

EFFECT OF EXHAUST GASES EMITTED FROM VEHICLES ON HUMAN HEALTH IN FERGANA CITY AND FERGANA DISTRICT

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Abstract

Ibn Sina wrote down the solution of many problems related to the science of hygiene in his book "Laws of Medicine". In particular, he says, "If there were no dust and other dusts in the air, a person would have lived for a thousand years", he calls for freeing the atmospheric air from pollution. Alloma pays special attention to air temperature and humidity[1,2,3,4]. It emphasizes the need for people to take health precautions in different seasons of the year. Many diseases are reported to be aggravated by high humidity or extreme heat. His words, "I know that different climatic conditions of the season can cause some kind of disease, so depending on the climate[5,6], you should intelligently recommend different daily routines to people" proves our point.

Key words

cancer, lead compound, horn sound, car accident, circulatory system, endocrine system, breathing, asthma, biological shell.

INTRODUCTION

One of the main causes of air pollution is that the fuel does not burn evenly and completely. Only 15 percent of the fuel is used to drive the car, and 85 percent "goes into the air." The combustion chamber of a car engine is a chemical reactor that synthesizes toxic substances[1,7] and releases them into the atmosphere. Even nitrogen contained in normal air enters the combustion chamber and turns into toxic nitrogen oxide. As a result of premature burning of fuel, the following toxic components are formed :

- CO - Carbon monoxide (suffocating gas - gas) 87-98%;
- NO, NO₂ - nitrogen oxides (19-73%);
- unburned hydrocarbons (82-96%);
- aldehydes;
- sulfur compounds;
- highly toxic lead compounds and soot can be shown.

oxides in the exhaust gases emitted by cars cause the formation of photochemical smog. One car emits 800 kg of carbon monoxide, 40 kg of nitrogen oxides and 200 kg of various hydrocarbons per year[8,9]. Carcinogenic hydrocarbons, which accumulate especially around traffic lights at intersections, are extremely dangerous. This waste has the ability to accumulate in the external environment and in the human body.

Due to the interconnectedness of the elements of the biological crust, the polluted atmospheric air has a negative effect on other components of nature. As a result, negative changes occur in the natural state of water and soil, in the human body, and in the flora and fauna. The cardiovascular system is damaged, blood pressure increases, cancer, bronchitis[10,11,12] and lung diseases increase.

An average person breathes 25 kg of air per day. As a result, harmful dust, soot and gases in the air accumulate in the body. This gradually leads to the weakening of the human body, and as a result, the body loses the ability to adequately resist various infections. We will consider all this in separate examples.

Nitrous oxide poisons the human body.

Nitrogen II oxide inflames the mucous membranes of the eyes , lungs, and causes irreversible damage to the cardiovascular system.

0.01 % CO in the air , the body is significantly poisoned. When inhaled, it binds to hemoglobin in the blood and squeezes oxygen from it, resulting in oxygen deficiency and affects the central nervous system[13,14,15]. Chronic poisoning is manifested by headache , ringing in the ears, difficulty breathing, and general weakness.

cause tissue, nervous system, gastrointestinal failure, as well as disruption of the metabolic process and the origin of cancer[16,17,18]. Lead compounds, like carcinogens, do not leave the body and become dangerous concentrations.

Ways of lead entering the body.

- Through the skin
 - O through the goat
 - Asthma and death through mucus membranes
- Q The effect of lead on the body.
- To the nervous system
 - To the digestive system
 - To the blood-vascular system
 - Endocrine and excretory system
 - To the genitals
 - To the musculoskeletal system

(Table 1)

Through the scheme below, we can see the ways of influence of vehicles on human health .



Effects of air-borne exhaust gases from automobiles on human health.

Table 2

Substance name	Causes diseases
Sulfur oxide SO ₂	chronic asthma, bronchitis, lung inflammation liver-blood pressure increase and eye diseases. Because SO ₂ in the air reacts with water to form weak sulfuric acid, which burns the mucous membranes in the eyes. As a result, the eye becomes red.
Carbon monoxide	Hemoglobin in the body decreases, cardiovascular systems are damaged, sclerosis increases, dizziness, heart rate accelerates, sleep is disturbed, a person becomes tajang (nervous disease).

