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Contents

Abstract

Editorial

(Online J Public Health Inform 2015;7(1):e5655) doi:10.5210/ojphi.v7i1.5655

###Reviewer names will be inserted here### published 15.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5655

URL:



Abstract

This roundtable will discuss successful syndromic surveillance data sharing efforts that have been used on a local scale for faster, more efficient, and long-term collaboration between neighboring public health jurisdictions.

(Online J Public Health Inform 2015;7(1):e5651) doi:10.5210/ojphi.v7i1.5651

###Reviewer names will be inserted here### published 15.

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Online J Public Health Inform 2015;7(1):e5651

URL:



Abstract

This roundtable will focus on how traditional emergency department syndromic surveillance systems should be used to conduct daily or periodic disease surveillance. As outbreak detection using these systems has demonstrated an equivocal track record, epidemiologists have sought out other interesting uses for these systems. Over the numerous years of the International Society for Disease Surveillance (ISDS) Conference, many of these studies have been presented; however, there has been a dearth of discussion related to how these systems should be used. This roundtable offers a forum to discuss best practices for the routine use of emergency department syndromic surveillance data.

(Online J Public Health Inform 2015;7(1):e5652) doi:10.5210/ojphi.v7i1.5652

###Reviewer names will be inserted here### published 15.

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5652

URL:



Abstract

This roundtable will provide a forum for the syndromic surveillance Community of Practice (CoP) to learn about activities of the BioSense 2.0 User Group (BUG) workgroups that address priority issues in syndromic surveillance. The goals of the workgroups are to coordinate efforts nationwide, better inform development of BioSense 2.0 to the Governance Group and CDC, and achieve high-quality outcomes for the practice of syndromic surveillance. Representatives from each workgroup will describe their efforts to date so participants can discuss key challenges and best practices in the areas of data quality, data sharing, onboarding, and developing syndrome definitions.

(Online J Public Health Inform 2015;7(1):e5653) doi:10.5210/ojphi.v7i1.5653

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Online J Public Health Inform 2015;7(1):e5653

URL:



Abstract

ASTHO worked with Booz Allen Hamilton to create a decision model for syndromic surveillance investments. The model% \hat{U}^a s goal is to allow public health systems to compare and contrast different syndromic surveillance systems based on the value of information and return on investment. The roundtable will include a demonstration of the decision model, a review of how it can be used in practice, and a facilitated discussion covering its usefulness, applicability in the US and internationally, and potential future improvements. The roundtable will be moderated by two of the subject matter expert panel members who participated in its creation and the ASTHO project manager.

(Online J Public Health Inform 2015;7(1):e5654) doi:10.5210/ojphi.v7i1.5654

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Online J Public Health Inform 2015;7(1):e5654

URL:



Abstract

The Digital Disease Detection Dashboard (D4) provides an analytics environment to conduct hypothesis testing, hot spot geolocations, and forecasting in a centralized dashboard. Methods such as linear regression, LOESS, and SIR modeling are implemented R, an open-source programming language. Visualizations utilize Javascript libraries and are rendered using R-Shiny. Currently, D4 contains 15 epidemiological datasets from the CDC including foodborne illness cases, influenza patient counts and positive lab confirmations, and unconventional public health data like weather data. D4's objective is to use powerful statistical models and rigorous visualizations to analyze multivariable associations to specific outcomes using open source code.

(Online J Public Health Inform 2015;7(1):e5657) doi:10.5210/ojphi.v7i1.5657

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Online J Public Health Inform 2015;7(1):e5657

URL:



Abstract

Mobile applications offer tremendous potential for collecting data for biosurveillance through participatory surveillance and the integration of new and traditional data streams. This panel features epidemiologists, data scientists, and technology partners who will address the full application lifecycle -- from the assessment of the specific demand, resource, and technology specifications, to implementation and evaluation-- of several innovative apps. Audience engagement using a new web app will gather input on other uses of mobile apps for data collection, visualization, and analyses. The panel and audience discussion will be compiled into guidance for future development of mobile apps for biosurveillance purposes to advance population health.

