Disease posed a problem on all Ottoman fronts; their prevalence depended on climate and the particular circumstances at the frontlines. Typhus, for example, played a significant role in decimating the 3rd Army during the campaign against Russia led by Enver in January of 1915. While the climate in the Caucasus exacerbated the spread of typhus, this “winter disease” posed a problem on all fronts and especially where crowded and unsanitary circumstances facilitated the spread of lice. Malaria was most common in warmer climates and was the most frequent cause of sickness in soldiers stationed in Mesopotamia and Gallipoli. Deaths from bacterial disease, caused by consuming contaminated water or food, or else through oral contact with exposed utensils or drinking vessels, peaked among troops of the 3rd Army fighting in Palestine during March and April of 1915. The situation at the Gallipoli front was especially bad not only because the surrounding regions’ environment (such as marshes) was a breeding ground for malaria, but also because the soldiers were housed in abhorrent conditions; the barracks had no bunk beds and soldiers slept crowded on the floor. Moreover, a general shortage of water, a lack of water pumps, inadequate field toilets and innumerable flies swarming around them proved to be a deadly combination. Flies easily transmitted microbes and bacteria, contaminating water and food supplies and causing an epidemic outbreak of dysentery in May 1915. The worst were the green ugly “corpse flies” which feasted on the bodies left on the battlefield. The inability to bury fallen soldiers, as fighting was continuous, constituted another problems. The decaying corpses covered in flies quickly became cesspools of diseases. Being a soldier at Gallipoli, no doubt, meant fighting not only a human enemy, but also an invisible and perhaps more dangerous one. It was an enemy – albeit tiny in appearance – that reigned supreme, as the only weapons against it, i.e. adequate hospital beds, medical staff and medicine, were in short supply.

Besides unbearable conditions on the fronts, wartime movement, resulting in overcrowding and lack of hygiene, continuously handicapped Ottoman efforts…Soldiers, deserters, civilian refugees, and deportees on the move often carried with them microbes, bacteria, and typhus-infected lice. The empire’s poor infrastructure contributed to the spread of disease. Limited trains to and from the fronts were often packed to capacity, meaning that common soldiers and microbes were crammed under unsanitary conditions into freight cars over long stretches of time. Passenger train upholstery generally turned into breeding grounds for lice…

Large numbers of displaced civilians added pressure to the empire’s health concerns. Refugees and deported minority populations not only were exposed to diseases, but also contributed to their dissemination.

“The Ottoman Empire: War on Four Fronts, November 1914.”
Soldiers reached the war region on foot and came into close contact with peasants on the way. Both the soldiers and village folk were infested with lice, as the soldiers found no washing facilities on the way to the warfront or when they arrived at their posts. Both cities and villages were in chaotic conditions where soldiers and the members of public shared the same shelters. In the early years of war, conditions were conducive to vector disseminated diseases, and the Turkish doctors were fully aware that these circumstances led to lice-disseminated diseases but lacked the infrastructure to rectify the situation. Disinfection equipment was almost non-existent and at the beginning of the WWI, in the 3rd Army possessed only two fixed (located in Erzurum and Trabzon) and two mobile autoclaves. There was no real disinfection gear, and no sterilisation ovens and steam chambers. It was not clear whether mobile autoclaves could be transported in winter times and if they would be functional at their place of arrival. Typhus rapidly became an epidemic under these optimal conditions. The war had started with bloody battles that lasted for 3 weeks followed by a month of slowdown. In 1914 from October to December 138 out of 357 typhus patients died as well as 72 out of 167 relapsing fever patients. The real tragedy came after the defeat of Sarıkamış where the majority of soldiers perished due to freezing conditions. The retreat of survivors in misery towards the villages of Erzurum, Hasankale and Pasinler, created a huge influx that filled the hospitals beyond capacity and infected the doctors and medical personnel working in those hospitals. Commander İsmail Hakkı Pasha died of the disease and Medical inspector Süleyman Numan was also infected with the disease. Although reliable statistical input was unavailable then, data from January 1915 indicate 522 typhus patients with 251 deaths and 223 Borrelia recurentis infected patients with 121 deaths. In Erzurum, 20–30 civilians were dying of the disease every day. In March, after a heavy impact, the disease lost its severity at the war front; however, it continued to impact those at the back, such as the gendarmerie, as well as civilians.

Başustaroğlu, Ahmet C. and Sadık Emre Karakuş. “The Fight against Typhus in the Ottoman Army during World War I.” In Focus. 140.
#3 – Armenian Genocide

Background: Though the Ottoman Empire, throughout its long history, had had a generally good track record with regard to human rights (long-standing tolerance of its Jewish and Christian populations), the pressures of the world war and the rise of modern nationalism led to the worst kind of wartime abuse: genocide. Since the rise of nationalism, there had been tensions between the Ottoman government and the Armenian population, and sporadic persecutions of Armenians had occurred since the late 19th century. With the pressure of a world war, some members of the Ottoman government looked at the Armenians with increased distrust. After all, many Armenians lived near the Russian border (a combat zone), and because both Armenians and Russians were Christians, the Ottomans suspected that the Armenians might ally with the enemy of the Ottoman state. In 1915 Ottoman forces began rounding up Armenians, especially in the eastern part of the country. Between 1 and 1 ½ million Armenian men, women, and children died – either killed directly or marched across eastern Turkey and into the Syrian desert, where they died of disease and starvation. This is considered the first modern genocide in world history; unfortunately, it would not be the last.

