time he came to see you?

A. I don't know. He's -- should be retired.

Q. Do you know under what circumstances he quit working?

A. No. No, I don't.

Q. Is that something that you would expect if you had been told you would report?

A. Yes, I suspect -- if you want me to speculate.

Q. Sure.

MR. BARLOW: I don't want you to speculate.

A. Okay. Well, he hurt his back, and that is almost universally a good reason to quit working in this type of scenario, but he hurt his back when he was 68. So he still should have been retired at that time.

Q. (BY MS. POWELL) But the fact of the matter is you do not know if he was considered medically disabled

at the time he quit working?

A. Correct, I do not know.

Q. But that's something if you had known you would have put in your report?

A. Probably.

Q. All right. Now, let's talk about your opinion about asbestos being a disabling disease. Do you have

0097

an opinion as to whether or not asbestos is always a disabling disease?

A. It's not always a disabling disease. Many people die with it and not die of it. If someone is 82 and has a 1/0 x-ray, they might die of prostate cancer, and the asbestosis is not what killed them. There's a good percentage of people, that is up to 50 percent of people, who die of diseases related to asbestos.

Q. And, Doctor, what do you base that opinion on?

A. Lots of articles.

Q. Okay.

A. Including the one that was just put out here, some work by Selikoff. The number of papers that I couldn't rattle off nor recite, but -- it seems high, but --

Q. It does seem high. If I could see that report.

MR. BARLOW: Object to the sidebar.

Q. (BY MS. POWELL) This Exhibit No. 3 that you're referring to, this is a study by whom -- or at least an extraction?

A. It says Selikoff and Siedman.

Q. All right. Well, I want to ask you. You said you are relying on the study which is referenced in

Exhibit 3; is that correct?

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A. No. I'm relying on what I've learned over time and read, this being one of many sources of information that I form my opinion by.

Q. All right. Well, as I said yesterday, this is tedious, but it's part of my job, and I got to go through and find out exactly what you're relying on. Because you have specifically identified this study --

A. Uh-huh.

Q. -- which is referenced on Klepper Exhibit 3, I want to ask you about it because you said that you were at least in part relying on that study; is that correct?

A. Correct.

Q. And that is a study by Selikoff and Siedman; is that correct?

A. Yes, ma'am.

Q. Was this published in a book or a journal; do you know?

A. I don't know.

Q. Okay. And it has the date December 31, 1991. Is that your understanding of when it was published somewhere?

A. No. I think that was work that was done a number of years ago before 1991.

Q. Okay. So this is an older study than that; is

0099

that correct?

A. I believe it is.

MR. BARLOW: It's a reprint.

Q. (BY MS. POWELL) Well, maybe I can ask -- I guess I can ask Baron & Budd who prepared this.

MR. BARLOW: Object to the sidebar.

Q. (BY MS. POWELL) In Exhibit 3 is a document which you did not prepare; is that correct?

A. I did not prepare that, no.

Q. And it has the caption "More Than 50% of Deaths Asbestos Related." Do you know if that caption or title appears in --

A. That's not how it appears in the article.

Q. All right. And that's something which the lawyers in this case have put on the top; is that correct?

A. Probably.

Q. Do you know if in that article by Selikoff and Siedman if they reached the conclusion that a person who suffers from asbestosis has a greater than 50 percent chance of dying from an asbestos-related disease?

A. That is my opinion, yes.

Q. I know that's your opinion. I'm asking you is if in this article by Selikoff and Siedman --

0100

A. That's what I remember, yes.

Q. Okay. So you remember that they reached that same conclusion?

A. That's correct.

Q. And that the findings they made with respect to the population they studied were not limited to the population studied?

A. Say that again, please.

Q. Well, as I understand it based on the title,

it looks like that Selikoff and Siedman were studying insulation workers; is that correct?

A. Right, that's my understanding.

Q. And do you know if any findings they reached in that article were limited to insulation workers?

A. Are you asking if this kind of study has been done with other sorts of asbestos workers?

Q. Right now I'm asking you in the study that Selikoff and Siedman did --

A. Uh-huh.

Q. -- if they limited their findings assuming that they found that insulation workers who were exposed -- who suffer from asbestosis were at greater than 50 percent chance of dying from an asbestos-related disease, was limited to insulation workers?

0101

A. I don't know the answer to that.

Q. Do you know if the relative risk which was found in the study was greater than two?

A. Greater than two?

Q. Yes.

A. Double?

Q. Yes.

A. I don't know.

Q. Do you know what the confidence intervals were?

A. No.

Q. We've already included the No. 1.

A. No, I don't know.

Q. Okay. All right. Now, what I need to ask you

is, what other specific articles are you relying on?

A. I don't have any other specific articles.

Q. Can you cite me to any textbooks which reach the same conclusion?

A. I don't know my textbooks well enough to tell you for sure that, for example, Fishman or Fraser and Pere would have the same conclusion. Those are texts that we use and I refer to. As I recall, I have seen that kind of data from different investigators, but I couldn't give you a specific reference or a specific text that says that same thing.

0102

Q. Now, I want to go back to our discussion on progression because I believe you told me that -- and please correct me if I'm wrong, that asbestosis might not always lead to disability because a person might be old and just die of something else; is that correct?

A. Sure.

Q. But let's talk about somebody like Mr. [redacted] Is it your opinion today with reasonable medical probability that he will become disabled from the asbestosis?

A. Depending on how you define disable, it's my opinion -- well, do you want to define disabled?

Q. Why don't you define it for me.

A. Well, I think -- I guess he's disabled because you asked me a number of questions about that. It is my opinion that this man, his functional capacity to do chores of daily living will be more difficult in the future. His breathing will worsen in the future and that he will more likely than not have problems related to his lungs and/or other organs affected by asbestos

in the future.
Q. Can you give me any type of opinion as to the time frame in which this will occur? Will it occur gradually year by year?
A. Well, if he got lung cancer, that can -- you

0103
can get lung cancer in a month and die in a year.
Q. Right.
A. We won't know how long he's going to live, so it's hard to predict that.
Q. Putting aside lung cancer for the moment, now I'm just asking now about disability from the asbestosis itself. Is this something that you would expect to see on a year-by-year basis?
A. Year-to-year basis, but it may take on the order of five years to be significantly worse such that it really impairs his function more than now. So in the year, he's not going to be on his death bed related to pulmonary fibrosis. In ten years for sure if he lives that long he will most likely have substantial problems related to scarring.
Q. What scientific literature can you cite me to that supports your position that with reasonable medical probability he will be disabled?
A. I cannot cite a specific reference paper or anything that supports what I just told you. That's based on a conglomerate of what I've read and seen and know and believe.
Q. Okay. Are you aware of any literature that is to the contrary?
A. The contrary of what?

