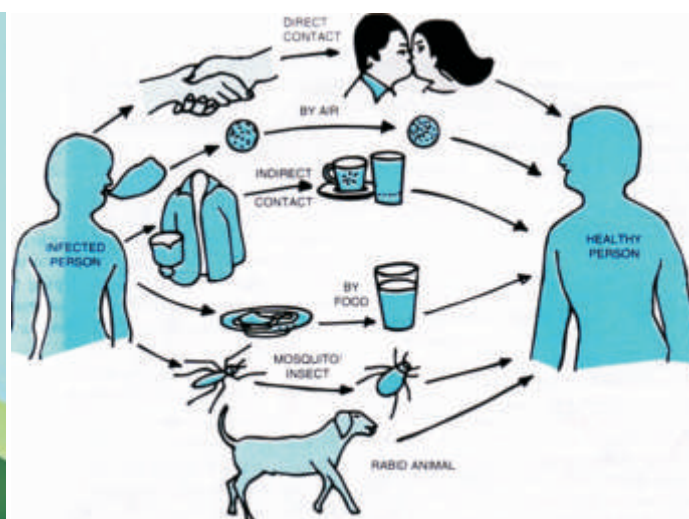


**EDITORIAL****DISEASE PATTERN : CHANDIGARH****Introduction**

With the ever changing population trends and lack of basic amenities, airborne, vector-borne and water-borne infectious diseases are being transmitted at a faster rate than before. Human being is highly susceptible to such infections where an array of air and water borne diseases are being encountered by us almost on a regular basis. Depending on the global climate change, socio-economic development, urbanization, changing age structure and lifestyles, India is at a position where it is facing a growing burden of non-communicable diseases, thus making it a region specific issue. The present global disease monitoring reveals that there is a steep rise and alteration in disease epidemiology. India faces the challenge of a range of infectious diseases. While deaths from non-communicable diseases (NCDs) are becoming increasingly prevalent, huge numbers of Indians continue to die annually due to communicable disease.

**Non-Communicable Diseases****Communicable Diseases****Index**

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**Paryavaran  
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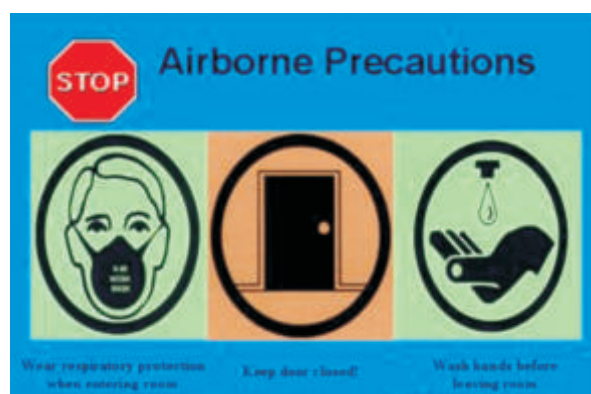


## Air-borne Disease

An airborne disease is caused by pathogens and involves transmission through the air. They are spread when droplets of pathogens are expelled into the air due to coughing, sneezing or talking. WHO estimates 7 million people die every year from ambient (outdoor) and household air pollution, with nearly 90 percent of deaths occurring in low- and middle-income countries. In Chandigarh, Influenza is not a prevalent disease, although in the year 2018, it affected 4 people and lead to the death of two individuals. It is mostly caused by a viral infection that directly attacks the respiratory system. Some of the common body symptoms include- body chills, nasal congestion, fatigue, muscle cramps, sensitivity and pain in the eyes.

Year	Number of People Infected (Influenza)
2014	1
2015	22
2016	0
2017	63
2018	4

Source: Anti Malaria Officer-Cum-Nodal Officer (IDSP) NVBDCP, U.T. Chandigarh.



## Water-borne Disease



Water-borne diseases are the most important concern about the quality of water. The pathogens involved, include a wide variety of viruses, bacteria and protozoan parasites. Due to differences in size, structure, composition and excretion by humans and animals, their incidence and behavior in water environments differ. In Chandigarh, some of the common water-borne diseases dealt with, are- Cholera, Typhoid, Hepatitis-A and Hepatitis-E. Number of Cholera cases have only decreased over the past years. Whereas, people infected with Typhoid, Hepatitis-A and Hepatitis-E have been 371, 141 and 325 respectively in the year 2018. Although no recent deaths have been reported due to these water-borne diseases but in the year 2012, 12 cases of mortality were reported due to Cholera.

