

MOSSVILLE BRIEFING

1. Mossville is a fairly small community located in Calcasieu Parish.
2. In the 1990's as the result of :
 - a. Chemical releases from some of the surrounding plants
 - b. A resulting law suit
 - c. The desire of the plants to extend their buffer zoneOffers were made to buy out some the adjacent homes. Some of the residents accepted however, offers were not made to all the residents.
3. Blood samples were collected from some of the Mossville residents and shipped to Germany where they were analyzed for dioxin in the blood. The agencies, both state and federal, were not involved in the process and little details regarding the techniques used or how the test subjects were selected were provided.
4. It should be noted that during part of this time that EPA Region 6 and LDEQ in response to request from the greater Calcasieu community were holding quarterly public meetings. During these meetings anyone could bring to the attention of the agencies any issues of concern.
5. Once the agencies were presented with the dioxin blood results there were numerous public meetings with the Mossville residents attended by LDEQ, EPA, Louisiana Department of Health, ATSDR, and others.
6. In response to a request by the appropriate state agencies ATSDR began an exposure investigation and health consultation in 1998 of the Mossville area and its citizens.
7. In 1999 ATSDR presented the results of their investigation to the Mossville citizens. The study concluded:
 - a. The dioxin blood levels were elevated in some participants (primarily the older residents) when compared to the so called national average.
 - b. The source of the increased dioxin exposure was unknown.
 - c. The blood dioxin concentrations measured in the Mossville residents are unlikely to be associated with known clinical health effects.
 - d. That additional work to evaluate the Mossville area was recommended.
8. In 2001 thru 2002 ATSDR continued its Mossville efforts and conducted a study comparing the environmental health conditions of the residents of Calcasieu to a so called controlled group. The community of Lafayette was selected by ATSDR to be the controlled group since there was little industrial development in the area that could be associated with dioxin production or formation.
9. In 2003 ATSDR presented the preliminary results of their Dioxin Study of Calcasieu and Lafayette Parishes to the residents of Lake Charles (Mossville) and Lafayette. The conclusions of the investigation were:
 - a. The people living in Calcasieu Parish have similar blood dioxin levels as people who lived in Lafayette Parish.
 - b. Dioxin levels in both parishes increased with age and length of residence.

- c. Dioxin levels were not elevated among the youngest age group (15 to 29 years) in either Calcasieu or Lafayette Parish suggesting no unusual current dioxin exposure.
10. ATSDR continued with its Exposure Investigation and conducted a follow-up in Calcasieu to evaluate changes in dioxin concentrations. The participants in the follow-up were involved in previous blood dioxin sampling projects. In addition to blood sampling, this follow-up also included environmental sampling at participants' residences. Sampling included soil in the yards, indoor dust, private well water, home grown fruits, vegetables and locally caught fish.
11. In March 2006, ATSDR presented the results of the Follow-up Exposure Investigation to community environmental works groups of Calcasieu parish. The follow-up investigations concluded:
 - a. Blood dioxin concentrations decreased in most participants between their initial and follow-up samples.
 - b. Blood dioxin levels were primarily elevated in older participants and likely attributable to historical dioxin exposures.
 - c. The blood dioxin concentrations found are unlikely to produce a known clinical health effects.
 - d. Dioxin concentration in surface soil, indoor dust, well water and homegrown fruit, vegetables, and nuts were not at levels of concerns.
 - e. Encourage residents to follow fish advisories currently in effect in their areas.
12. It would appear that ATSDR will continue its work to generate physiologically based pharmacokinetic models to better understand changes in participants' blood dioxin concentrations.
13. In summary it is felt that it is clear that all of the appropriate state and federal agencies have taken appropriate steps to respond to the concerns raised by the Mossville residents.
14. February 2007: LDHH participated in the Louisiana Department of Environmental Quality's Office of Environmental Services," Listening Session" to strengthen the agency's working relationships with communities. Representatives from MEAN, Calcasieu League for Environmental Action Now (CLEAN) and other community groups also attended this event and provided LDHH with their environmentally related health concerns and information on how the agency could collaborate with the public to address their concerns.
15. March 2007: On the ATSDR/LDHH monthly Calcasieu call, ATSDR suggested that LDHH identify other stakeholders in the community. LDHH located additional stakeholders and agreed to work with them to develop fact sheets on cancer and dioxin to be disseminated to the community.
16. 2007 –An audit of PPG's Calcasieu Estuary Biological Monitoring Program 2005 Annual Report was completed at the request of ATSDR.