0104
Q. Your opinion that there are some persons who are diagnosed with -- when they are diagnosed with asbestosis who are 1/1s and there is -- that will not progress?
A. I'm aware that there is a considerable faction and/or body of literature that would disagree with the notion of progression and the notion of the high rate of death related to asbestos exposure and asbestosis. I couldn't point you to those papers, but I know there's considerable argument.
Q. And I take it that obviously you've discounted it, and is there a reason why you don't follow that body of literature as opposed to the one that you say you did follow?
A. Well, I can't say that my personal experience numbers enough to say that I've studied it myself, so to speak. I don't know how to answer your question.
Q. Well, I guess what I'm asking is you're saying that there's sort of a split of opinion. There are those who think that asbestosis will always progress and those who would say in somebody like Mr. [redacted] it won't progress. And you are in agreement with those who say that it will progress? And I just want to know why.
A. Well, I think that some of the articles that

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say that it doesn't progress and that it's not as dangerous as I propose look at different populations, they look at different in points, and there are clearly very strong reasons for the industry to look at this long and hard and to develop a body of literature that

defends asbestos.
Q. So is it your opinion that those studies which have found the contrary from your belief are all funded by industry?
A. No. But you -- you can study a phenomenon and get a result based on how you do it and who you look at and how you crunch your numbers and who you exclude.
Q. It's called biased, right?
A. Yeah.
Q. So you're saying that those studies which have found the contrary of what you believe are biased?
A. I'm saying that some of them may be.
Q. Some of them may be, but what I'm asking -- and that's a fair criticism. If you could point me to specific studies and show me how they were biased.
A. I can't do that.
Q. You just believe that they're biased?
A. Well, I've read them and seen the bias, but I can't tell you the specific articles or show you where in an article.

0106
Q. And could you point me to one of those specific authors that you know has a connection to industry?
A. No.
Q. Well, would you agree with me that a potential for bias exists on the other side of the coin?
A. Certainly.
Q. And that certainly there are influential groups such as plaintiff's lawyers who would have a financial interest in the opposite conclusion, that is

that there are reasons for bias in finding that asbestos -- asbestosis is always progressive?
MR. BARLOW: Object to the form.
A. Yeah, I can see that point. The only argument or statement would be that a lot of this work like the Selikoff work was done, I think, before the plaintiffs' attorneys were deeply involved in this kind of work.
Q. (BY MS. POWELL) Okay. So -- well, putting aside Selikoff's work, I'm talking now about recent work. You would agree with me then for recent work that the potential for bias because of plaintiffs' attorney's involvement exists as well?
A. On both sides, correct.
MR. BARLOW: Hey, Lisa, if we're going to go a lot longer, I need to go to the little boy's room.

0107
MS. POWELL: Sure. Let's go.
THE VIDEOGRAPHER: Going off the record at 5:51.
(Recess taken from 5:51 PM to 6:03 PM)
THE VIDEOGRAPHER: Stand by. Going on record at 6:03.
Q. (BY MS. POWELL) All right, Doctor. I'd like to talk to you about some of the other diseases which you were of the opinion that asbestos causes. Are you of the opinion today that Mr. [redacted] will be diagnosed with -- strike that.
Are you of the opinion today that with reasonable medical probability that Mr. [redacted] will be diagnosed with any other asbestos-related disease?
A. Well, he certainly has an elevated risk of developing mesothelioma, G.I. malignancy, colon cancer

to name a few.
Q. Right. And I understand your opinion is he is at an increased risk, but what I'm asking is as you sit here today, can you say with reasonable medical probability that he will, in fact, contract another asbestos-related disease?
A. No, it's not a sure thing.
Q. All right. And with respect to the other diseases that you say he is at an increased risk of

0108
contracting -- let's first start with the lung cancer. I believe you testified he had a 20-time greater risk of contracting lung cancer than a nonsmoker who was not exposed to asbestos?
A. Yes, ma'am.
Q. What is the risk of a nonsmoker not exposed to asbestos of contracting lung cancer?
A. I can't give you an exact number, 1 in 10,000.
Q. 1 in 10,000?
A. One in a thousand.
Q. You think it's approximately 1 in a thousand that a nonsmoker has a risk of contracting lung cancer?
A. 1 in 10,000 seems reasonable in their lifetime. It's one of the most common causes of cancer.
Q. So what you're saying then is that a nonsmoker exposed to asbestos has a 20 in 10,000 --
A. 1 in 500 chance.
Q. Okay. Thank you.
A. Roughly.
Q. All right. And with respect to mesothelioma,

can you give me what the -- what risk Mr. [redacted] has of contracting it?
A. Approximately double the general population.
Q. Do you know what the risk is in the general

0109
population?
A. Pretty low, one in a hundred thousand.
Q. And can you tell me what study you rely on for that opinion?
A. No, ma'am.
Q. Okay. And with respect to your opinion that -- to kind of save time, I'm going to put this a group, that asbestos causes laryngeal, esophageal and G.I. cancer, can you point me to any specific literature for that opinion?
A. Not specifically, but it's a common -- or a commonly held belief. It's described in the texts and the articles on this subject. That's not a surprise.
Q. Now, getting back to Mr. [redacted] asbestos exposure. I believe you told me that he told you he was exposed to asbestos; is that correct?
A. Well, he told me what he did as I asked him, and some of these people know what asbestos is; some of them honestly don't know what asbestos is, Doctor. And when I find someone who has worked in a furnace in the cupola with the ladles, the pouring operation, wearing heat protective gloves, et cetera, some of them will say it was asbestos. I don't know if he told me it was asbestos. He's not an asbestos expert.
Q. And he could be mistaken?