Typhoid fever is an acute illness associated with fever caused by the Salmonella Enterica Serotype Typhi bacteria. It is caused by the ingestion of contaminated food and water. This bacterial infection causes high fever, and can cause severe abdominal pains, headache, and loss of appetite. The total number of Typhoid cases in Chandigarh have only decreased by 18 from the year 2017 to 2018.



Cholera is an infectious disease that causes severe watery diarrhea, which can lead to dehydration and even death if untreated. It is caused by eating food or drinking water contaminated with a bacterium called *Vibrio Cholerae*. Some of the common symptoms of Cholera are- Rapid heart rate, loss of skin elasticity (the ability to return to original position quickly if pinched), dry mucous membranes, including the inside of the mouth, throat, nose, and eyelids, low blood pressure & dehydration. There had been no reported cases for Cholera after 2016.

Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus. It is usually spread through contaminated food, water and faeces. Common symptoms of Hepatitis A are- Jaundice (yellow eyes and skin, dark urine), pain in stomach, loss of appetite, diarrhea, fatigue. Total number of Hepatitis A cases have reduced by 56 from 2017 to 2018.

Hepatitis E is an illness of the liver caused by hepatitis E virus (HEV). It is a virus that can infect both animals and humans. Common symptoms of Hepatitis E are- vomiting, abdominal pain, loss of appetite, anemia and pale skin. Total number of Hepatitis E cases in Chandigarh have reduced by a number of 132 from 2017 to 2018.







## Vector-Borne Disease

Year	People Infected (Malaria)	People Infected (Dengue)	People Infected (Chikungunya)
2014	114	13	Nil
2015	152	966	Nil
2016	122	885	272
2017	114	1951	54
2018	44	301	4

Source: IDSP Sector-9 U.T. Chandigarh

Vector-borne infectious diseases are emerging or resurging as a result of changes in drug resistance, public health policy, shift in emphasis from prevention to emergency response, demographic and societal changes, and genetic changes in pathogens. India's malaria surveillance system ranks among the worst in the world according to the World Health Organization's (WHO) World Malaria Report 2017. Documented within the report is a claim that the surveillance system uncovers only eight percent of all malaria cases within the country. This opens up the possibility that statistics for malaria within India are hugely under reported. A correlation is drawn between nations with weak surveillance systems and those with high disease burdens. India was found to share six percent of the global disease burden. Some of the vector borne diseases that the people of Chandigarh deal with are Malaria, Dengue and Chikungunya. In 2018, number of people affected from Malaria have reduced to 44 as compared to 114 Malaria affected people in 2017. Reported cases of Dengue have reduced drastically from 1951 in 2017 to 301 in 2018 and the number of cases dealing with Chikungunya have decreased from 54 in 2017 to only 4 in 2018. Although no deaths have been reported due to these diseases, except one in 2017 caused by Dengue.

This positive variance was probably because of the National Vector Borne Diseases Control Program that deals with the prevention and control of six vector borne diseases, namely- Malaria, Filariasis, Dengue, Japanese Encephalitis (JE), Kala Azar and Chikungunya. The objectives of this program are-

- to prevent Morbidity due to Malaria, Dengue, Chikungunya, JE and Kala Azar.
- To improve the efficiency of the existing surveillance activities of disease control programs
- to establish a public Health Laboratories
- To provide a secure online data management system.



