

# Legionnaires' Disease Cases in Clark County

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## General Legionnaires' Disease Information

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### Background

Legionellosis is an infection caused by the bacterium *Legionella pneumophila*. Legionnaires' disease is the more severe form of infection, the milder illness is called Pontiac fever. Legionnaires' disease acquired its name in 1976 from an outbreak of pneumonia that occurred at a convention of the American Legion in Philadelphia. Between 8,000 and 18,000 persons get this disease annually in the United States. There is an unknown number of persons infected with the bacterium and have mild or no symptoms at all. This disease typically occurs as a single case not associated with an outbreak. If an outbreak were to occur, it would be around summer and early fall; however, cases do occur year-round.

*Legionella* organisms reproduce to high numbers in warm, stagnant water, such as certain plumbing systems and hot water tanks, cooling towers, evaporative condensers of large air-conditioning systems, and whirlpool spas.

### Transmission & Risk

Outbreaks of legionellosis occurred after persons inhale aerosols from a contaminated water source. Exposure can happen in homes, workplaces, healthcare facilities, or public places. It cannot be passed from person to person and there is no evidence of persons becoming infected from car air conditioners.

### Symptoms & Complications

Those with Legionnaires' disease usually have fever, chills, and a cough. Some patients report symptoms of muscle aches, headache, tiredness, loss of appetite, and diarrhea. It is difficult to distinguish Legionnaires' disease from other types of pneumonia based solely on symptoms.

### Testing, Diagnosis, Treatment

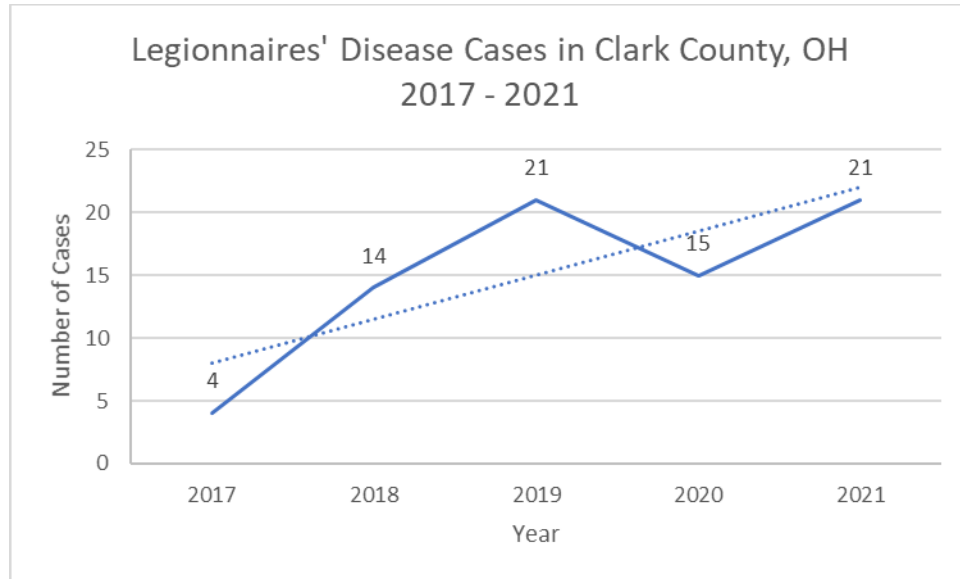
A physician must consider the possibility of legionellosis in order to obtain the appropriate tests. The most useful detect bacteria in sputum and finding *Legionella* antigens in a urine sample. Sputum is a mixture of saliva and mucus coughed up from the respiratory tract.

Levofloxacin and azithromycin are among the drugs usually recommended for the treatment of Legionnaires' disease. Pontiac fever requires no specific treatment.

More information can be found here: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infectious-disease-control-manual/section3/section-3-legionellosis>

*Clark County Related Discussion*

Figure 1 shows the cases in Clark County, OH from 2017-2021. There has been a 425% increase in Legionnaires' disease cases in Clark County from 2017 (4 cases) to 2021 (21 cases). All cases between 2017 and 2021 have been confirmed cases.



*Figure 1 Legionnaires' cases in Clark County 2017-2021*

Table 1 shows the breakdown of cases per quarter per year. There is no clear trend in cases; however, there has been an overall increase. As mentioned above Legionnaires' disease outbreaks would occur during summer and early fall but can happen year-round. Q3 (July, August, September) has the highest number of cases in 2019 and 2021, and Q1 (January, February, March) has the highest number of cases in 2020.

	Q1 Grand Total	Q2 Grand Total	Q3 Grand Total	Q4 Grand Total
2017	0	0	2	2
2018	2	5	4	3
2019	1	6	7	7
2020	10	3	1	1
2021	3	1	11	6

*Table 1 Legionnaires' disease cases per quarter per year*