Nitric oxide N_xO_x (NO, NO ₂ , N ₂ O ₅ , N ₂ O ₃ , N ₂ O ₄)	It is a colorless and odorless poisonous gas that has a strong effect on the respiratory tract. It reacts with exhaust gases and creates photochemical fog, that is, smog. Usually dense fogs consisting of various harmful gases and dusts are called smog. The effect of nitrogen oxides on the human body begins with the appearance of a mild cough. High concentrations of nitrogen oxides cause severe coughing, headache[19,20] and vomiting. Nitrogen oxides cause the formation of nitric acids (HNO ₃ and HNO ₂) when moisture collides with mucous membranes of the surface. They have a strong effect on the lungs
Hydrocarbons (gasoline vapors, pentane, hexane, etc.).	They have a strong effect on the human body. Their extremely small concentrations cause diseases such as headache and dizziness. If a person breathes this air for 8 hours, he will develop a cough and a headache.
Hydrogen sulfide H ₂ S	dizziness, dizziness, fainting and decreased sense of smell
Fluorine compounds	nosebleeds, teeth and bones in general may decay, goiter appears, gastrointestinal diseases increase
Lead compounds.	nervous diseases, urinary tract, and respiratory tract. It reduces the amount of hemoglobin in the body. Lead compounds enter the body through the respiratory tract, where about 50% of its compounds accumulate
Atmospheric dust.	Carbon black has the ability to be adsorbed on heavy hydrocarbons and benz(a)pyrene. This is extremely dangerous for humans the respiratory tract, it is quickly absorbed into the body and causes tumor disease and various diseases.

According to our inquiry, at least 20-25 people in the city die in car accidents every year, and hundreds of people suffer various injuries. In rural areas, this indicator causes 3-5 deaths and more than 50 injuries.

Many people suffer from nervousness or diabetes due to traffic noise. Our experience shows that at least 80% of people with diabetes are women. The main reason for this is that many young drivers who drive this vehicle suddenly use a high-pitched horn when passing in front of women. This causes women to fear and develop diabetes[21,22]. There would be no harm in keeping these signals as long as they are issued according to the state standard. But some businessmen, craftsmen and drivers deliberately install such a high volume sound generator, and as a result, ordinary people suffer again.

Picture 1



In order to investigate this interesting situation, when we contacted the statistics department of the health organization of Fergana region, they gave the following statistics of diseases (-table). (Table 3)

**According to the statistical report of the Ministry of Health
Fergana city and Fergana district**

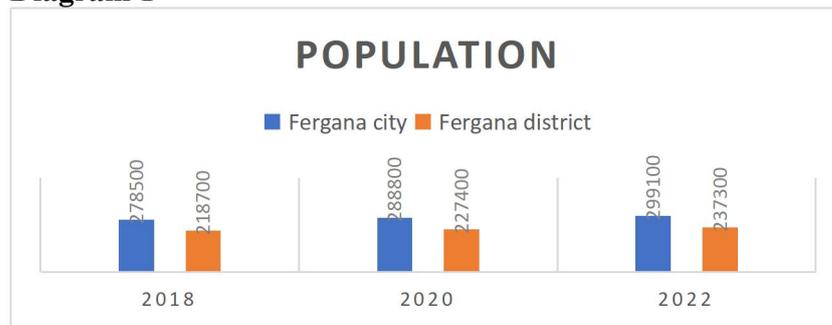
	Headlight. sh. 2018	Headlight. T. 2018	Headlight. sh. 20 20	Headlight. T. 20 20	Headlight. sh. 20 22	Headlight. T. 20 22
Total persons	217295	177167	217306	182461	226844	157108
Diseases from them	241439	196852	228743	191461	250429	168451
Some disease and paralysis.	1975	9915	7319	4217	2295	4282
new tumors	1683	181	1925	975	1752	60
Diseases of the endocrine system	15725	20263	36150	25113	19803	19885
Total diabetes (sah.diab.)	3652	6628			3588	5560
Diseases of blood and blood-forming organs	40840	33161	13909	18120	38907	32598
of which: anemia	40796	32355	13909	18120	38871	32598
Mental nausea	9313	9440	8543	2952	7144	2511
Diseases of the nervous system	13702	8892	9793	14918	12703	8900
of which: cerebral palsy in children	194	506	11	0	189	493
Tut q anok and tut q anok situation	164	813	230	600	175	685
Peripheral vascular diseases	1725	379	1274	0	1646	46
Alzheimer's disease	0	0	97	56	0	18
Diseases of the eye and its appendages	6568	6782	5300	14925	5940	5850
Diseases of the circulatory system	27873	17897	30528	24462	24539	16193
Respiratory disease.	56619	38588	58444	29507	70348	27961
Acute bronchitis	743	2293	1466	882	1026	1102
among them: chronic pharyngitis, nasopharyngitis, sinusitis, rhinitis	2440	1685	1440	2911	3594	451
Diseases of the tonsils and adenoids	1379	1475	359	40	3382	421
Allergic rhinitis	328	423	3071	1206	285	254
Lung inflammation (pneumonia)	530	150	663	224	574	143
Chronic and unspecified bronchitis, emphysema	2116	1701	1208	2016	1938	1116
Asthma, asthmatic condition	705	826	658	1414	710	778