Here is an early account of the Ottoman persecution of Armenians and the effects on survivors:


Bishop Bagra, writing from Etchmiadzin, states that great quantities of refugees have arrived there and at other points of the Government of Erivan…..In all 160,000 refugees passed through Igdir and Etchmiadzin. Their pitiful condition is indescribable, and it is reported that the daily mortality is about 100 deaths due to famine and disease, chiefly dysentery and typhus.

The needs of the refugees were at first attended to by the Committee of the Etchmindzin Brotherhood, who distributed bread, opened hospitals, and an asylum for 3,000 children. The transport of the sick and feeble picked up along the line of march was also undertaken by this brotherhood.

The Moscow Armenian Committee subsequently sent their medical provisioning detachment to organize a proper system of relief. …[People from various areas came to help.] But the needs of the refugees are very great. There is urgent need of doctors and nurses in considerable numbers, and medicines, flour, sugar, tea, and other foodstuffs and clothing in large quantities are required.

Mr. Consul Stevens adds that about 9,000 refugees at Elenovka and Ahti are in no better condition than the refugees in the Government of Erivan, and have great need of medical attention. It seems inevitable that half the refugees must die unless this help is quickly forthcoming.
Excerpt from the writings of Alexander Aaronsohn (a war correspondent of the Associated Press of America, who observed and wrote about events in the Ottoman Empire).

Beersheba, a prosperous town of the ancient province of Idumea, was the southern base of operations for the advance on Suez….

The soldiers themselves suffered much hardship. The crowding in the tents was unspeakable; the water-supply almost as inadequate as the medical service, which consisted chiefly of volunteer Red Crescent societies – among them a unit of twenty German nurses sent by the American College of Beirut. Medical supplies, such as they were, had been taken from the different mission hospitals and pharmacies of Palestine – these “requisitions” being made by officers who knew nothing of medical requirements and simply scooped together everything in sight. As a result, one of the army physicians told me that in Beersheba he had opened some medical chests consigned to him and found, to his horror, that they were full of microscopes and gynecological instruments – for the care of wounded soldiers in the desert!


A World War I field hospital in the Middle East in 1917. The staff are members of the Red Crescent Society.

http://old-photos.blogspot.com/2008/07/world-war-i-field-hospital.html
#5 – Famine and Disease in Palestine

Excerpts from a diary by Ihsan Turjman (a Palestinian Arab soldier in the Ottoman Army in Palestine).

Misfortunes Visit Us All at Once: 
Locusts, War, Inflation, and Diseases 
Sunday, May 9, 1915

I write this with my mind totally preoccupied. I cannot think of anything except our present misfortune. When will we finish with this wretched war, and what will happen to us next?

Our lives are threatened from all sides: A European war and an Ottoman war, prices are skyrocketing, a financial crisis, and the locusts are attacking the country north and south. On top of all this, now infectious diseases are spreading throughout the Ottoman lands….

Typhus Is Spreading in Jerusalem 
Monday, May 24, 1915

I was shocked to hear today about the death of Ahmad Effendi Nashashibi….He died from typhus in the prime of his youth. He was buried this afternoon. Diseases are spreading like wildfire among the population, especially among Muslims – for they do not take the proper precautions, may God forgive us. I was told from one of the health inspectors in town that four typhus cases were reported in one day alone in Bab Hutta. When I heard the news, I was struck with great dread, not only for the people but also for myself. First, because I live and breathe all day among soldiers, in a place that is full of bugs and lice; and second, because of the lack of good hygiene in the workplace….I love life and enjoy its offerings. Please God, I am still young, do not take me away.

#6 – Ottomans in British POW camps

Many Ottoman soldiers taken as prisoners of war by the British were held in POW camps in Egypt. There diseases spread: in particular, a contagious eye disease (which returning POWs later spread throughout rural Turkey) and a disease caused by a vitamin deficiency as a result of improper diet in the camp.

“Even as these cultural activities continued, various diseases killed or maimed the prisoners, particularly in the Egyptian camps. Trachoma, a contagious eye disease acquired during the war at the Palestine and Yemen fronts, spread relatively quickly in the camps, partially or fully blinding as many as 15,000 prisoners. A nutrition deficiency disease, pellagra, killed at least 3,056 Ottoman prisoners in the Egyptian camps. Pellagra was a recognized disease, but its causation was not known at the time. Although the British doctors were adamant at first that the prisoners who came into the camps already had the disease, evidence shows that even if small numbers of them came in already pellagrous, many others developed the disease in the camps due to a "faulty" diet. While the intention clearly was not to make the Ottoman prisoners sick, certain Orientalist and racialist beliefs of the British led them to concoct a "European diet" for the German and Austro-Hungarian prisoners in the Egyptian camps, and a "non-European diet" for the Ottoman prisoners. The "non-European Diet" was high in calories, most of which came from the daily thirty-two ounces of bread, but it lacked the crucial vitamin B3 (niacin). Extended deficiency of niacin resulted in pellagra among more than 9,300 Ottoman prisoners of war, while the vast majority of the Germans who were given their "European diet" remained pellagra-free. And those small numbers of Germans, who eventually succumbed to pellagra, developed it well after the Ottomans did, another indication of both their more nutritious diet and that the disease developed in the camps.”