(Online J Public Health Inform 2015;7(1):e5660) doi:10.5210/ojphi.v7i1.5660

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Online J Public Health Inform 2015;7(1):e5660

URL:



Abstract

This panel will expand the development process and use case collection of the ISDS Technical Conventions Committee, whose purpose is to bridge the gap between the analytic needs of public health practitioners and the expertise of the research community for the enhancement of disease surveillance. Panellists will present use cases of current and ongoing concern at local, state, and national levels. The audience will be prompted with questions on the relevance, aspects of common utility, technical feasibility, and data availability issues related to each use case, and derived or novel ideas will be solicited.

(Online J Public Health Inform 2015;7(1):e5661) doi:10.5210/ojphi.v7i1.5661

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Online J Public Health Inform 2015;7(1):e5661

URL:



Abstract

The session will explore past collaborations between the statistician panelists and public health departments to highlight approaches that have and have not been effective and to recommend effective, sustainable relationship strategies for mutual advancement of practical disease surveillance and relevant academic research.
 Panelists will describe experiences working with health departments, including actual applications as examples. Issues discussed will include requirements analysis, scoping technical problems for health department utility, adaptation of traditional statistical methods, and management of changing data environments. Panelists will derive advice for public health practitioners seeking help in forming relationships, framing problems, communicating results, and seeking funding.

(Online J Public Health Inform 2015;7(1):e5662) doi:10.5210/ojphi.v7i1.5662

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URL:



Abstract

Putting data linkage into FIRST gear: lessons from the Firefighter Injury Research and Safety Trends project (FIRST). The purpose of this panel is to describe the process of using data to develop firefighter nonfatal injury surveillance systems in the city of Philadelphia and the state of Florida through the linkage of data from workers" compensation, inpatient and emergency department hospitalizations, human resources, and continuing education/training registries.

(Online J Public Health Inform 2015;7(1):e5663) doi:10.5210/ojphi.v7i1.5663

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Abstract

Syndromic surveillance identified temporal and spatial patterns in gunshot related visits that are comparable to findings from the New York Police Department, suggesting that ED syndromic data have potential to be used as an accurate near-real time tracking system of gun-related injuries. Syndromic data may not capture all fatal gun-related violence but do include patients who were dead on arrival to the ED. As gunshot-related injuries are typically emergencies, we do not expect patients to be using other health care facilities for these types of visits. Therefore, ED data can be used to evaluate and improve interventions targeting gun-related injuries. Continued monitoring of gunshot-related visits can be beneficial in identifying local hot spots in gun violence around NYC for an efficient public health response by health professionals, law enforcement, policy makers, and community-based organizations.

(Online J Public Health Inform 2015;7(1):e5665) doi:10.5210/ojphi.v7i1.5665

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URL:



Abstract

The Canadian Swine Health Intelligence Network (CSHIN) was developed to help Canadian swine veterinarians and producers deal more effectively with swine disease. It consists of two integrated components; a social network and a web-based data collection, analysis and reporting system. The organizational structure engages the data and information providers directly in the decision making (governance) processes. The data collected include farm level syndrome prevalence as well as clinical and laboratory diagnoses. The CSHIN has demonstrated that it can provide value to both individual producers and the industry as a whole.

(Online J Public Health Inform 2015;7(1):e5666) doi:10.5210/ojphi.v7i1.5666

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Abstract

This analysis used BioSense 2.0 frontend data to evaluate the impact of air quality indeces on emergency department visits for respiratory syndromes and subsyndromes during wintertime inversions in Salt Lake County, UT. Most syndromes and subsyndromes occurred more frequently on days with higher AQI and aberration alarms were more likely to be triggered on days with higher AQI for ILI, pleurisy, and respiratory failure. After adjusting for seasonality, the AQI was significantly associated with the proportion of emergency room visits for RSV, ILI, and the respiratory syndrome. These results suggest frontend data may be useful for ecological air quality analyses.

(Online J Public Health Inform 2015;7(1):e5672) doi:10.5210/ojphi.v7i1.5672

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URL:



Abstract

Utilization of the BioSense 2.0 system for syndromic surveillance requires validating syndromes for sensitivity and specificity. The objective of this presentation is to evaluate the BioSense 2.0 poisoning by medicines syndrome by determining chief complaint terms for inclusion and exclusion based upon pre-defined ICD-9 codes and a comparison of binned and unbinned chief complaint data. The results of this study suggest that the inclusion of the chief complaint terms \"od,\" \"overmedicated,\" and \"ingested\" will increase sensitivity, while the exclusion of terms related to alcohol, carbon monoxide, and food poisoning; swallowing a foreign body; and contact dermatitis will increase specificity.