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A. He could be mistaken, and it's also been many

years prior. But based on the history I got and what he told me, it is my belief that this man was exposed to asbestos.
Q. And, in fact, you know on the questionnaire that he filled out if he indicated whether he was exposed to asbestos?
A. Was that a question?
Q. I believe so.
A. There you go. He said not that he was aware of. Like I said, these people did their job. Their concern was not what is that made of but of production, and they're not -- they're workers.
Q. Right. And whether or not a product contained asbestos might not have been of concern to them at the time?
A. Exactly.
Q. If it's possible that Mr. [redacted] could make a mistake as to what contains or didn't contain asbestos, isn't it possible that some of the workers that said they were exposed to asbestos could be mistaken?
MR. BARLOW: Object to form.
A. It's always possible.
Q. (BY MS. POWELL) And do you do anything to verify that what these workers are telling you is

0111
correct?
A. Well, through the six or seven years of doing this kind of work, I've talked to many patients. Some of them are pretty smart. A foreman, the supervisors, even some attorneys have assured me that certain materials used in that environment had asbestos in it.

Q. And in this case, have any of the attorneys assured you that versus the cupola or the ladle contained asbestos?
A. Well, Tyler -- I've seen a lot of people from Tyler Pipe, so as I say, my information -- the information that I believe has come from other workers that kind of know what's going on.
Q. I'm asking you in this case, did the attorneys from Baron & Budd tell you that any of these things contained asbestos?
A. No, but the -- no -- not specific to this man.
Q. Well, in general with respect to Tyler Pipe, have the attorneys told you that any portions of the foundry contained asbestos?
A. I can't recall an attorney telling me that this had asbestos and this did not. Believe it or not, I get a lot of information over time from the workers. Some of are no help. Some are very valuable, and that's part of --

0112
Q. Well, how do you make a determination as to whether the information you receive from a worker is valuable or invaluable because people can be sincere but mistaken?
A. Well, when they describe the name of the product that they used, and it said asbestos on it, it has asbestos in it, and I've heard that more than a few times from workers.
Q. Okay.
A. Not this man.
Q. Now, when is the last time that you saw Mr. [redacted]?

A. The day I saw him the first time.
Q. So it's been over three years?
A. Yes, ma'am.
Q. So if we wanted to know his current condition, would you agree with me that the best source of that information is someone who has seen him most recently, examined him most recently?
A. Like his doctor or his --
Q. Any other doctor?
A. Well, unless it's a doctor from the defense.
Q. And why would you discount any doctor for the defense?
A. They might have a bit of askewed opinion

0113
perhaps.
Q. Biased?
A. Yeah.
Q. And why would that bias exist because they're being paid by the defense?
A. That might have something to do with it.
Q. And you're being -- with all due respect, Dr. Klepper, you're being paid by the plaintiffs?
A. That's right.
Q. The same potential -- and your firm is making a million dollars a year from plaintiffs' attorneys, fair? Potential for bias exists, doesn't it?
A. (Witness nods head)
Q. Say yes.
A. Yes.
MR. BARLOW: That was a question.
Q. (BY MS. POWELL) And have you been told or been

shown a copy of the IME report which Dr. Stockman completed on Mr. [redacted] in this case?
A. I looked at the PFTs from that report. I didn't look at any other part of it.
Q. Was there anything significant that you saw in those?
A. The PFTs?
Q. Yes.

0114
A. They were very similar to the PFTs we did. They showed a bit less restriction like about 82 percent, I believe, on the TLC, and she described obstruction and there may have been very minor changes in the spirogram, the spirometry consistent with obstruction which I did not see on our PFTs.
Q. All right.
A. So they were similar.
Q. Very similar. So, in fact, there hasn't been a rapid decline in his PFT tests; is that correct?
A. That would be a safe assumption since the lung volumes are really not an effort dependent phenomenon. You can sand bag other portions of this, but that's one that's pretty producible. So, yes, I would say his lung volumes, his restrictive physiology has been stable over the interval between those -- our PFTs and whatever she did hers.
Q. Do you know Dr. Stockman?
A. Personally, no.
Q. Do you have any reason to doubt her abilities other than what you've already told me?
A. No.
Q. Do you know Dr. Cade?

A. Cade?
Q. Yes, C-a-d-e, who is a radiologist in Dallas.

0115
A. No.
Q. He has done some B reading reports. I take it that you were not shown those?
A. Correct.
MS. POWELL: Let's go ahead and mark these.
(Exhibit No. 10 was marked)
Q. (BY MS. POWELL) Dr. Klepper, I've shown you what's been marked Exhibit 10, and it's two B reading reports I'll represent to you done by Dr. Cade. As you can see that, one x-ray is dated 6/13/96, and the other is dated 1/27/2000. And I'll represent to you that the x-ray dated 6/13/96 was provided to me by the plaintiff's attorneys as being the same -- represented to me was the same one that you read?
A. Um-hmm, yes.
Q. Now, did Dr. Cade reach the same conclusion as you?
A. No.
Q. And what conclusion did he reach?
A. Looks like it was negative based on his assessment.
Q. Okay. And with respect to the x-ray dated January 27, 2000 which I'll represent to you is one which Dr. Stockman ordered, what finding did he make?

0116
A. It's negative on that also.
Q. All right. And how do you reconcile

the different findings?
A. I disagree.
Q. You just disagree?
A. I disagree. The x-ray that he read that I also read he scored as a film quality three based on contrast. I simply disagree with that. That is a pretty dispirit assessment, but -- I disagree with his assessment.
MR. BARLOW: I need to put an objection on the record to this line of questioning since he's not relying on any of these in the formation of his opinion.
MS. POWELL: I can still cross him on it.
MR. BARLOW: You can ask him about it. I just need to put that on the record.
MS. POWELL: All right.
A. Also, to say that pleural plaque can be very subtle, and it's well known that it is one of the more underread phenomenon on asbestos exposed patients. It's a long story, but in the B reading testing, that's what people miss the most. They misread it or underread it or don't see it at all.
Q. (BY MS. POWELL) Well, evidently he passed the

0117
B Reader test, correct, if he's a B Reader.
A. Evidently, he didn't see the plaque.
Q. Well, that's a difference of opinion, correct?
MR. BARLOW: Object to form.
A. Could be, yes.
Q. (BY MS. POWELL) And he's had the opportunity to read two different sets of x-rays which you have not; is that fair?

A. Correct.
MR. BARLOW: Object to form.
Q. (BY MS. POWELL) And given the fact that he is -- had the opportunity to read two different sets of x-rays, would you agree with me that he's in a better position to evaluate the radiological findings?
MR. BARLOW: Object to form.
A. You would think so, but, no, I'm not going to agree with that. The other x-ray was quality two underexposed. A little bit of rotation will cause a plaque to be not seen because you don't see it in profile. It's not unusual to see plaque on one film and not on another. I simply --
Q. (BY MS. POWELL) He didn't see it on either, correct?
A. Right. And like I said, I disagree. I stick with my reading.

