Proceedings of the Libby, Montana asbestos education & outreach retreat

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Emily Warrender September 29, 2025

Jean C. Pfau discusses the history and health implications of the vermiculite mine in Libby, Montana, and the establishment of the Center for Asbestos-Related Disease (CARD), which offers vital clinical services for affected individuals. Additionally, a retreat in June 2025 allowed experts to share research findings on asbestos exposure

Libby, Montana, is known for its year-round recreation opportunities, its moderate climate (for Montana), and a notorious vermiculite mine. For decades, the mine supported the people and economy of Libby by providing stable employment for miners, loggers, processing plant workers, and many others. Sadly, along with the vermiculite came tiny needle- like fibers of a deadly fibrous mineral called Libby Amphibole (LA) asbestos. In 2009, the U.S. Environmental Protection Agency (EPA) declared a Public Health Emergency in Libby, calling for cleanup and funding for the medical care of affected residents. Shortly after, the Affordable Care Act (ACA) provided special provisions to pay for free health screenings and Medicare coverage. [1] Libby's Center for Asbestos Related Disease (CARD), a 501-C-3 non-profit organization, has provided essential clinical services for people exposed to LA since 2002. It was chosen as the premier site to provide the screenings under the ACA.

Today, Libby and the surrounding areas are designated as a Superfund site due to the extensive use of contaminated vermiculite in homes, yards, playgrounds, schools, and sports fields. The vermiculite was shipped from Libby via railroad in open cars, so both the mining company, W.R. Grace, and the BNSF railroad have been found liable for the contamination and resulting health effects. [2]

To date, diagnoses that qualify patients for coverage under the ACA include mesothelioma, several cancers, asbestosis, and pleural disease. However, high rates of autoantibodies and Systemic Autoimmune Diseases (SAID), including systemic lupus erythematosus and rheumatoid arthritis, are associated with LA exposure. [3,4] Extensive research and screening have validated that amphibole asbestos, like LA, significantly increases the risk for SAID. [5,6] While it is incredibly difficult to link SAID cases with specific exposures, CARD began screening for SAID and autoantibodies in 2019 to ensure that patients received appropriate care. [7]

Screening, outreach, and education retreat, Libby, Montana, June 2025

On June 19-20, 2025, renowned physicians, scientists, and other asbestos experts met in Libby. The purpose of this article is to share the proceedings of that meeting, with grateful acknowledgement of funding from the LOR Foundation. Funded primarily by the Agency for Toxic Substances and Disease Registry (ATSDR), core components of the CARD's federally supported activities are outreach and education. While CARD's grant does not fund research, much of the outreach and education provided by experts was closely tied to ongoing research efforts. CARD also supports research indirectly by facilitating data sharing and collaboration.

Day 1:

The CARD's Scientific Advisory Group (SAG), (8) including experts in pulmonology, radiology, occupational medicine, epidemiology, and immunology, provided updates on Libby's pleuro-pulmonary diseases, mortality studies, results of lung cancer screening, and autoimmune/ inflammatory diseases. Highlights:

- Dr Kinta Serve, Associate Professor at Idaho State University, gave an exciting update of her laboratory's exploration of mechanisms behind autoimmune responses evoked by LA, including the autoantibodies that drive asbestos- induced pleural fibrosis. (9,10) Extensive analysis of CARD's autoimmune screening data is underway.
- Dr Curtis Noonan, Professor of Epidemiology at the University of Montana, summarized incidental findings of CARD patients who were eligible for, and participated in, the lung cancer screening program. Incidental findings included evidence of emphysema, coronary artery calcification, and other conditions that can be indicated with thoracic imaging. These findings were common and point to the importance of continuing to follow this population.
- Dr Anthony Reeves, Professor in the School of Electrical and Computer Engineering at Cornell University, and Dr Albert Miller, Professor of Medicine at Mount Sinai School of Medicine in New York, seek continued validation of the Lamellar Pleural Disease (LPT) diagnosis to improve recognition of the disease in people exposed to LA outside of Libby. Exciting new objective technologies currently being explored were discussed, including computerized CT scan image analysis and ultrasound.
- Dr Brad Black, former Medical Director for the CARD, agreed and emphasized early detection to shorten the 'latency' to diagnosis, improve treatment outcomes, and enhance the timeliness of community surveillance for ongoing environmental exposures. His years at CARD convinced him that there are significant clinical markers very early in the disease that should be explored.

Day 2:

The morning's public 'Breathe in Science' fun rally for children and their families included educational booths and games. Experts from Day 1 volunteered in leading children in their exploration of science as it impacts our daily lives. The afternoon's Science Expo included presentations to the community, including:

- Tracy McNew, Executive Director of CARD, shared an update on the organization's status following the 2019 lawsuit filed by BNSF, which significantly affected CARD's reputation and operations. (11) She emphasized that CARD has always acted in good faith, following the requirements of its federal grant, the ACA, and diagnostic guidelines set by the American Thoracic Society. Although a civil jury found 337 claims to be false, CARD disagrees with that interpretation and has not been given enough information to identify or correct specific issues. No individuals lost benefits as a result, and CARD has already adjusted its practices – such as no longer submitting Medicare access forms for those without clinical diagnoses – to reflect concerns raised during the trial. Despite media misrepresentation and ongoing public confusion, CARD remains open, committed to its mission, and willing to improve where needed.
- Dr Chris Weis, a toxicologist who worked for both the EPA and the NIH during his career, gave a powerful presentation of his experience as an EPA 'first responder' to Libby in 1999, and how they worked with the community to act quickly and to create the CARD. He called on the community to have the same passion now and to speak out in support of the CARD, since they are at risk of losing it.
- Dr Jaime Szeinuk, Occupational Medicine physician at Northwell Health in New York, clarified and affirmed the validity of the LPT diagnosis and emphasized how critical the CARD is for having established the diagnosis and educating about the disease in Libby and beyond.
- Dr Raja Flores, Director of Thoracic Surgery at Mount Sinai Hospital in New York, spoke eloquently about his perspective, as a surgeon, about Libby and the importance of the CARD. His insightful presentation is available here.

The Libby meeting could be summarized as a strong consensus statement that the diseases caused by LA, including autoimmune diseases and LPT, have been validated, that discoveries from the CARD's screening program must be addressed, and that better tools for early diagnosis and therapies are essential. Affected communities, and indeed the entire world, require the CARD to continue its screening, outreach, and educational activities, so that we do not become complacent about natural and residual asbestos exposures that persist despite reductions in its commercial usage. At present, only the CARD, through its more than 20 years of experience, systematic evidence-based medical work, and SAG, has the cumulative knowledge and expertise to continue this important mission.

References

1. DOI: http://dx.doi.org/10.1016/j.chest.2017.08.858
2. https://www.asbestos.com/news/2024/05/01/federal-jury-bnsf-deaths-libby/
3. DOI:https://doi.org/10.1289/ehp.7431
4. DOI: https://doi.org/10.1080/15287394.2018.1485124
5. https://doi.org/10/1016/j.autrev.2024.103603
6. https://doi.org/10.56367/OAG-041-11247
7. https://doi.org/10.56367/OAG-042-11274
8. https://libbyasbestos.org/about/scientific-advisory-group/

9. https://doi.org/10.56367/OAG-045-11274
10. https://www.scientia.global/wp-content/uploads/Dr-Jean-Pfau.pdf
11. https://www.npr.org/sections/shots-health-news/2025/07/07/nx-s1-5452433/libby-montana-vermiculite-asbestosis-clinic-shutdown-bnsf-lawsuit

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Primary Contributor

Jean C. Pfau
Center for Asbestos-Related Disease