(Online J Public Health Inform 2015;7(1):e5674) doi:10.5210/ojphi.v7i1.5674

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URL:



Abstract

The presented method is a practical, understandable way to monitor single care facilities for chief complaint clusters of concern based on unusually high occurrence of rare or common terms that need not be related to syndromes. Routine implementation requires a human monitor to inspect the relevant CCs make follow-up decisions. Using 7 years of patient records from 15 hospitals, our approach pools CCs into contiguous time blocks and uses a statistical hypothesis test to seek current terms that are anomalous relative to their occurrence in a large sliding baseline. Sets of anomalous terms are then presented for further investigation.

(Online J Public Health Inform 2015;7(1):e5675) doi:10.5210/ojphi.v7i1.5675

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Online J Public Health Inform 2015;7(1):e5675

URL:



Abstract

Food consumption data gathered at a fine enough spatial and temporal resolution is essential for the effective delivery and evaluation of diet-related public health interventions. Currently, the standard for food consumption data is food surveys. However, they are a burden on the respondant, are prone to bias and are often published after a long delay. In our study, we illustrate the utility of digital food purchasing data in public health practice by demonstrating a drop in soda sales following two public health interventions implemented in late 2011 in Montreal, Canada, to decrease the consumption of soda in school-aged children.

(Online J Public Health Inform 2015;7(1):e5676) doi:10.5210/ojphi.v7i1.5676

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Online J Public Health Inform 2015;7(1):e5676

URL:



Abstract

The National Science and Technology Council, within the Executive Office of the President, established the Pandemic Prediction and Forecasting Science and Technology Working Group in 2013 to advance US Government epidemic prediction and forecasting capabilities. Working Group leaders will provide an overview of activities, and seek feedback on the Working Group direction from the ISDS community.

(Online J Public Health Inform 2015;7(1):e5677) doi:10.5210/ojphi.v7i1.5677

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Online J Public Health Inform 2015;7(1):e5677

URL:



Abstract

Soon after discovery of a MERS case in Indiana, CDC through its BioSense Syndromic Surveillance (SyS) Program joined with certain public health jurisdictions to improve the national-level MERS surveillance picture. Activities were undertaken to bolster local surveillance efforts, despite jurisdictions use of differing SyS tools. This resulted in the ability to generate periodic reports of aggregated MERS-like surveillance data. Many seem to see this initiative to enhance the national MERS surveillance picture as a model to build upon, and a success that can help improve trust and generate hope for creating a meaningful national SyS picture.

(Online J Public Health Inform 2015;7(1):e5678) doi:10.5210/ojphi.v7i1.5678

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Online J Public Health Inform 2015;7(1):e5678

URL:



Abstract

Decision support systems for malaria elimination must support rapid response to contain outbreaks. The integrated mobile system in Zanzibar has been recognized as one of the most advanced in the world. The system consists of a simple facility-based case notification system that uses common feature phones, and a mobile application for Android tablet computers. The resulting system enables rapid response to new cases, helps to rapidly diagnose and treat secondary case, and provides high-quality data for identifying hot spots, trends, and transmission patterns. This presentation will review the history, technology, results, lessons-learned, and applicability to other contexts.

(Online J Public Health Inform 2015;7(1):e5679) doi:10.5210/ojphi.v7i1.5679

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Online J Public Health Inform 2015;7(1):e5679

URL:



Abstract

This presentation will detail the incorporation, usage, and complications for inclusion of Census ZCTA based data with patient health records. Approaches to meaningful categorization will be discussed and potential usefulness described. Examples will be given using test data from the ESSENCE surveillance platform.

(Online J Public Health Inform 2015;7(1):e5680) doi:10.5210/ojphi.v7i1.5680

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Online J Public Health Inform 2015;7(1):e5680

URL:



Abstract

This paper describes analyses of health seeking behaviors from two surveillance datastreams: Poison Control Center (PCC) calls and Emergency Department (ED) visit records. These analyses were conducted in order to quantify behaviors following the development of symptoms after water contamination exposure and to understand the motivation, decision-making and timing behind healthcare seeking behaviors.