0118
Q. I wanted to go back over something that you talked about in the direct examination. You mentioned a patient who had some bones break from coughing.
A. Right.
Q. Was this a patient that was -- who was diagnosed with asbestosis?
A. Yes, ma'am.
Q. And this was a patient you were following?
A. Yes, ma'am.
Q. And what was this patient's name?
A. [redacted]
Q. Okay. And do you know did this person have a lawsuit?

A. Yes.
Q. And do you know who this person's attorney was?
A. No.
Q. Did you testify about Mr. [redacted] bone's breaking in a deposition --
A. No.
Q. -- or at trial?
A. He never went to trial.
Q. And I don't believe I asked you this question. How many patients have you personally followed as opposed to these medical legal examinations who have

0119
been diagnosed with asbestosis?
A. A handful.
Q. And a handful is --
A. Five.
Q. -- five?
A. Being a consultant, though, we'll see people in the hospital with plaque and never see them again because they don't require routine follow-up with a pulmonologist or their internist will follow them along. So we may see more people with an asbestos- or a pneumoconiosis-related change that we don't follow on a regular basis because there is no treatment for this disease.
Q. But as far as those patients who you have followed over time, there would be those five patients that you've told me?
A. Roughly.
Q. Roughly, approximately. Okay. And, Doctor, have you reviewed anything other than the reports which

you issued in connection with your deposition here today?
A. No, I have not.
Q. Have you been shown anything other than what's in front of us here today?
A. Can't you tell?

0120
Q. Now, Doctor --
A. No, ma'am, I haven't.
Q. And have -- were you provided anything by the attorneys for the plaintiffs in this case other than what's in front of us here today?
A. No, ma'am.
Q. And did you have the opportunity to meet with Mr. Barlow before your deposition? Yes?
A. Yes.
Q. For how long?
A. For about an hour.
Q. And what did you talk about?
A. This case, what I thought, my opinions, what would I answer to this or that question.
Q. Anything else?
A. No.
Q. I'd like to go ahead and mark your report as an exhibit -- I'm sorry, not your report, the form which Mr. [redacted] filled out.
(Exhibit No. 11 was marked)
Q. (BY MS. POWELL) And, Dr. Klepper, I'm going to show you what's been marked as Klepper Exhibit 11 and ask you if you can identify that.
A. That's the worksheet that is typically sent to

the patient or individual before they're seen so we can

0121
get some demographic information and kind of get a head start on their symptoms -- and then this is gone over two separate times, once by the nurse and then again myself.
Q. And, Doctor, is this the report which we referred to earlier where you told me that Mr. [redacted] did not state that he had been exposed to asbestos?
A. Yeah, I think you pointed that out.
Q. Okay.
A. He was not aware of having been exposed is the fact of the matter.
MS. POWELL: Let's go ahead and mark this as an exhibit.
(Exhibit No. 12 was marked)
A. It's a different patient.
Q. (BY MS. POWELL) Correct. Dr. Klepper, I'm going to show you what's been marked as Klepper Exhibit 12 and ask you if you can identify it?
A. Looks like a B reading work form, worksheet.
Q. And would this be for a Mr. [redacted]?
A. Yes.
Q. And can you tell me what positive findings you made?
A. He had a Grade 1 x-ray. He had parenchymal opacities with primary T and secondary Q which would be

0122
irregular and rounded opacities in the mid and lower zones on both sides, and he had a profusion score of 1/0. He didn't have any pleural plaque nor any other abnormalities.

Q. Okay. And just as we talked about with Mr. [redacted], the finding you made of these opacities was made in the section entitled, "Small Opacities;" is that correct?
A. Correct.
Q. And you found medium sized small opacities; is that correct?
A. That's correct.
Q. And as far as the profusion which that gives you the degree of the opacities; is that right?
A. Yes.
Q. And what finding did you make?
A. It was a 1/0.
Q. And is that the smallest or most minimal positive finding that you would recognize?
A. That's exactly how I would describe it.
Q. All right. And would you agree with me that there's a debate in the literature as to whether a 1/0 finding is sufficient for a diagnosis of asbestosis?
A. Well, yes, for sake of argument. We've already talked about the fact that you can have

0123
asbestosis diagnosed by autopsy or a biopsy of the lung. I mean --
Q. And obviously we don't have that in this case?
A. Correct. But, yes, there is some debate about whether a 1/0 is positive or a 1/1 is required to make the diagnosis.
Q. And if you could just explain to the jury again what a 1/0 signifies? What is the one of that diagnosis mean?

A. When you learn to read x-rays, when you take the course, you put the patient's x-ray up and you put up the standards. And the first question you ask is, is this closer to a 0/0 or closer to a 1/1. If you think it's closer to a 1/1, then you ask, did I consider the grade above it, a 2/2, or did I consider the grade below it, a 0/0, seriously consider. So if you look at the film, and it matches your 1/1 pretty consistently, and if doing all the averaging of the lung fields and allowing for penetration if it matches with a 1/1, it's a 1/1. If it looks like a 1/1 but you considered a 0/0, it's a 1/0.
Q. So in this case, you found it was a one which is the most minimal category of profusion, but you considered finding zero; is that correct?
A. That's correct.

0124
MS. POWELL: Can we go off the record a second?
THE VIDEOGRAPHER: Going off the record at 6:29.
(Recess taken from 6:29 PM to 6:43 PM)
THE VIDEOGRAPHER: Stand by. Going on record at 6:43.
MS. POWELL: Let's mark these.
(Exhibit Nos. 13 and 14 were marked)
Q. (BY MS. POWELL) Dr. Klepper, I'm going to show you what's been marked as Exhibit 14 which I'll represent to you are two B reader reports done by Dr. Cade. The first of the same x-ray you reviewed and the second of the x-ray taken by Dr. Stockman. What were the results that Dr. Cade found?

