



# Crimean-Congo Hemorrhagic Fever (CCHF)

A viral hemorrhagic fever transmitted by ticks. It is endemic in Eurasian countries such as, Turkey, Pakistan, Afghanistan and Iran. CCHF virus is spread by the Hyalomma tick, which is found mainly on cattle and sheep. Muslim countries, in which these animals are sacrificed during Eid-Al-Adha, are among the countries where CCHF is endemic.



**Dr Khurrum Isma**Hospital Pharmacist

#### **Transmission**

The CCHF virus is transmitted to people either by tick bites or through contact with infected animal blood or tissues during and immediately after slaughter. Human-to-human transmission can occur resulting from close contact with the blood, secretions, organs or other bodily fluids of infected persons. Hospital-acquired infections can also occur due to improper sterilization of medical equipment, reuse of needles and contamination of medical supplies.

### Signs and Symptoms

If you get bitten by an infected tick, or come in close contact of an infected person or animal's body fluids, seek immediate medical attention if you start showing the following symptoms. These symptoms appear within 1 to 3 days of the transmission and initially resemble symptoms of flu. After 2 days, you may start showing additional symptoms including: High grade fever, Stomach pain, Diarrhea, Myalgia (muscle aches), Headache, Nausea, Sensitivity to light, Excessive sleepiness, Depression, Localized abdominal pain in the upper right side, Rashes, Jaundice, Uncontrolled bleeding.

### **Treatment**

General supportive care with treatment of symptoms is the main approach to managing CCHF in people. The antiviral drug ribavirin has been used to treat CCHF infection with apparent benefit.

### **Prevention and Control**

It is difficult to prevent or control CCHF infection in animals and ticks as the tick-animal-tick cycle usually goes unnoticed and the infection in domestic animals is usually not apparent. Furthermore, the tick vectors are numerous and widespread, so tick control with acaricides (chemicals intended to kill ticks) is only a realistic option for well-managed livestock production facilities. There are no vaccines available for use in animals. In the absence of a vaccine, the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.

### When buying the sacrificial animals or caring for animals

- 1. Inspect the animal body to check for ticks each day.
- 2. Do not touch or crush the tick with your bare hands.
- 3. Do not try to remove the tick with your fingers.
- 4. Wear light colored, full sleeve clothes and shoes with socks.
- 5. Apply an insect repellent on the exposed area of body.
- 6. Take a shower and change your clothes as soon as you return home.

### **During Qurbani**

- 1. Cover your mouth and nose during start of slaughtering.
- 2. Slaughtering should be done in abattoirs or restricted places.
- 3. If your hands are blood stained, do not rub your eyes or nose.
- 4. Should not handle the hide without gloves.
- 5. Try to keep your hands clean by washing frequently.
- 6. If soap and water is not available, use plain water or tissue.
- 7. The offal and leftover of the animal should be disposed-off properly.
- 8. Slaughter area should be washed and cleaned after the Qurbani.
- 9. Blood in slaughter area can be covered with dry bleaching powder.

#### References:

https://www.who.int/emergencies/diseases/crimean-congo-haemorrhagic-fever/introduction.pdf?ua=1 https://www.dentalnewspk.com/congo-fever-and-eid-ul-azha-preventive-measures/





# **Typhoid /Enteric Fever**

Salmonella enterica serotypes Typhi causes typhoid fever and Salmonella Paratyphi A, B and C causes paratyphoid fever (mainly food poisoning and diarrhoea), both are potentially severe and occasionally life-threatening bacterial diseases collectively known as enteric fever.

Typhoid fever is common in summer. It affects an estimated 22 million people worldwide each year. It is endemic in India, Pakistan and Bangladesh. Humans are the only source of these bacteria; no animal or environmental reservoirs have been identified.



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Infectious Disease

Typhoid fever and paratyphoid fever are more common in areas of the world where water is more likely to be contaminated with sewage. It's a disease of poor environmental sanitation and unsafe water supply. Transmission is through feco-oral route. Contaminated fruits, vegetables, salads, eggs, meat, processed food, chicken nuggets etc. can carry salmonella and can end up with disease.