Key finding: The discovery of an inconsistent dioxin concentration led to the release of a revised report page identifying this sample concentration as a non-detect. Considerable differences were found in dioxin congener concentrations

when comparing a red drum field sample to its field duplicate. The rest of the results in the final report were identified as valid.

17. 2007 - Calcasieu Cancer Review (1988-2004) (LDHH/OPH/SEET)
Key finding: The 2003 review was expanded to include an additional 7 years of data. Cancer incidence was evaluated using the preferred method of calculating standard rate ratios (SRRs) for 22 anatomical sites and all sites combined. Cancer rates for all sites combined in Calcasieu Parish did not differ significantly from state rates. Females in Calcasieu Parish have significantly higher lung cancer rates, with whites having 10% higher rates when compared with the state and blacks having a 35% higher rate. The melanoma rates for whites in Calcasieu are 30% higher in men and 60% higher in women when compared with state rates.
18. Fall 2007-2008: LDHH and ATSDR continued to collaborate and work on a cancer fact sheet for the community. LDHH and ATSDR decided to revisit the community once all of the documents that have been developed and completed by the agencies have been completed.
19. June 2009: Cancer fact sheet draft was submitted to ATSDR for review.
20. July 2009: LDEQ-LDHH participated in the Environmental Protection Agency, Region 6, Environmental Justice Listening Session where the members of CLEAN, MEAN, and other residents of Calcasieu and Mossville provided the agencies with their environmental concerns.
21. August 12, 2009: LDHH participated on a conference call in which a number of items were discussed: EPA had been ordered to re-address the Mossville's health concerns and may agree to conduct some Safe Drinking Water Program sampling at schools or other public tap locations; ATSDR indicated that they would not attend the upcoming health fair, however, EPA was to attend; topics to be discussed at the health fair would be potential water sampling and relocation of homes in Mossville.
22. August 26, 2009: ATSDR sent to LDHH Wilma Subra's latest report which correlated health problems with chemicals being released from the local industries. This report had been distributed at the health fair meeting which was held on Saturday, August 24, 2009.
23. November 2, 2009: ATSDR received a signed request and report titled "Industrial Sources of Dioxin Poisoning in Mossville, La: A Report Based on the Government's Own Data." The signees, presumably Mossville residents, would like ATSDR to protect their health from dioxin by investigating nearby industrial facilities that release the same kind of dioxin that ATSDR detected in the blood of Mossville residents and the environment, to eliminate dioxin exposures, and to help them access effective medical services for their serious health problems. LDHH was notified that ATSDR is sending 8-10 individuals from Mossville to Atlanta on December 8, 2009 to meet with Dr. Frumkin.
24. November 23 – December 1, 2009: ATSDR requested that LDHH update the Calcasieu fish advisories for the estuary and related water bodies. LDHH indicated that the Calcasieu estuary advisories had not been modified because the updated fish advisory protocol had not been finalized. A final protocol has been recently completed by LDHH, LDEQ, LDAF, and LDWF and will go to public comment within the next few weeks. Once the public comment is over and all of

the agencies' Secretaries have signed the protocol document, LDHH will assess available fish tissue data from the Calcasieu Estuary according to the new protocol.

25. Oct. 20, 2009. LDEQ met with Mossville residents and their advocates at LDEQ headquarters in Baton Rouge to discuss concerns.
26. Jan. 2010. LDEQ-LDHH participated in EPA's preliminary site investigation meeting in Mossville.
27. April 2010. LDEQ-LDHH participated in EPA's continuing update of its preliminary site investigation meeting in the Mossville area.