A. He read both as negative.
Q. All right. And again, just as we discussed with Dr. [redacted] would you agree with me that Dr. Cade is in a -- would you disagree that Dr. Cade is in a better position to evaluate the condition of Mr. [redacted] since he's had the opportunity to review two x-rays?
A. No. The -- comparing apples to apples, the x-ray that I saw and read and the x-ray dated the same that he read as negative, although one is positive and one is negative, many people if it's a 0/1 which is a

0125
very minor difference, many B Readers will say negative. They won't say 0/1 because negative -- 0/1 implies negative. They will go ahead and not mark that section, okay. So it is very possible that this other physician and I are not that far apart on our assessment even though it's described as negative.
Q. Okay. So you're saying that Dr. Cade may have really found 0/1 but just not taken the time to write it down?
A. It's not an issue of taking the time. Once you record it, then you can argue about it, okay.
Q. All right. So you're saying that he made -- you are a 1/0, and he may be a 0/1 which is a negative finding, and there's not that much difference between your positive finding and that potential negative finding?
A. Precisely. And he's got nothing to gain by saying it's a 0/1.
Q. In what sense?
A. Well, because he's probably reading x-rays for

defendants. So if he thinks it's a 0/1, he might as well say it's negative. That's kind of what he's saying by a 0/1.
Q. So again you are presuming bias?
A. I'm offering that as an explanation for the

0126
difference between the two x-rays, the two interpretations.
Q. Thank you, Dr. Klepper. I have no further questions at this time.
MR. BEASON: I just have a few for you, Dr. Klepper.

CROSS-EXAMINATION

BY MR. BEASON:
Q. Earlier we were talking at one point in time about clubbing of digital extremities. Do you remember talking about that?
A. Yes.
Q. And that occurs within cases with asbestosis, correct?
A. It can, yes.
Q. And that looks like a bell-shaped configuration at the end of the fingers?
A. Kind of like a drumstick, the end of a drumstick.
Q. And does that occur with any other disease, the process, pneumoconiosis other than asbestosis?
A. Yes, sir.
Q. What does that occur with?
A. It is seen with silicosis. It is seen with a liver disease. It is seen with some diseases of

0127
shunting in the lung where blood goes through an opening in the heart of the lung. I'm sure it can be seen in other forms of pulmonary fibrosis, pneumoconiosis and otherwise.

Q. You were also mentioning about your positive findings on x-rays for -- the x-rays that you review --

A. Yes.

Q. -- on an annual basis, and you said that you don't keep track of a positivity rate but you felt that there might be others who did?

A. Yes.

Q. Who would keep track of that?

A. Well, perhaps a law firm that provides me with x-rays to be read and interpreted might keep track of what my positivity and negativity rate is. I don't know, and I don't want to know.

Q. Okay. So -- but when you said that, you don't know of anybody particular, you're just speculating that perhaps somebody else does?

A. That's exactly correct.

Q. Okay. Now, you're not a toxicologist, are you?

A. Well, I -- part of being a pulmonary and critical care physician is seeing people exposed to certain toxins like this or overdoses, toxic exposures,

0128
et cetera. My primary area of training is not in toxicology, no.

Q. You don't practice as a toxicologist?

A. No.

Q. You've never practiced as a toxicologist?

A. No.

Q. You don't hold yourself out to be a toxicologist?

A. No.

Q. Other than your working in the -- what we've talked about with seeing patients on a medical legal area, you don't have any particular training, education or experience in the field of toxicology other than ordinary physicians?

A. No, wrong, because there are inhalations like gas releases, chlorine releases. It is relatively rare, but we do take care of people with, like I say, overdoses in exposure. So it's not a big part of my practice, but it is not the -- the concept is not entirely foreign to me or my partners.

Q. Other than in inhalation matters, you don't have any other areas of working with toxicology?

A. No, sir.

Q. You're not an epidemiologist, are you?

A. Well, that's part of medicine which I've not

0129
performed very well at this particular time, but, yes, part of medicine is some passing understanding of epidemiology and the rate of the disease of the population.

Q. Do you consider yourself to be an epidemiologist?

A. I would consider myself with training in epidemiology more than the layperson and with respect to lung diseases more than an internist or a family practitioner.

Q. But you don't practice as an epidemiologist?

A. No, not primarily.

Q. And you had never practiced as an epidemiologist?

A. Not solely.

Q. And you don't hold yourself out as an epidemiologist?

A. That would be accurate.

Q. Are you familiar with the terms of relative risk ratios?

A. Yes --

Q. Okay.

A. -- vaguely.

Q. And what do you understand that to be?

A. The relative risk of developing a disease as

0130
it relates to an exposure or external phenomenon.

Q. Talking about fields still of epidemiology and toxicology, what do you consider to be confidence intervals to mean?

A. I don't know.

Q. Okay. In talking in the fields of toxicology and epidemiology, what do you understand biological plausibility to mean?

A. I would be guessing, and I'm not going to guess or speculate.

Q. Okay. These terms and how they relate to the specific field of toxicology and epidemiology aren't something that you routinely deal with?

A. Not really.

Q. Okay. You're not a rheumatologist, are you?

A. No.

Q. That's one I can get definite agreement on; is that right?

A. That's correct.

Q. Okay. You don't practice as a rheumatologist?

A. No.

Q. You've never practiced as a rheumatologist?

A. No.

Q. And you don't hold yourself out as a rheumatologist?

0131
A. That's correct.

Q. And other than ordinary physicians have a little bit of understanding of rheumatology, you don't have any other particular training, education or experience in the field of rheumatology?

A. No.

Q. You're agreeing with me on that?

A. I'm agreeing with you. I do not.

Q. Okay. Have you ever made any -- or done any research regarding the causes of rheumatoid arthritis?

A. No.

Q. Do you have an opinion as to whether or not exposure to silica causes rheumatoid arthritis?

A. I do.

Q. And what is that opinion?

A. It is my opinion, and it is supported in literature that there is a link between silica exposure, silicosis and rheumatoid arthritis.

Q. Okay. And but you haven't ever done any research regarding -- on that?

A. No.

Q. Okay. And that's just become aware because of

your vague understanding of knowing that some literature is out there?

A. I'm aware of it because I have been seeing more and more patients with silicosis and have done a little more reading in the area, and there are several studies that show a link between not only rheumatoid arthritis but other collagen vascular diseases like scleroderma.

Q. Who do you -- whose studies or who do you recognize as being informative or worthy of value on that subject matter?

A. I can't recall the author of the papers I'm thinking of.

Q. And on those papers that you're thinking of, are familiar of what kind of relative risk ratios they've found?

A. I would be speculating.

Q. Okay. But you can't think of any other names or any -- or identified, if I threw out 15 different names, you wouldn't be able to pick out the one on there who has written a lot about the subject matter of causation of rheumatoid arthritis?