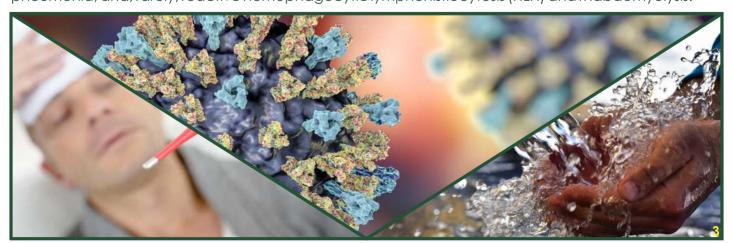
People who are actively ill with typhoid fever and those who are carriers of Salmonella Typhi can spread it to other people. About 1 in 20 people remain carriers after they've recovered. So contact with a person with active typhoid disease, contact with the chronic asymptomatic carrier and eating food or drinking beverages that are handled by a person carrying the bacteria can cause the disease in the community.

Carriers are people who have recovered from typhoid fever or paratyphoid fever but continue to carry and shed the bacteria in their stools for longer than one year.

After ingestion of contaminated food or water, Salmonella Typhi invade small intestine and enter the bloodstream. From here they are carried by white blood cells in the liver, spleen, and bone marrow. They multiply and reenter the bloodstream. At this stage bacteria invade the gallbladder, biliary system, and the lymphatic tissue of the bowel and multiply in high numbers. Then they pass into the intestinal tract and can be identified for diagnosis in cultures from the stool tested in the laboratory.

The bacterium grows intracellularly in the intestinal lymphoid tissue, presenting acutely with gastrointestinal symptoms and fever. The classic presentation is that of a prolonged step-ladder fever accompanied by malaise, abdominal pain, and constipation in the first two weeks, followed by diarrhea in the third week. Metastatic infection in the liver, spleen, bone, and other viscera may occur. Many patients develop gastrointestinal bleeding and intestinal perforation.

Enteric fever by S. typhi can result in severe disease causing complications in 10%-15% of patients, including gastrointestinal bleeding, intestinal perforation, hepatitis, pancreatitis, typhoid encephalopathy, disseminated intravascular coagulation, hemolytic uremic syndrome, endocarditis, pneumonia, and, rarely, reactive hemophagocytic lymphohistiocytosis (HLH) and rhabdomyolysis.





The disease can be serious among certain populations like children younger than 5, older adults, and people with immune systems weakened from a medical condition, such as diabetes, liver or kidney disease, and cancer or its treatment. Specific genetic polymorphisms in major histocompatibility complex class II and III genes have also been found in individuals with severe typhoid fever.

Accurate diagnosis is the key to management and prevention. Use of inappropriate and inaccurate tests can lead to incorrect diagnoses and can result in inappropriate treatment.



Gold standard test for the diagnosis of Typhoid fever is Blood culture. Other tests like typhidot or widal are neither sensitive nor specific and are no more recommended for diagnostic purposes especially in this era where the cases of XDR salmonella are on rise. During the first week of illness, we can isolate Salmonella typhi in the blood of about 90% of patients and, at the end of the third week, in the blood of only 50% of patients. One can isolate the bacteria in the feces for the whole duration of the disease, but between the third and the fifth week the yield is high. About 5 to 10% of patients continue to excrete the bacilli, two or three months after the onset of the disease, shedding 3% after one year: these are chronic carriers.



Pakistan Health Authorities have reported an ongoing outbreak of extensively drug resistant (XDR) typhoid fever that began in the Hyderabad district of Sindh province in November 2016 and has been detected in more than 2000 people, in 14 districts since then.

An increasing trend of typhoid fever cases caused by antimicrobial resistant (AMR) strains of Salmonella enterica serovar Typhi (or S.Typhi) poses a notable public health concern.

This XDR Salmonella entericaserovar Typhi (S. typhi) is resistant to five classes of antibiotics (chloramphenicol, ampicillin, trimethoprim-sulfamethoxazole, fluoroquinolones, and third-generation cephalosporins) due to the acquisition of H58 haplotype. Carbapenems and azithromycin are antibiotics of last resort. Reports of azithromycin resistance are already emerging from South East Asia. One or more genetic mutation could make typhoid untreatable in some areas in Pakistan.

Prevention is always better than cure. Wash your hands thoroughly after using the toilet, changing diapers or helping someone with diarrhea. Keep your nails short, otherwise bacteria can reside there. Eat properly washed fruits vegetables and salads. Avoid eating food from outside especially from street vendors (Contaminated foods usually look and smell normal, which is why it is important to know how to prevent infection). Eat properly cooked food. Be sure to refrigerate or freeze foods likely to spoil or go bad quickly, prepared foods, and leftovers within 2 hours (or 1 hour if the temperature outside is 90°F or hotter). Wash your hands thoroughly with running water and soap after touching pets and other animals and their belongings and get vaccinated.



