Balancing fear, hope in foothills

Experts face task of explaining asbestos peril, not alarming public.

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Published 2:15 am PDT Sunday, May 15, 2005

In the grassy foothills of El Dorado County, doctors and public health experts are trying to do the near-impossible.

They must both outline a real danger and try not to overplay it.

Say too little about the lethal diseases that could be triggered by naturally occurring asbestos, and the community may not take sufficient steps to avoid them.

Paint the hazard too broadly, and people are simply, pointlessly terrified.

The balancing act gets tougher as the fear factor edges up, most recently with federal government advice that a generation of student athletes, coaches and outdoor workers at Oak Ridge High School should tell their doctors they've been exposed to asbestos.

It's good advice, said Dr. Norman Edelman, chief medical officer of the American Lung Association - but he would add a caveat.

"Tell your doctor, and then go home and forget about it," he said, except for doing what you can to avoid new exposure.

For basic lung health, said Edelman, the risks of asbestos fibers loosened from veins that lace El Dorado's western slopes are real but small.

"There are so many things in life you should be more afraid of - radon in your basement, living with a smoker, ozone in the air, particulates," said Edelman.

"Prioritize. Worry more about clean air."

Officials with the federal Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry spent much of last weekend explaining what is known - and the yawning gaps of the unknown - about a dust that can make some people sick.

Even amid the flood of information, though, some things simply couldn't be jammed in.

Missing were horrifying details of villages in Turkey where roughly half of all deaths are being attributed to lung diseases caused by exposure to erionite, a mineral similar to asbestos.

Equally absent were hopeful details about advances in diagnosis and treatment of mesothelioma, the rare and vicious cancer that has grabbed the attention of those pinpointing potential health risks in the foothills, where residential construction has churned up the native rock, releasing toxic fibers into the air.

Dr. Robert Taub, director of the Columbia University Mesothelioma Center in New York, is among the most upbeat of doctors treating the cancer, in which a sheathlike tumor spreads around the linings outside the lungs or chest. For now, the condition is usually swiftly fatal, but Taub sees reason for hope.

"In 20 or 30 years from now the disease will be eminently treatable," he said. "We are about a year away from a very good diagnostic test, probably five years away from understanding all the mechanisms that are involved in the production of mesothelioma. ... The science is getting better and better."

Taub's rosy outlook is not shared by some researchers who worry that too little money is devoted to mesothelioma. But the time frame he outlined is significant.

It takes an average of 32 years after heavy exposure to develop mesothelioma, past research has shown. A handful of cases show up in as few as 15 years, and some more than 60 years later, said Taub and other experts. So advances that are decades away still could hold promise for those recently exposed.

Others express frustration at discussion of the potential for distant cures rather than immediate action to limit exposure.

Progress in surgical treatments or discovery of genetic markers for those most at risk are inevitably going to aid some patients and miss others, said Dr. Marc Schenker, chairman of the epidemiology and preventive medicine department at the UC Davis School of Medicine.

As a self-described "guy who believes in prevention," Schenker says his priority is reducing the exposure that can make people sick in the first place. That means focusing on measures that would protect everyone from dust and dirt laced with disease-causing levels of asbestos fibers.

"I have yet to meet the person who said they'd rather have had the cancer and had it treated than not have had it at all," added the doctor, who has been researching the link between mesothelioma and asbestos veins.

Schenker has been studying 3,000 mesothelioma cases, looking into patients' work and residential histories. The findings are significant, he said, but he declined to discuss details before the research is published this summer.

A huge quandary for El Dorado Hills and other communities near asbestos formations is that much of what we know about the mineral involves different fiber types and different types of exposure. Workers in shipyards, factories and mines tended to inhale much more of a less potent form. No one knows how to extrapolate from their fates.

It's tough, too, to draw direct parallels from villages in Greece, Cyprus, New Caledonia, China and other locales, where cancer clusters have been linked to asbestos-bearing rock used in household whitewashes, building materials or roads. Exposure levels in those places are thought to be higher.

Also, while it's clear that large amounts of asbestos make many people sick, it's equally clear that very tiny amounts don't, because virtually everyone in the industrialized world has some asbestos in their lungs. The trouble is, no one is precisely sure where the dividing line lies between a low exposure that seems "safe" and one that could be deadly in time.