A. It's not something I need to know on a day-to-day basis.

Q. I got you. And you're not familiar with any issues such as whether or not -- and can tell me whether there's a biological plausibility regarding the connection of silica exposure and rheumatoid arthritis?

A. Well, there must be some connection because

the frequency of rheumatoid arthritis has increased in patients exposed to silica and who have silicosis.

Q. Okay. Do you know whether or not there have been any animal studies done on that subject matter?

A. I don't know. I'm sure there have been.

Q. Okay. And on that same subject matter, are you aware of any cohort mortality studies done of people in areas who have worked in what some might consider high silica content to analyze the incidents of rheumatoid arthritis?

A. I recall vaguely that those exposed versus those not exposed have a higher rate of RA, scleroderma to name a few collagen vascular diseases.

Q. You're conglomerating all three of them together to say there was a higher incidents. But what I'm asking about is the rheumatoid alone. Are you familiar with that?

A. Once again, I believe there is an increased rate of rheumatoid arthritis in people exposed to silica and who have silicosis.

Q. And the more specific of my question was, were you aware of any cohort mortality studies? Do you know what a cohort mortality study is?

A. Other people not exposed, comparing two groups.

Q. Something similar to that.

A. I'm not aware, no.

Q. Okay. Are you aware of whether or not you would look for there to be underlying silicosis if you were to say there's going to be a connection between the silica exposure and rheumatoid arthritis?

A. I would -- yes, I would look for silicosis.

Q. Underlying silicosis?

A. Yes.

Q. Okay. And what kind of latency period would you look for on silica exposure and rheumatoid arthritis?

A. I have no opinion. I don't know.

Q. Wouldn't you agree with me, sir, on this subject matter of the exposure to silica and whether or not it causes rheumatoid arthritis is really something better for the parameters of other experts other than yourself?

A. No, not if we're talking about silicosis.

Q. Not talking about silicosis, talking about the issue of whether silica causes rheumatoid arthritis.

A. Well, I'm not an expert in rheumatology. I see people with silica exposure and silicosis, and I have seen people with silicosis and rheumatoid arthritis. I have read papers that suggest a link between the two. And I have no reason to believe there isn't a relationship.

Q. Okay, a relationship. But my question to you is really on that subject matter of silica exposure and rheumatoid arthritis. That's a question that's really better left to experts other than yourself?

A. Sure.

Q. Okay.

A. Or I could probably look it up and learn more about it too.

Q. But right now, as we sit here right now, you

really haven't done that?

A. I've read a little bit, but I can't answer your questions as specifically as you'd like.

Q. Okay. I don't have any further questions for you at the time, Doctor. Thank you.

REDIRECT EXAMINATION

BY MR. BARLOW:

Q. Doctor, you were asked a bunch of questions about what rate at which you find positive readings on x-rays and positive findings of asbestos-related disease or occupational-related disease. When you review x-rays of workers, are you looking at a cross section of the general population or is it something different? Can you tell the jury what it is?

A. Well, they are selected. These aren't people who are picked up off the street looking for a pneumoconiosis. These are typically people in a union, pipe fitters union, boilermakers union that are x-rayed, and those x-rays are then sent to me. So I am not told what the exposure is or the concern is, but I can assume that the people I see have been x-rayed because of a concern of an exposure to a pneumoconiotic potential.

Q. And if we were to compare your rate of positive findings of occupational disease to someone else's, would it be important that the types of groups be the same?

A. Yes. It's not uncommon for a population to be screened on a yearly basis, and these may be young people, 25, 30. The City of Austin has a routine screening procedure looking for a variety of diseases.

So, yes, it's very important if you look at healthy unexposed people or healthy young minimally exposed people, you're going to have a different positivity rate.

Q. It's important to compare apples to apples and oranges to oranges?

A. That's correct.

0137

Q. Doctor, would it be proper as a physician for you to let any outside source influence your opinions when you're evaluating people for possible occupational disease?

A. No. It's difficult enough to take the x-ray and read it as accurately as one can trying to exclude all external biases. So to know what other people's positivity rate is would make it even more difficult, and I don't think it would be good -- I don't think it would alter what I do and how I do it.

MS. POWELL: Object to the nonresponsive portion of the answer.

Q. (BY MR. BARLOW) You were also asked a lot of questions about what you knew about the x-ray equipment and the x-ray technician which did the x-rays that you reviewed. Is that important for you to know?

A. I don't think it is.

Q. Can you explain to the jury why that's not important to you?

A. When I get the x-ray for screening evaluation, the first thing you do is assess the quality, and there are many parameters of quality, positioning, contrast, exposure. There are certain artifacts, et cetera. So

from looking at the x-ray, you know if it's a good x-ray or not. It may be unreadable. If it's

0138

unreadable, it's marked that way and it's not interpreted. That is a source of discrepancy. The worse an x-ray is, the more discrepancy there may be from reader to reader. But, no, it's not important for me to know who took it or how -- if it's a good x-ray, it's a good x-ray.

Q. You were also asked somewhat about the ATS criteria. The ATS does not require an x-ray for the diagnosis of asbestosis, does it?

A. Not technically if you read the article word to word.

Q. It's suggested?

A. It's suggested and helpful.

Q. Yes. But, in fact, medical literature does recognize cases of asbestosis where there's no positive x-ray finding?

A. Yes.

Q. But in Mr. [redacted] case, he actually did have a positive finding, right?

A. My opinion is that he had a 1/1 x-ray which is positive. I'm conservative when I read the x-rays for this exact reason.

Q. Doctor, you've seen a lot of people from the Tyler Pipe Foundry?

A. Workers?

0139

Q. Workers.

A. Yes.

Q. And what have they told you about the types of

products that were used out there generally?

A. Well, I know -- I've heard many stories about the cupola, which is, I believe, a long tall cylindrical furnace type operation. There are receptacles for molten cast iron that are lined with heat-resistant materials. There are smaller vessels for the same purpose. And there's a lot of sand, and sand is used in the molding and the core operation. There are several furnaces that are used to cook the cores. There's no doubt in my mind that asbestos was used in that operation in a lot of different ways.

Q. And you were asked to assume that in Mr. [redacted] case in a hypothetical that all of the products he worked around turned out to not be asbestos containing. Does that seem reasonable to you based on what you know about Tyler Pipe?

