# Deadly, unknown and neglected tropical disease

**7FACTS** 

ABOUT CARRION'S DISEASE

1

CARRION'S DISEASE IN THE ANDEAN VALLEYS OF PERU, ECUADOR AND COLOMBIA, AND PARTICULARLY IN RURAL AREAS WITH FEW RESOURCES

Factors contributing to the spread of the disease to previously unaffected areas include climate change, the El Niño phenomenon and increased population mobility.

3

THE CAUSATIVE ORGANISM IS

BARTONELLA BACILLIFORMIS, A BACTERIA THAT IS TRANSMITTED TO HUMANS THROUGH THE BITE OF A SANDFLYOF THE LUTZOMY/ GENUS.

As humans are the only known reservoir for the

bacteria, this a potentially eradicable disease.



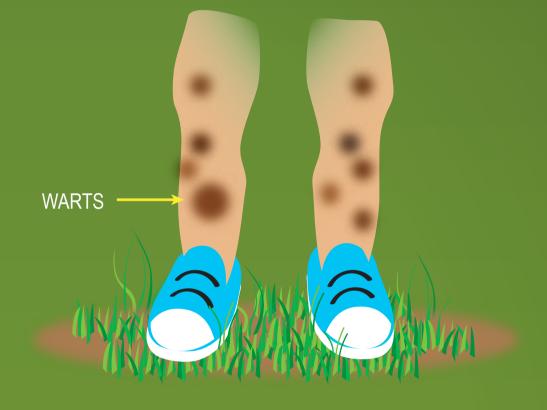
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2

## IN THE ACUTE PHASE, KNOWN AS OROYA FEVER, THE BACTERIA INFECT RED BLOOD CELLS, CAUSING FEVER, HEMOLYTIC ANEMIA AND IMMUNOSUPPRESSION.



Untreated, Carrion's disease is fatal in between 44% and 88% of cases  $\longrightarrow$  more deadly than the plague and as lethal as the Ebola virus. SYMPTOMS ARE DIFFERENT IN INDIVIDUALS WHO HAVE BEEN EXPOSED TO THE DISEASE AND HAVE DEVELOPED SOME IMMUNITY. THE CHRONIC PHASE:



In the chronic phase, the infection gives rise to lesions called "Peruvian warts".



## ANTIBIOTIC TREATMENT CURES THE CLINICAL SYMPTOMS BUT DOES NOT ALWAYS ERADICATE THE BACTERIA

In some endemic

areas up to 40% of

those infected are

asymptomatic.

#### THE REAL NUMBER OF THOSE AFFECTED

IS UNKNOWN OWING TO THE LACK OF RESOURCES FOR PROPER DIAGNOSIS IN RURAL AREAS



## THE DISEASE WAS NAMED IN HONOUR OF DANIEL ALCIDES CARRIÓN A MEDICAL STUDENT WHO ASKED TO BE INOCULATED WITH DIS

**ANTIBIOTICS** 

A MEDICAL STUDENT WHO ASKED TO BE INOCULATED WITH BLOOD FROM A "PERUVIAN WART".

AND LEFT A DIARY DETAILING THE COURSE OF HIS DISEASE

HE DIED 40 DAYS LATER

Carrión developed Oroya fever, thereby demonstrating that the fever and the warts were different phases of the same disease.

The greatest impact of Carrión disease is on the most vulnerable and forgotten populations. It is truly a neglected disease.

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