## Q switch ND-Yag laser.

A quality-switched laser (Q-Switched) is a non-invasive laser that creates high-intensity pulsed beam light. The Q-Switched laser beam pulses last a mere billionth of a second. The energy emitted from a Q-switched laser is concentrated into very powerful pulses.

Because their contact with the skin is less than other lasers, Q-Switched lasers are known for not damaging surrounding tissue and causing unwanted side effects.



**Dr. Humaira Ata**MBBS, Diploma in Dermatology
Consultant Laser Specialist

With advanced technology, Q-Switched lasers are used for many conditions including, melasma, tattoo removal, age spots, sunspots, birthmarks, freckles, moles and skin rejuvenation.



Melasma is a common skin pigmentation issue that causes dark, blotchy, and uneven skin tone on sun-exposed areas, mainly on the face. It is more common in women than in men and generally appears for the first time in the 20s to 50s, or during pregnancy. Although it's medically harmless, for many people the discoloration is a cause of embarrassment so it is common to seek treatment.

Before you begin to think of a laser as the magic wand of spots removal, you need to be aware that it's not a "one and done" proposition. Almost all tattoos require multiple sessions for removal. How many times will you need to go under the laser? The answer is not that simple.

## **Teeth Whitening**

Tooth discoloration and staining is primarily due to two sources of stains; Intrinsic and extrinsic. Tooth whitening targets those intrinsic stains that cannot be removed through mechanics such as scaling. Even with regular brushing and flossing, it can be hard to avoid the gradual graying the teeth. Likewise, if you have poor oral health habits, your teeth can rapidly turn yellow, brown or even black. Common misconception is that tooth whitening damages enamel. The answer is NO. Teeth whitening gel will not damage or harm your tooth enamel. In order to achieve successful whitening, the product flows through the enamel tubules and begins to lighten the underlying stained tissue. Whitening products can cause temporary tooth sensitivity that goes away in few days. You can get 6-7 shades lighter teeth in just 45 minutes.



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# **Customer Loyalty an Interest of Quality Professionals**

While the intention to encourage repeat custom dates back to the very first commercial interactions, formal structures around customer loyalty most probably began with premium marketing in the late 18th century, when American retailers gave copper tokens to customers making a purchase. The tokens could be redeemed against future purchases. Some 200 years later, it is now difficult to find organizations that do not claim customer satisfaction or loyalty to be their number one priority, but what does this mean and why should it be of interest to quality professionals?



**Amara Sundus**QA Officer

### What is loyalty?

Loyalty is a behavior exhibited by customers, built upon the feeling of satisfaction that accumulates through interactions or touch points over time (Edyman. M, 2018). Loyalty, however is significantly more than a conduct! It is a fallacy to expect that a client is faithful since they keep on purchasing from you. While this description may be attractive, it does not address adequately the nuances of a more complex situation.

A more compelling definition that addresses these weaknesses may be that loyalty exists where a customer continues to believe that your organization's product or service offer is their best option. As quality professionals, we need to ask ourselves where we fit into this scenario and where we can find support both from our professional body and from key standards, including ISO 9001:2015, which lists 'customer focus' as the first of seven quality management principles.

The CQI says *quality is about making organizations perform for their stakeholders* – from improving products, services, systems and processes, to making sure that the whole organization is fit and effective. It states that customers are the most important group of stakeholders for most businesses. Of course, in any business everyone is responsible for customer loyalty – but not everyone can have the skills, training and experience to drive excellence.

However, these attributes are present in quality professionals who are dedicated to protecting and strengthening their organization's reputation, and ensuring that current and future customer needs are met or exceeded.

So how does a quality professional practically proceed in order to understand the loyalty profile of existing customers, determine the drivers of that loyalty and then make improvements aligned with those drivers?

Various frameworks exist to support this process but one which has gained prominence is the concept of 'Net Promoter'. The system uses an insightful question to help position customers within three behavioral groups. 'Promoters', those scoring nine or 10, are loyal enthusiasts who actively purchase and encourage others to do the same. 'Passives', those scoring seven or eight, are satisfied but unenthusiastic and easily wooed by competitors. 'Detractors', those scoring six or less, are unhappy and feeling trapped in a bad relationship.



