

New tool for the early detection of public health threats from Twitter data: epitweetr



The [R-based tool epitweetr](#) allows users to automatically monitor trends of tweets by time, place and topic, with the aim of detecting public health threats early through signals, such as an unusual increase in the number of tweets. It was designed to support public health experts with the early detection of threats from infectious diseases but can be extended to all hazards and other fields of study by modifying the topics and keywords.

The epitweetr package includes an interactive web application (based on the R package Shiny) with five pages:

1. Dashboard, where a user can visualise and explore tweets, and download the associated outputs and data;
2. Alerts page, where you can view the current alerts and associated information;
3. Geotag evaluation page, where you can evaluate the geolocation algorithm in different tweet fields to manually choose the geolocation threshold;
4. Configuration page, where you can change settings and check the status of the underlying processes;
5. Troubleshooting page, with automatic checks and hints for using epitweetr with all its functionalities.

To make epitweetr as widely available as possible, R was chosen as the computing platform. R is free, open source, and runs on any modern operating system.

epitweetr can be downloaded free of charge from the ECDC website, the CRAN website (for CRAN users) or GitHub (for GitHub users).