MS. POWELL: Objection, form.

A. No, it doesn't.

Q. (BY MR. BARLOW) And, Doctor, you were asked a little bit about Exhibit 3, Klepper Exhibit 3, about the study and what the relative risk ratio was on that study. Is that the type of -- is that the type of

0140

study that's going to have relative risk ratio?

A. Perhaps not. These are expected deaths and actual deaths, and I'm not sure you would get that information from this type of study.

Q. On that chart, there's no -- there's no control group that it's being compared against?

A. Correct.

Q. Okay. Now, Doctor, you were also asked some

questions about what the risk of developing cancer was for Mr [redacted]. Prior to this deposition, had you reviewed any literature with regard to what the actual risk were of an asbestotic -- a person asbestotic like Mr. [redacted] developing mesothelioma or lung cancer?

A. No.

Q. Are those figures something that you carry around in your head?

A. No.

Q. Are you confident in the figures that you gave in this deposition?

A. No, specifically the figures of the rate of lung cancer. The relative additive risk of asbestos exposure, I feel a bit more certain about. But in my job on a day-to-day basis, I don't typically need to know the general population's risk of lung cancer. It may seem strange, but there's plenty of other things

0141

that I need to know, so.

Q. Okay. Would you defer to an epidemiologist who does study in this area on that subject?

A. Certainly.

Q. Doctor, did I ask you to look up for mesothelioma on our last break what the relative risk was for asbestos-exposed workers?

A. Yes.

Q. And what did you find?

A. It gave a range of approximately 7 to 13 percent, I believe, of asbestos exposed workers.

Q. Develop --

A. -- mesothelioma.

Q. Okay.

MR. BARLOW: Pass the witness.

MS. POWELL: Dr. Klepper, I have a couple of other questions.

RECROSS EXAMINATION

BY MS. POWELL:

Q. Now, you just said that on the last break Mr. Barlow came to you and asked you to look up the risk of mesothelioma for asbestos workers; is that correct?

A. He didn't ask me to. We talked about it, and I looked on up to date --

0142

Q. Well, did he tell you that he thought maybe the information you gave in your deposition wasn't right?

A. He was concerned that I was off.

Q. Okay. So he brought that to your attention?

A. Yes.

Q. Okay. And that's why you looked it up. Can you tell me what study you looked at?

A. No, I can't and not because I won't, because I don't remember.

Q. Right, okay. You gave some figures about the cost of medical monitoring, I believe, for Mr. [redacted]. And that was based on life expectancy of how long?

A. Medical care?

Q. Medical care.

A. I think I said ten years. It's a difficult question. Hospitalization is very expensive, and it doesn't take too many bouts in the hospital to run up a tremendous bill.

Q. Okay. What I'm trying to get at is, you know, what kinds of medical costs are you anticipating to come up with this figure?

A. Oxygen, home care, three or four one-week hospitalizations, two weeks in the ICU on a ventilator, lung cancer with surgery, lung cancer with hospice care

0143

for six months. This is from experience. I take care of people who run up these sorts of bills.

Q. Well, as I remember, and correct me if I'm wrong, it's been a long day, your figure was 250,000?

A. My figure was a range of 150 to $250,000.

Q. Does that figure include the costs if Mr. [redacted] will come down with lung cancer?

A. In a round about way, yes. If he got lung cancer, either he's going to die quickly and not require much or he will live a more prolonged period of time, and that's a very, very expensive disease. It's not likely he would be cured of it because it's not commonly cured.

Q. Right. So the $250,000 is based upon calculating in the cost of lung cancer?

A. Not necessarily. Progressive shortness of breath, oxygen, oxygen --

Q. Okay. Well, what I'm trying to get at are you saying that if he doesn't come down with lung cancer than the cost of the oxygen, et cetera, will be $250,000?

A. Could be.

Q. Including the home stays?

A. Plus medications.

Q. So --

0144

A. ER visits.

Q. All right. So you are figuring in all of that into the $250,000 figure, but are you in somehow taking into consideration the possibility of lung cancer in the $250,000?

A. Well, of course. One has to. If I -- if I knew he was going to get lung cancer, it would be a lot more than that.

Q. Okay.

A. He's going to leave a wife and family.

Q. So have you taken, for instance, the cost of lung cancer which may be X and say there is a 10 percent chance or 50 percent chance he's going to get lung cancer, so I'm going to include 50 percent by way of example into my calculation?

A. I'm not sure it's that scientific.

Q. But your figure does include at least in some manner -- you're taking into consideration the risk of lung cancer?

A. Yes.

Q. But you can't tell me how you computed it exactly?

A. No.

Q. It's just sort of in your own mind you've come up with this figure?

0145

A. Right.

Q. Now, on pleural plaques that we talked about for Mr. [redacted] do you consider that to be a disease process?

A. I was afraid you were going to ask that.

Q. Took me a while.

A. Well, a scar on your hand is not a disease. A scar on your liver is a disease, cirrhosis. A scar in your lung is a disease. A scar in your brain is a disease.

Q. What about a scar on the chest cavity?

A. Yeah. Isolated, circumscribed focal pleural plaque by itself doesn't cause a lot of trouble. It is important to me because it is -- if I really think it's there, if I can see it well and I'm confident it is an indicator of exposure, and that's important.

Q. All right. So it's a marker of asbestos exposure in your mind, correct?

A. Yes. When it's more advanced or if it's diffused pleural thickening, it's a different story.

Q. But that's not what Mr. [redacted] has, correct?

A. Correct.

Q. And you're not seeing -- or saying with a reasonable medical probability that the pleural plaque will develop into diffuse pleural thickening?

0146

A. I'm not saying that, correct.

Q. So in these circumstances, would agree with me that the pleural plaque that you found on Mr. [redacted] is a benign condition?

A. It is a benign condition indicative of malignant potential.

Q. But today it is not an active disease process, correct, in and of itself?

A. Yeah. They grow to a certain size and then stop. So I would assume at this age his plaque is

probably not enlarging. They don't just go pop.
Q. Okay.
A. They go from nothing to a certain size. I suspect it is stable.
Q. All right. And one of the things I'd like to talk with you about is, as I understand it, you communicated your findings to Mr. [redacted]?
A. Yes.
Q. And even though you're not a treating physician, you would feel obligated to do that, correct?
A. That's part of my function.
Q. Now, you've told me that there is a debate in the literature about the progressive nature of asbestosis?