Quality professional has to ask the question in the best way, to provide timely, reliable and actionable data; undertaking robust analysis to learn why the customer feels as they do; and taking action to create more promoters and reduce the number of detractors. Here are a few things to consider while determining or measuring the customer loyalty:



- Get the question right
- Most surveys are too long
- Use the right language
- Ask the right customers
- Get the format right
- Avoid anonymous surveys and close the loop quickly
- Gamesmanship¹
- Improvement action
- Secure the benefit

### THE QUALITY APPROACH

Within the team effort required to design, deploy and operate an effective customer loyalty program, quality professionals are positioned, perhaps uniquely, to take the lead.

Not only is the consideration of key stakeholders an implicit part of their organizational mandate, but operational independence as well as a toolkit of key analysis and improvement methods also supports success.

Simple quality tools such as check sheets or the Pareto principle can clarify themes within customer comments, while others such as cause and effect diagrams can assist with the analysis when determining required improvements.

ISO 9001:2015 is central to the quality professional's approach. With customer focus established as a key quality management principle, what other scaffolding exists? Examples include:

**The process approach**, which is founded on an understanding of requirements and processes to ensure that they are achieved effectively. Alignment with the insight gained from loyalty surveys and the imperative to act on those requirements for improvement is clear.

At the heart of the **Plan**, **Do**, **Check**, **Act (PDCA)** cycle are customer requirements and the satisfaction achieved as an output of the quality management system (QMS). Thus, an effective customer loyalty program provides both PDCA inputs and outputs.

As quality professionals and customer loyalty advocates, where does this leave us? An environment seemingly gaining in complexity, competition and uncertainty at an accelerating rate, knowledge of loyalty drivers, as well as a core ability to drive sustainable improvements in response to any changes to these drivers, is likely to be a source of competitive advantage.



At Ali Medical Centre, a quality policy, aligned with an organizations purpose, context and strategic direction, quality objectives and planning to achieve them are devised on departmental and organizational level. Ali Medical has considered its requirement to be customer focused and to gather customer feedback including, but not limited to, complaints, provides a powerful framework for determining what needs to be done to develop customer loyalty. As a care providing center, we find ourselves ideally placed to become more proactive and strategic, which can only be advantageous to our employers and us, both individually and collectively.

## Patients' Feedbacks

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A very supportive and caring team. Ms. Ghaliya & Dr. Omar are very professional & attend to both emotional & medical needs of their patients. I am really thankful to them for the care and support, both have provided during the procedure.

Atmosphere and the ambiance is good, cooperative staff and doctors

Aqsa Aamir ,

Hassan Malik

On call Dr. Munawer & staff were very professional & courteous. Took really good care of my son. Five star for your service.

I came with my father who is 91 yrs of age suffering from CA.Prostate. I was received cordially and promptly by the E.R staff (Abdul Qayyum, Zeeshan, Afsana, Adnan & Saima). They comforted the patient. The consultants were there in no time and his orders were followed properly I wish and pray well for the staff and wish them all the best in their future endeavours.

Zain Haider

Abdul Wahab

We approached emergency with high fever and shivering. The staff at AMC emergency is cooperative, competent and well conversant with their job. They ably handled the patient and started immediate treatment as per requirement. Mr.

Yaqoob was handling the patient.

I came in your OPD to know about pediatrician timing. One of your staff members Mr. Naeem guided me very well. I will say your management and your staff team is very cooperative.

Alamgir Butt

Jawad 1

Came to emergency for canalization of my father. He was received cordially and properly by the staff. I wish the staff of ER well and pray for their prosperous future. I am satisfied with the facilities. Procedure was according to the standards and staff was very cooperative. Doctors and other staff were highly professional. Highly recommend Dr. Omar, he was very kind, patient and professional. Satisfied 5/5.

Abdul Wahab

Tahira

So nice of Dr. Tariq. He is a very lovely person. Love him. Stay blessed.

found Dr. Humaira very professional & competent doctor. She is expert in her work as well as communication with patients. I also want to appreciate Ms. Abida Bibi for her care, professionalism & maintenance of room & equipments plus privacy.

Shayan

Dr. Sanam

I came to Dr. Humaira for my acne treatment. She is a very professional and friendly doctor. I am very satisfied with the results. I also recommended her to my friends and family. Her staff member Abida bibi is very cooperative. Her happy face and friendly attitude makes you forget half of your health issues. Ali Medical Centre's laser clinic has been my go-to station for past 7 months and this trend is not changing anytime sooner.

Javeria Rasheed

#### **Editorial Board**

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