Digestive organs are sick.	17519	12148	15772	11877	19122	11125
oral cavity, salivary glands	0	540	16	23	0	1262
Stomach and 12 other diseases	744	850	680	195	1005	617
Gastritis, duodenitis	2173	963	2781	662	3057	868
Chronic hepatitis	784	303	657	517	681	271
Liver cirrhosis	180	115	178	154	158	55
Gallstone disease	341	177	253	89	305	283
Diseases of bile ducts	2790	217	3271	426	3621	90
the pituitary gland	549	36	386	28	545	12
Urinary system	20641	13490	2138	6001	20840	14314
Skin and subcutaneous tissue diseases	3504	4026	16951	15165	3210	5186
The bone, muscular system and connective tissue are sick.	7356	6957	1547	1615	6470	6612
Congenital anomaly	632	1321	4835	1364	592	944
Some conditions that appear in the perinatal period	4427	2053	542	926	4227	1386
Symptoms and undefined signs	0	80	0	110	0	590
Injury and poisoning	6884	4832	5441	5006	6884	2731
T ransport accidents	0	0	230	200	500	256
External environmental causes of the disease	0	0	0	0	0	49
poisoning	0	0	0	2	0	0

From this so our interest population number , birth and scientist to the number when we look at it The difference is mother of the region statistics from the department the following the results we got

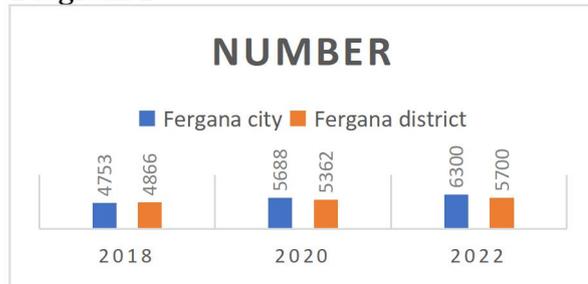
The difference is mother province statistics department gave to the message according to The difference is mother city and The difference is mother 2018, 2020, 2022 in the district population the number the following in the diagram described

Diagram 1



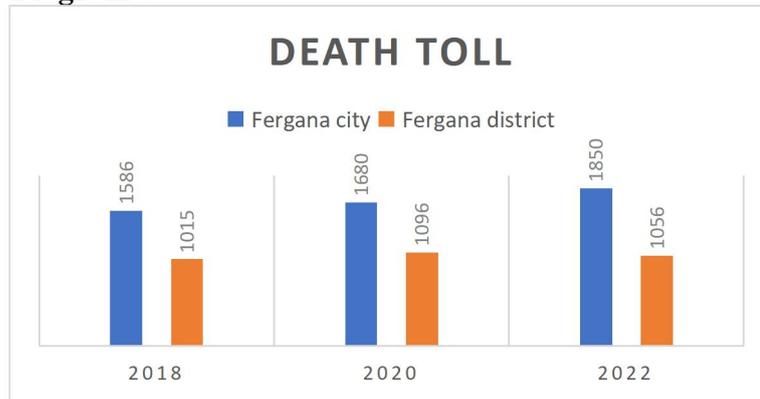
The number of births in Fergana city and Fergana district in 2018, 2020, 2022 is shown in the diagram below, according to the information provided by the Statistics Department of Fergana Region.

Diagram 2



The number of deaths in Fergana city and Fergana district in 2018, 2020, 2022 is shown in the diagram below, according to the information provided by the Statistics Department of Fergana Region.

Diagram 3



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