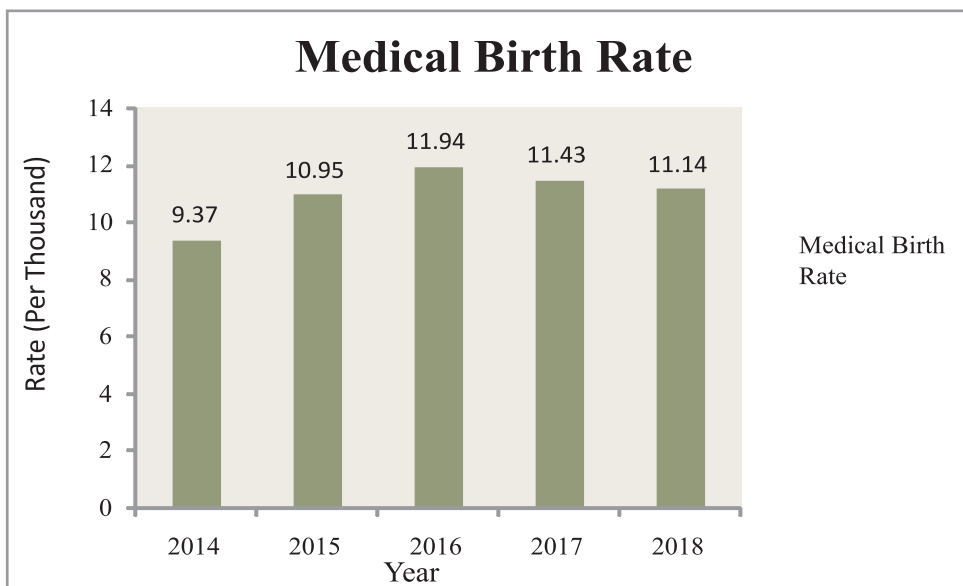


## Do's and Don'ts -

Dengue	
Do's	Don't's
Loss of plasma cells is one of the prominent symptoms of dengue. Eat immunity-boosting fruits, and drink fruit juices rich in Vitamin C.	Do not give Aspirin for the fever or pain because Aspirin is a blood thinner and exacerbate plasma leakage.
Repeated blood tests are necessary to monitor platelet counts and haematocrit.	Never delay treatment especially if symptoms like red spots, bleeding from any site, black stools, excessive drowsiness, breathlessness, paleness of skin and frequent vomiting may occur.
Timely intravenous fluid substitutes to counteract plasma leakage.	Do not give antibiotics as dengue is caused by a virus, not a bacteria.
Chickengunia	
Do's	Don't's
One can apply cold compresses in order to reduce pain and inflammation. The cold application helps to soothe the skin.	In any case of high fever, especially when accompanied by joint pains, consult your physician immediately.
Since the muscles around the joints become weak and stiff so mild exercises can help you get rid of the pain. Give large quantities of fluids with normal light diet.	Watch out for these symptoms: Red spots on skin, Bleeding from gums or nose, Frequent vomiting, Black stools and Drowsiness
During Chikungunya it is very common to experience rashes and itchiness so one should use prescribed creams and oils that could keep the skin moisturised.	Mosquitos are attracted to dark colours, so avoid wearing dark clothes.
Malaria	
Do's	Don't's
Do consume milk as it strengthens the body and provides a channel for the toxins to flush out of the body.	Don't include any cold foods in the diet such as cucumber, orange, papaya, bananas, watermelons, etc.
Do consume a light diet without much cooking and without much oil and spices.	Don't eat any lentils during malarial fevers. They take a long time to digest and also produce gas in the body; thus aggravating symptoms.
Timely intravenous fluid substitutes to counteract plasma leakage.	Never delay treatment especially if symptoms like red spots, bleeding from any site, black stools, excessive drowsiness, breathlessness, paleness of skin and frequent vomiting occur.



## Medical Birth Rate in Chandigarh

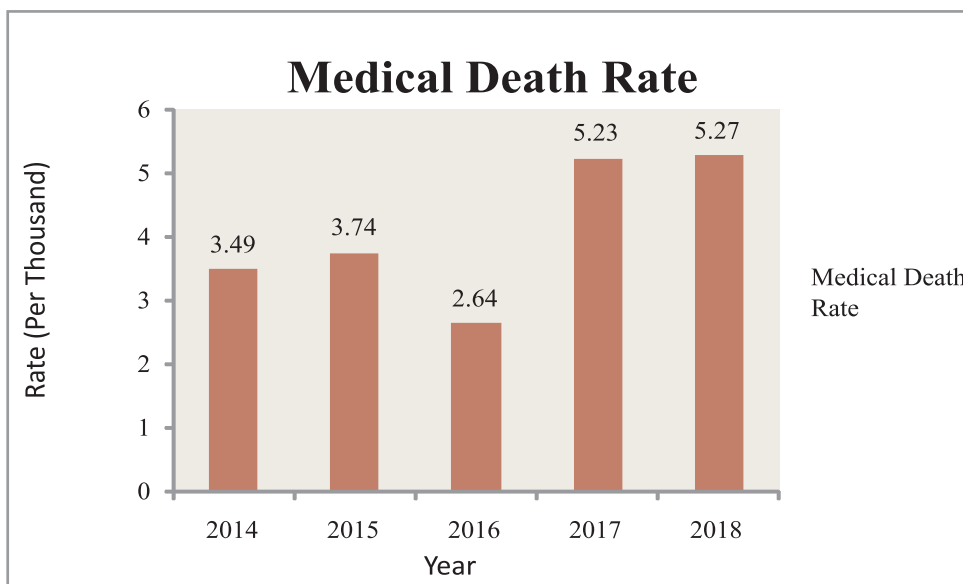


Source: Statistical Abstract Chandigarh- Additional Distt. Registrar, Death & Birth Sector-17, Chandigarh

Birth rate is defined as the number of live births per thousand of population per year. In Chandigarh the medical birth rate has attained a near constant value of 11 over the past three years (2016-2018).