(Online J Public Health Inform 2015;7(1):e5681) doi:10.5210/ojphi.v7i1.5681

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Online J Public Health Inform 2015;7(1):e5681

URL:



Abstract

Antimicrobial resistance (AMR) is recognized as a severe threat to human and animal health worldwide, yet relatively little is known regarding the bioavailability of AMR genes in airborne microbial communities. Hence, the objective of our study is to use next generation sequencing (NGS) to assess the temporal dynamics of airborne bacterial communities as well as functional metagenomics to investigate the dispersion of AMR genes present within them.

(Online J Public Health Inform 2015;7(1):e5682) doi:10.5210/ojphi.v7i1.5682

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Online J Public Health Inform 2015;7(1):e5682

URL:



Abstract

We describe an R package that was designed to provide ready implementation of veterinary syndromic surveillance systems, from classified data to the generation of alerts. The development of the package was informed by the experience developing two systems for veterinary syndromic surveillance based on laboratory test requests. Functions are available to carry out retrospective analyses of the data available; produce an outbreak-free baseline from historical data; monitor data streams prospectively with a combination of various temporal outbreak-signal detection algorithms; set up automated email alerts in case of alarms; and set up an html interface for the system.

(Online J Public Health Inform 2015;7(1):e5683) doi:10.5210/ojphi.v7i1.5683

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Online J Public Health Inform 2015;7(1):e5683

URL:



Abstract

In order to provide real-time access to influenza test results, we created a laboratory-based surveillance system which automatically uploaded influenza test results from a rapid PCR-based influenza test, Xpert Flu, and the associated testing times and locations. On-site, type-specific results were available to physicians and uploaded for public health awareness within 100 minutes of patient nasopharyngeal swab. Expansion of this real-time capability to sentinel facilities could improve both local and national surveillance and response, reducing the need for syndromic influenza surveillance.

(Online J Public Health Inform 2015;7(1):e5684) doi:10.5210/ojphi.v7i1.5684

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Online J Public Health Inform 2015;7(1):e5684

URL:



Abstract

Bovine cysticercosis is a zoonotic foodborne disease caused by \"Taenia saginata\" involving cattle as the intermediate host and humans as the final host. Due to the slow development of cysticercosis cysts in cattle muscles and the complexity of cattle movements, there is a strong bias to consider the last farm location before slaughter as the location of infection for spatial analysis. This study presents an innovative approach to spatial analysis that takes into account uncertainty regarding the location where the animal was infected. An animal-herd-level weighted analysis was used and applied to bovine cysticercosis in France.

(Online J Public Health Inform 2015;7(1):e5686) doi:10.5210/ojphi.v7i1.5686

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Online J Public Health Inform 2015;7(1):e5686

URL:



Abstract

Radon exposure is the second leading cause of lung cancer after smoking and the number one cause among non-smokers. EPA estimates that one in fifteen homes nationwide has elevated radon levels. Public outreach efforts promote radon testing and subsequent mitigation when unsafe levels are found, yet due to varying state regulations, data are non-standardized, making targeted public health actions challenging. An EPA-CDC collaboration will test the feasibility for capturing, analyzing and displaying radon data from state and local health departments by conducting a pilot project to standardize previously non-systemized, uncoordinated data sources into a nationally consistent radon information resource.

(Online J Public Health Inform 2015;7(1):e5687) doi:10.5210/ojphi.v7i1.5687

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Online J Public Health Inform 2015;7(1):e5687

URL:



Abstract

This presentation highlights the use of mathematical model to estimate burden of disease in absence of surveillance data. We estimated that in 2010, 3.57 million severe pneumonia cases and 0.45 million all cause pneumonia deaths occurred in children under age 5 years. Among these cases, the contribution of pneumococcal pneumonia was 15.8% to all cause pneumonia cases and 20.8% to all cause pneumonia deaths. Three states requires specific mention, Uttar Pradesh contributes (24% cases, 24% deaths), Bihar (16% cases, 17% deaths) and MP (9% cases, 10% deaths) to the national figures. They were top contributors to pneumococcal pneumonia burden also.

