

## Ministry of Health, Wellness & Elderly Affairs

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## **Press Release**

## A LOOK AT SAINT LUCIA'S COVID-19 EPIDEMIOLOGICAL CURVE

An epidemic curve or (epi curve) as it is often referred to in Epidemiology, is a bar graph that shows the progression of illnesses in an outbreak over time. The Epi Curve relies on the onset of first symptoms to determine when persons become infected with an illness. During ongoing outbreak investigations, the epi curve is updated as new data becomes available.

Studies of the epidemic curves generated by the COVID-19 pandemic reveal that it is a propagated source epidemic. A propagated source epidemic, generates an epi curve which shows that the spread of the disease, may be transmitted from human to human, one incubation period apart. This means, the infection begins with a single index case then continues to infect other individuals in a similar manner. This produces a wave of infection.

A wave is characterized by steady increases in the number of infected cases which culminates in a peak and is generally followed by a gradual decrease in the number of infections as the susceptible population is reduced.

Similar to other COVID19 epidemic curves around the world, a study of the epidemic curve for COVID 19 in St Lucia confirms a propagated epidemic curve.

Since the diagnosis of our first case of COVID19 on March 11, 2020 a total of 12,808 cases have been diagnosed to date and St Lucia has experienced 4 major waves of the COVID-19 virus. True to the propagated curve a series of waves were noted as anticipated.

For each wave, we observed a gradual increase in cases secondary to person to person transmission. This increase peaks and is followed by a gradual decrease in numbers. The beginning of the fourth wave in Saint Lucia is approximated around the 25<sup>th</sup> of July 2021 peaking at approximately the 28<sup>th</sup> of August 2021 after which a decreasing trend in transmission is noted with fewer cases being diagnosed as control measures are put in place.

As is highlighted in the literature in a propagated epidemic curve there will be successive waves of infection until there is implementation of appropriate control and prevention measures or the number of persons susceptible to the disease is exhausted.

This means, that despite a significant decrease in the daily number of cases diagnosed, if the measures for control and prevention are not maintained or adhered to we will experience additional waves of infection.

It is also noted that from October 14<sup>th</sup> an average of 22 cases were diagnosed daily which indicates continued transmission. In addition, much of the St Lucian public is still a population susceptible to SARS COV2 and its variants. As such further waves of infection are expected.

The Ministry of Health, Wellness and Elderly Affairs urges the public to adhere to the protocols of infection prevention and control:

- Wash or sanitize your hands.
- Wear your masks.
- Social Distance.
- Avoid large crowd gatherings.
- Give yourself the best opportunity against the disease Vaccinate.

For more information please contact the Office of the Chief Medical Officer or the Epidemiology Unit, at 468-5309/468-5317 respectively