

Oregon improves pesticide exposure case ascertainment



CONTRIBUTOR: Rob Laing, Interoperability Informaticist, Oregon Health Authority

CATEGORY: **Syndromic Surveillance**

Oregon Health Authority (OHA) leveraged syndromic surveillance to more quickly identify and follow-up with cases of pesticide exposure.

The “What”

Unlike infectious disease surveillance, pesticide exposure surveillance and case follow-up rely almost entirely on clinician reporting. In an effort to improve timely identification and follow-up, Oregon Health Authority (OHA) added an application programming interface (API) to their integrated disease surveillance system (Orpheus) to allow the Pesticide Exposure Coordinator to query Oregon's syndromic surveillance system (ESSENCE) to return emergency department (ED) visits for pesticide exposure. Because syndromic data are deidentified, this call creates a temporary person and case record using the medical record number (MRN) from ESSENCE that the epidemiologist then uses to retrieve identifying information on the person from the hospital to begin case investigation.



The “So What”

OHA recently resumed this work so there are no metrics to report at this time, but as of March 2023, 14 cases had been created and either begun investigation or ruled out as insufficient. OHA anticipates improved case ascertainment, timely investigation and timely remediation as outcomes.

The “Now What”

OHA would like to evaluate whether this interoperability has improved their case ascertainment and response. If so, they will explore whether automation of the query would make sense, as well as whether fast healthcare interoperability resources (FHIR) could be used to obtain the additional demographic and potentially case details could be retrieved to improve investigation efforts.



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