## Medical Death Rate in Chandigarh



Source: Statistical Abstract Chandigarh-Additional Distt. Registrar, Death & Birth Sector-17, Chandigarh

Death rate is defined as the ratio of deaths to the population of a particular area or during a particular period of time, usually calculated as the number of deaths per one thousand people per year. The medical death rate in Chandigarh has attained a near constant value of 5 over the past two years (2017-18).



The medical mortality rate in Chandigarh in 2018 was 5.41% in rural areas as compared to 4% in 2017. In Urban areas, it was 19.97% as compared to 5.27% in 2017. The overall medical death rate in Chandigarh in 2018 was 19.57%. The medical birth rate in Chandigarh in 2018 was 0.73% in rural areas as compared to 0.59% in 2017. In Urban areas, it was 28.13% as compared to 11.74% in 2017. The overall medical birth rate in Chandigarh in 2018 was 28.37.



### Initiatives Taken by Chandigarh Administration

An awareness campaign was organized by the Health Department U.T., Chandigarh to celebrate 'World Hepatitis Day' on 28th July 2019 with the objective to generate awareness among general public by a way of performing Nukkad Natak/ Street Play in Village Burail, Sector-45, Chandigarh. Artists of Song & Drama Division, Press Information Bureau sensitized the general public regarding prevention methods of Hepatitis. A series of awareness generation activities were been organised for the masses through FM Channels, Doordarshan etc. Health Department, UT Chandigarh appeals to all citizens to know more and share more about Hepatitis to make Chandigarh disease free.

A Media Collaboration Meet for the launch of Rotavirus Vaccine under Universal Immunization Programme (UIP) was organized by Health Department, UT Chandigarh. The focus of the meet was to interact with media persons and sharing of the important information regarding Rotavirus Diarrhoea. This initiative will help to prevent the children between the age group of 0-5 years from Rotavirus Diarrhea in UT Chandigarh as Rotavirus is a highly contagious virus and Vaccination is the only specific intervention strategy for protection from Rota virus infection.

75,144 children's were immunized during two days of Sub National Immunization Day (SNID) Polio Round held on 16th and 17th June, 2019 in UT Chandigarh. To maintain Polio free status in Union Territory of Chandigarh, Sub National Immunization Round (SNID) Polio June 2019 was scheduled in U.T. Chandigarh on 16th and 17th June, 2019 and it was a two days House to House activity which was conducted to focus on High Risk areas/ vulnerable areas only.

World Tuberculosis Day (March 24)	World Cancer Day (Feb. 4)
World Health Day (April 7)	Rare Disease Day (Feb. 28)
National Infant Immunization Week (April 26–May 3)	World Asthma Day (May. 05)
World Immunization Week (TBA)	World Pneumonia Day (Nov.12)
National Women's Health Week (May 12–18)	World Malaria Day (April 25)
World Hepatitis Day (July 28)	World Hand Hygiene Day (May 05)

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**Medicinal Plants of Chandigarh**

The use of plants to heal or combat illness is probably as old as humankind. For centuries Native people of various cultures have used plants as medicine for all sorts of healing. Plants were at the basis of Indian and Chinese medicine for millennia, and they still are to this day. Chandigarh being a modern era city is blessed with botanical gardens with an average of 50 variety of medicinal plant species with variegated medicinal uses.



Common Name	Botanical Name	Appearance	Therapeutic Uses	Parts Used
Kachnar	Bauhinia variegata	Medium sized Evergreen and deep Pink Flowers	Cures Skin Diseases, Diarrhea	Bark, Roots and Flowers
Kalmegh	Andrographis paniculata	Annual herb, rose colored, small fowers	Cures jaundice, anemia	Whole herb
Nirgundi	Vitex negundo	Small shrub with blue flowers	Cures asthma, lung diseases, urinary problems	Whole plant
Salar	Boswellia serrata	Deciduous trees with small white flowers	Cures fevers, convulsions, bronchitis, cough	Resinous exudation of bark
Jacaranda	Jacaranda mimosifolia	Pyramis-shaped clusters of blue flowers	Cures skin infections, leukemia, acne	Bark, Flowers, Root

Source: [http://chandigarh.nic.in/green\\_botanical.htm](http://chandigarh.nic.in/green_botanical.htm)

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To,

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Note : While every care has been taken in compilation of the information available for this newsletter. However, readers must make thorough confirmation/enquiries at their own level before acting upon any data/information provided to the readers. Any discrepancy brought in the notice of ENVIS CENTRE, Chandigarh will be highly appreciated.

