



# Surveillance using outbreak markers for Canadian Armed Forces (CAF) deployed operations, 2017-2019

## 3 CAF overseas Operations

Canadian Armed Forces (CAF) operations vary by **mission purpose, location, and number of personnel**. To help troops stay healthy on deployments, the **Disease and Injury Surveillance System** is used to meet health surveillance requirements in theatre.



## Outbreak markers

Average CAF denominator per week

**Op UNIFIER**  
~201 (99-254)

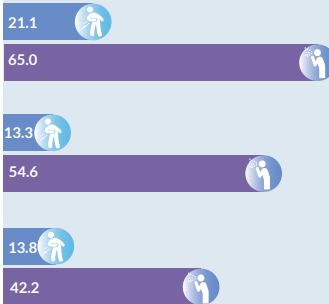
**Op REASSURANCE**  
~405 (97-540)

**Op IMPACT**  
~277 (190-629)

### Outbreak markers

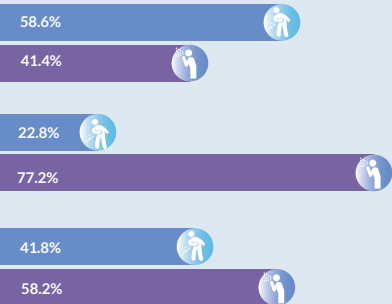
- gastrointestinal (GI) infections
- acute respiratory tract infections (ARTIs)

### GI infections and ARTIs - rates per 100 person-years over a 3 year period



ARTI rates were over three times more common than the rates of GI infections.

### Lost duty days by GI infections and ARTIs over a 3 year period

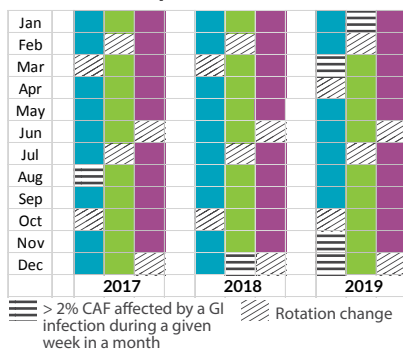


Overall ARTIs took a higher toll on lost duty days than GI infections.

## 3 years of results 2017-2019

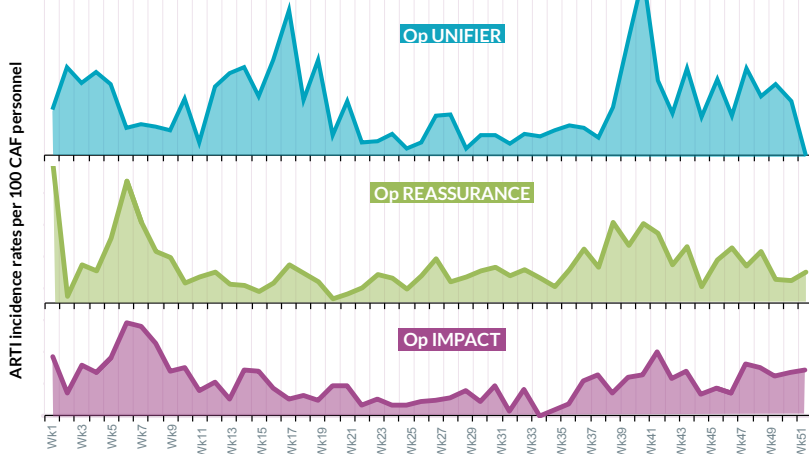
The trend in ARTI rates observed for all three operations are comparable to the influenza seasonal patterns in the northern hemisphere (Sep to Apr).

### GI infection outbreaks by year, month and Operation



Less than 2% of CAF personnel were affected by a GI infection during a given week in a month on Op IMPACT.

### 3 year averaged weekly ARTI rates per Operation



GI infections and to a greater extent ARTIs continue to play an important role in CAF deployed troops in both training and combat settings. Both of these conditions contribute to lost duty days which has the ability to impact operational readiness.



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