

# Moon Phase and Calls for Police Service in Barrie, Ontario

*Evaluating the relationship between crime and phase of the moon*

**Agency:** Barrie, Ontario, Canada  
Police Service

**Period:**  
2015–2018

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### Context

The need for police intervention may be associated with certain factors such as day, time, and weather. Anecdotal reports suggest that more crime occurs during the full moon, however little research has addressed this topic.

### Key Finding

Analyses of calls for service from 2015 to 2018 do not show a relationship between number of calls and phase of the moon.

\*BetaGov trains agency personnel to become research-savvy “Pracademics” who lead trials.

## Background

Research has explored crime rates as a function of environmental and seasonal variables. For example, some research suggests that crime may rise during hot, summer months. A recent report indicates an association between days of high pollen count and crime. A few studies have addressed a relationship between phase of the moon and crime rates. In examining the “lunar hypothesis,” a variety of negative events such as crimes and felonious behaviors have been attributed to the appearance of the full moon, although empirical support for these claims is mixed.

The belief that the phases of the moon can affect behavior may not be such a provocative idea, given our knowledge of the effect of the moon in other areas of scientific inquiry. If the phase of the moon is found to be related to behavior, this information may be important for predicting crime and, as such, could appropriately determine police staffing needs and other department resources.

## Study Design

Replicating a recent investigation using crime data from the Vallejo (CA) Police Department and moon-phase data, the Barrie Police Service provided four years of crime data for a similar data analysis project. Analysis compared the number of police service calls on full-moon days with non-full-moon days. Because of the perception that mental health functioning may be related to the full moon, additional

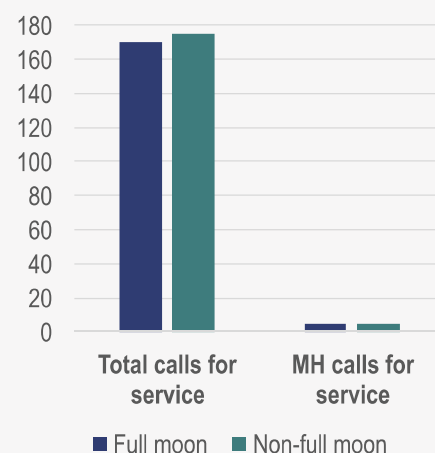
analyses addressed service calls for mental health issues only.

A total of 256,007 calls for service were included in the analyses for 2015 through 2018. The sub-analysis for service calls for mental health issues includes 1820 observations.

## Results

The number of calls for service was not statistically different during full-moon days (a mean of 169.6) compared with non-full-moon days (a mean of 175.4). Nor was there a statistically significant difference in the average number of mental health service calls on full-moon days compared with non-full-moon days.

Calls for Service Per Day by Moon Phase



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