There are a few certainties, though.

Virtually everyone who has investigated the issue agrees there are not enough asbestos fibers floating around the air in El Dorado County for people to worry about getting a lung-scarring disease called asbestosis.

The same scientists also agree that if a dangerous disease does emerge in detectable levels from exposures there, the most likely candidate is mesothelioma. Even so, the vast majority of those exposed will not get it: Different experts, relying on different studies, put the chance of developing mesothelioma after very high exposures at anywhere from 5 percent to 10 percent.

Who gets sick and who doesn't is widely believed to be affected by genetics. Dr. Michele Carbone, a Loyola University professor, suggests a virus also might play a role, although he hasn't convinced most experts in the field. Carbone is among several trying to track down genetic factors in hopes of blocking mesothelioma's development.

The picture is much less clear for lung cancer, the other fatal disease associated with asbestos. In

those heavily exposed, lung cancer kills more people than mesothelioma, even after allowing for the background level of cancers that would have been expected in a large group anyway.

UC Davis' Schenker is convinced that lung cancer won't show up significantly in El Dorado because exposures are too low. Dr. Vikas Kapil, with the federal Agency for Toxic Substances and Disease Registry (ATSDR), is not so sure.

"I don't think anyone can answer that question yet," he said.

The other health issue that could emerge for people who have lived, worked or played in affected areas is a range of changes in the pleura, a membrane surrounding the lungs. Thickening, plaques and other alterations, lumped together and described as pleural changes, are not life-threatening, and people generally aren't even aware of them, said Dr. Aubrey Miller, an EPA toxicologist.

They are associated with increased risk of both lung cancer and mesothelioma, but the association is complex, doctors say. Not everyone with pleural changes develops other diseases, and many with the more serious diseases don't have pleural changes.

Still, the changes indicate people could benefit from more intensive follow-up testing, and that they should pay more attention to better pulmonary health overall, perhaps being more vigilant about flu shots or getting to a doctor sooner with a bad cold, Miller said.

Federal scientists are still studying asbestos zones in El Dorado County and throughout California to see whether they can offer risk assessments beyond a single high school in El Dorado Hills.

Meanwhile, they are urging selected Oak Ridge students and workers who spent time outdoors on campus before cleanup was completed last summer to tell their doctors they've been exposed.

Some wonder what good telling a doctor would do.

"There is no consensus in the medical community as to what to do," said Dr. Nicholas J. Vogelzang, director of the Nevada Cancer Institute who has published many papers on mesothelioma.

"One doctor will say have a chest X-ray every year, and one doctor will say a pulmonary function test."

Many physicians, including some who treat asbestos patients, hooted at the idea of telling a doctor about an environmental asbestos exposure, saying it's likely to be an exercise in futility. There are no easy, early warning signs of mesothelioma, and there's still debate about the value of earlier diagnosis of lung cancer, they say.

In addition, too few doctors know enough about asbestos-caused ills, which often are misdiagnosed, said Dr. Brad Black, medical director of the Center for Asbestos Related Diseases in Libby, Mont.

But federal doctors are adamant it could help.

A physician can watch for the pleural changes, said Dr. Ketna Mistry of the ATSDR. A doctor can counsel patients to stop smoking - good advice anyway, but more important in regard to lung cancer, the incidence of which shoots up dramatically in heavily exposed people who smoke.

Even Black, while dubious about the benefits today, said in time that could change. He is involved in research on a new test, which has shown promise in Australia, that might someday indicate the presence of mesothelioma before symptoms develop.

The advice has left some people who once attended Oak Ridge High nonplused, others deeply shaken.

"I guess I'll go tell my doctor next time I go for my physical," said Paul Kuzmich, who played basketball and studied amid the construction dust in the early 1980s when Oak Ridge High School opened. "I don't think I'm real worried about it."

Mark Salowitz, who graduated from Oak Ridge a few years after Kuzmich and has been monitoring the news from his home in Virginia, looks back and shudders at his years of track, cross-county and

dirt-biking in areas shown on today's maps to be streaked with asbestos.

"I went beyond fear to resignation, thinking, this is how I'm going to die. The question is when, and what I'm going to do about it," he said.

Beyond telling his doctor, Salowitz's plans are simple. Have a lot more fun. Maybe get a little more religion. He is 34.

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