0147

MR. BARLOW: Object to the form.
A. I would like to say I agreed with you that there is a debate.
Q. (BY MS. POWELL) Okay. Did you tell Mr. [redacted] that there is a debate in the literature?
A. No, I didn't.
Q. Why didn't you?
A. Because I think the bulk of the literature supports the fact that asbestosis is progressive. I think most of the information available supports that.
Q. Well, couldn't you have told Mr. [redacted], you know, I think the bulk of the literature says this, but I think it's only fair to tell you that there are respected writers and respected publications who have a different opinion than me, and I think you need to know

this?
MR. BARLOW: Object to the form.
A. These are not real sophisticated people, No. 1. And No. 2, I don't try to scare them, but I'd rather air on the side of being a little conservative and making sure that they get routine follow-up x-rays.
Q. (BY MS. POWELL) Well, but isn't it important that you take the whole person into consideration?
A. It is.
MR. BARLOW: Object to the form.

0148

A. It is, and that's why I don't tell them that. That's why I don't -- they hear what they want to hear, and what they will hear is that it maybe won't get worse. When they leave, they may -- that may be all they remember. It's there, but it won't get worse.
Q. But you don't think that they have the right to know?
A. Oh, they have the right. I'm doing what I think is best for them, and I don't think there is any harm in the way I approach my discussion with these patients.
Q. I have no further questions. Thank you, Dr. Klepper.

FURTHER REDIRECT EXAMINATION

BY MR. BARLOW:

Q. Doctor, just one quick -- I want to ask you about future medicals again, and I want to ask you a little different questions than the thing I asked you last time. I want you to assume this time that Mr. [redacted] will not get lung cancer or mesothelioma. I want you to assume that his disease process stays only

asbestosis. Assuming that based on your experience, what would his future medical expenses be?
A. Well --
Q. And let me make sure that it's reasonable and

0149

necessary medical expenses.
A. He also has coronary artery disease, and he's 75. Best-case scenario might be something as low as a hundred thousand. As we know, medical care medications, et cetera, are not inexpensive. So I would say it could be as low as that.
MR. BARLOW: Pass the witness.
MS. POWELL: I have no further questions. I just like to get this marked since we read from it as an exhibit. Can we do that?
MR. BARLOW: Sure. Let's stay on the record for just one thing. I need to make one objection on the record. I'm sure -- I mean, I know it was an honest misunderstanding, but the x-rays were not here today. Yesterday off the record defense counsel and I had had a discussion where I said I wasn't going to get into the x-rays unless she got into the x-rays. Today there was cross-examination on other people's reading of the x-rays, and I would have liked to have had the doctor on redirect read for the jury the x-rays right here and show them where he saw interstitial fibrosis. Since that was not -- since they were not here, I was unable to do that, so we would reserve the right that if we choose to, to come back and do a quick video having the doctor look at those x-rays.

0150

MS. POWELL: I just like to state on the record that yesterday I offered to leave the x-rays in this office, and you declined them.
MR. BARLOW: That's true.
MS. POWELL: And since I was traveling through airports where there were x-ray machines, and I know nothing about what happens if you put an x-ray through an x-ray machine, and the fact that I was afraid they were going to bend on -- while I'm carrying them, I didn't want to risk it because I felt like they are much too important evidence for me to accidentally destroy. So since you didn't say you needed them yesterday, I didn't bring them back to produce them, so.
THE VIDEOGRAPHER: Going off record at 7:20.
(Exhibit No. 15 was marked)
(Proceedings concluded at 7:20 PM)

0151

CAUSE NO. 40,551

VIRDELL HOWLAND, SR., ET AL.,	)	IN THE COUNTY COURT
Plaintiffs,	)	
VS.	)	AT LAW
OWENS CORNING, ET AL.,	)	

Defendants.) SMITH COUNTY, TEXAS

REPORTER'S CERTIFICATION

DEPOSITION OF MARK KLEPPER, M.D.

JUNE 20, 2000

I, Cinnamon Boyle, Certified Shorthand Reporter in and for the State of Texas, hereby certify to the following:

That the witness, MARK KLEPPER, M.D., was duly sworn by the officer and that the transcript of the oral deposition is a true record of the testimony given by the witness;

That examination and signature of the witness to the deposition transcript was waived by the witness and agreement of the parties at the time of the deposition;

That the original deposition was delivered to ALEX BARLOW;

That the amount of time used by each party at the deposition is as follows:

ALEX BARLOW - 01:08

LISA POWELL - 02:24

RYAN A. BEASON - 00:12

That $_____ is the deposition officer's charges to the Plaintiffs for preparing the original deposition transcript and any copies of exhibits;

That pursuant to information given to the deposition officer at the time said testimony was taken, the following includes all parties of record:

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FOR THE DEFENDANT DALLOZ SAFETY, INC.:

RYAN A. BEASON
FAIRCHILD, PRICE, THOMAS,
HALEY & WILLINGHAM, LLP
440 Louisiana Street
Suite 2110
Houston, Texas 77002
(713) 426-1700

That a copy of this certificate was served on all parties shown herein on _____ and filed with the Clerk pursuant to Rule 203.3.

I further certify that I am neither counsel for, related to, nor employed by any of the parties or attorneys in the action in which this proceeding was taken, and further that I am not financially or otherwise interested in the outcome of the action.

Certified to by me this ____ day of _____, 2000.

_____
CINNAMON BOYLE, Texas CSR 6394
Expiration Date: 12/31/01
Diana Henjum Reporting Services, P.C.
2501 Oak Lawn Avenue
435 Oak Lawn Plaza
Dallas, Texas 75219
(214)521-1188 Fax: (214)521-1034
(888)656-DEPO

FURTHER CERTIFICATION UNDER RULE 203 TRCP

The original deposition was/was not returned to the deposition officer on _____;

If returned, the attached Changes and Signature page contains any changes and the reasons therefor;

If returned, the original deposition was delivered to _____, Custodial Attorney;

That $_____ is the deposition officer's charges to the Plaintiffs for preparing the original deposition transcript and any copies of exhibits;

That the deposition was delivered in accordance with Rule 203.3, and that a copy of this certificate was served on all parties shown herein on and filed with the Clerk.

Certified to by me this _____ day of _____, 2000.

_____
CINNAMON BOYLE, Texas CSR 6394
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