

Vital concerns: Impact of iodine deficiency still felt in [officially recognized] iodine deficiency- free Armenia By Gayane Mkrtychyan and Sara Khojyan ArmeniaNow reporter Published: 05 June, 2009 The issue of shortage of iodine in water is considered a serious problem in Armenia, which, as a landlocked mountainous country, far from oceans and seas, is in the risk zone of IDD development (Iodine Deficiency Diseases) The lack of iodine in the human body can cause serious pathologies of the thyroid gland. Because of losing major trade links in consequence of the Soviet Union's collapse in 1991, the population of Armenia was deprived of iodinated salt. Even though now salt is being iodinated (the existed standard is 40+/-15 milligram per kilo) in some regions of Armenia the problem is still acute, because the substance of iodine in salt is not enough to provide the required amount of iodine. According to the data of the Armenian Ministry of Health, in 2007 hyperthyroidism (during which the gland produces more hormones than necessary, resulting in toxins being released into the system) was diagnosed for the first time among 458 people; of 2,334 who already had the problem. (The Ministry provides no data for 2008-2009) In 2006, there were 2,563 reported cases of hyperthyroidism in Armenia, or 368 more compared to 2005. The same year, 724 people were diagnosed with the disease for the first time: 300 people more than in 2005. Armenia's provinces, Syunik and Lori, are considered as regions with a high risk of iodine deficiency because of the lowest substance of iodine in water and soil. Vruyr Hovhannisyan, head of Goris' (Syunik province) south territorial branch of 'Jrmughkoyughi' (water-pipe sewerage) CJSC, confirms that their region, in fact, has the problem of iodine deficiency. He shows the data received from Kapan's territorial laboratory of 'Jrmughkoyughi', which show that the percentage of iodine in Akner, Mukhuturyan and Shakeh water springs, supplying the town of Goris and its region, as well as the town of Kapan and its region, is zero. Zemfira Ghazaryan, head of the Water Control Department at Lori's 'Jrmughkoyughi', says that there is no iodine in any of the seven water pipelines supplying the town of Vanadzor (Lori province). "There is no iodine in the springs. This is the reason why goiter is so widely spread here," she says. Mary Khurshudyan, general endocrinologist of Syunik Province explains that because of the shortage of iodine the thyroid gland may enlarge. "There are several types of goiter – no disorder in function, weakening, and paralyzing (of the gland)," she says. (Goiter is an enlarged thyroid gland, it is developed when there is a stable lack of iodine in the blood, when the amount of thyroid gland hormones in the blood is abruptly decreased.) "The endocrine function of the gland is weakened in case of hypothyroidism. The lack of hormones in the blood produced by it is expressed by sleepiness, the work of the heart slows down, disorders of menstruation cycle are registered, which, in its turn, brings to sterility," says Khurshudyan. Armine Petrosyan, 36, from Goris, is diagnosed with hypothyroidism. "I feel discomfort very often, especially in spring. I am short of breath. I have terrible headaches, I feel weak, I get tired," she says. Ara Kurenkov, endocrine-surgeon of the Surgical Department at the 'Goris Medical Center' CJSC, explains what happens during hyperthyroidism or toxic goiter: "In this case the gland produces more hormones than necessary, as a result of which intoxication takes place. The heart starts working faster, the nervous system becomes supersensitive, a person feels frightened, s/he sleeps very bad and sweats all the time." General endocrinologist of Sisian (Syunik province) Armenuhi Dovlatyan says that they have no official data, but she can say that at least one in ten in their region has problems connected with disorder of thyroid gland's function. "The number of people having diseases connected with thyroid gland reaches 15,000 in Sisian. There are also people who suffer from toxic goiter. And the patients who suffer from enlarged gland, when the function is not disordered are not registered; however, there is really a great number of them," the doctor says. Edward Toromanyan, Head of 'Armenia' Endocrinology Center, says that only cases of hyperthyroidism are registered in Armenia; and if only those indexes are taken into consideration, it would turn out that there is no problem of diseases in Armenia connected with the disorder of thyroid gland's function. "The registered indexes of diseases are deceptive also because they might be the numbers of those applying to policlinics. And that is a completely different index, and it would not show the picture of the disease. For example, there are people who have a slightly enlarged thyroid gland, and since they do not feel discomfort, they do not turn to the doctor," he explains. The number of toxic thyroid-hyperthyroidism patients in Armenia 1990 1995 1999 2000 2001 2002 2003 2004 2005 2006 2007 Diagnosis for the 1st time according to years 644 331 286 441 417 398 421 433 384 724 458 Total number of patients 3438 2668 1953 1993 2009 2122 2362 2178 2195 2563 2334