

Study confirms high toxicity near ISRO plant

Kochi: A high rate of the thyroid stimulating hormone (TSH) has been confirmed among the people of Keezhamd near Aluva where water bodies have a dangerously high level of perchlorate, a highly toxic chemical found in rocket fuel and fireworks.

Over 65 wells in the area where ISRO's Ammonium Perchlorate Experimental Plant is located are contaminated, but more studies will have to be done before the hyperthyroidism can be linked to the presence of the toxic chemical in the water bodies.

"When compared to the state average, we have found a high TSH level among more residents here. But the scenario is not alarming and further studies will have to be done before we can conclude that all the 450 people have hyperthyroidism. Clinically they are still not patients and the blood samples will be now be sent for further tests," said District Medical Officer, Dr. Hazeena Muhammad.

According to the DMO, the prevalence rate of high TSH level among residents of Keezhmadu is 13.2 per cent, while the state average is 10.5 per cent. The district collector had ordered an expert medical examination of the blood samples following reports of high levels of

Dr. Jayaprakash, endocrinologist, Medical Trust Hospital, who examined the blood samples, says though a high TSH level has been identified, only more tests can confirm the hyperthyroidism and the link between perchlorate and the disease. "I've advised further examination, including doing antibody tests, to confirm the disease," he added.

An earlier study conducted by the Department of Environmental Technology, National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram had detected a high level of perchlorate in drinking water sources in the area. Based on its findings, the people were advised not to use well water and were supplied potable water in tanker lorries by the Kerala Water Authority. All the 193 families were given free water connections as well.