(Online J Public Health Inform 2015;7(1):e5688) doi:10.5210/ojphi.v7i1.5688

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Online J Public Health Inform 2015;7(1):e5688

URL:



Abstract

Traffic crashes cost Nebraska \$1.6 billion a year, are the leading cause of injury death, and the fourth leading cause of injury hospital treatment in Nebraska. This pilot study demonstrates the value of emergency department syndromic surveillance data to aid the surveillance of motor vehicle crash (MVC) related injuries in Nebraska. Results of this study suggests that emergency department syndromic surveillance data can be used for the timely identification of MVC-related injuries in Nebraska. This will allow stakeholders to identify accident hot spots and better deployments of accident prevention assets and procedures.

(Online J Public Health Inform 2015;7(1):e5689) doi:10.5210/ojphi.v7i1.5689

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Online J Public Health Inform 2015;7(1):e5689

URL:



Abstract

A Neolithic transformation is underway in public health, where the ubiquity of digital healthcare (HC) data is changing public healths traditional role as data hunter-gatherers to one of data farmers harvesting huge reserves of electronic data. ILINet 1.0 is the current U.S. outpatient influenza-like Illness (ILI) surveillance network dependent on volunteer sentinel providers ro report syndromic ILI. ILINet 1.0 represents a largely unchanged, ongoing hunter-gatherer approach to ILI surveillance. The roundtable will encourage ILINet 1.0 supporters and challengers to present their views and supporting evidence for proceeding with the status quo or formulating a new approach to ILINet 2.0.

(Online J Public Health Inform 2015;7(1):e5690) doi:10.5210/ojphi.v7i1.5690

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Online J Public Health Inform 2015;7(1):e5690

URL:



Abstract

Missed opportunities for influenza vaccination in office-based settings occur when patients (who are inclined to accept influenza vaccination if a provider recommends it) remain unvaccinated after a fall/winter healthcare visit. Healthcare providers can be very influential in encouraging patients to obtain influenza vaccination, but little is known in real-time during annual campaigns of how many and what type of providers are actually giving vaccinations in office settings. We propose a new metric derived from electronic healthcare claims that provides a near-real-time estimate of % of providers who are administering influenza vaccines in office-based settings.

(Online J Public Health Inform 2015;7(1):e5691) doi:10.5210/ojphi.v7i1.5691

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Online J Public Health Inform 2015;7(1):e5691

URL:



Abstract

This oral presentation will describe the surveillance planning and activities for a large-scale event (Super Bowl XLVIII) using New Jersey syndromic surveillance system (EpiCenter).

(Online J Public Health Inform 2015;7(1):e5692) doi:10.5210/ojphi.v7i1.5692

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Online J Public Health Inform 2015;7(1):e5692

URL:



Abstract

Prior to the October 1, 2015 transition deadline, all public health jurisdictions should prepare for the impact that the ICD-9/10 transition will have on their syndromic surveillance practice. This change presents challenges involving resources, funding, and time constraints for code translation and syndrome classification. It will also require new statistical methodologies to accommodate changes to coding practices. This session describes the process developed to incorporate practical public health input to translate syndromic surveillance syndromes and sub-syndromes from ICD-9 diagnostic codes to ICD-10 codes. These translations will be a solution that addresses how the challenge of the transition can be used to improve surveillance practice.

(Online J Public Health Inform 2015;7(1):e5693) doi:10.5210/ojphi.v7i1.5693

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URL:



Abstract

During the 2009 influenza pandemic, due to the 2009 pandemic influenza A (pH1N1) virus, there were an estimated 44 infections for every excess emergency department visit for influenza-like illness in Florida.

(Online J Public Health Inform 2015;7(1):e5694) doi:10.5210/ojphi.v7i1.5694

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URL:



Abstract

BioSense and Louisiana influenza-like-illness, gastrointestinal, and upper respiratory syndrome classifications were applied to Louisiana emergency department data to examine if varying syndrome definitions yield similar results when applied to the same data. Results were highly correlated for each syndrome pair however syndrome percentage means were significantly different. Most C2 alerts occurred on corresponding weeks, providing confidence in the use of C2 on current syndrome definitions for aberration detection. As public health jurisdictions work towards developing common syndrome classifications for comparability across jurisdictions, this analysis provides evidence that current differences in syndrome definitions may not hinder comparability of trends over time.

(Online J Public Health Inform 2015;7(1):e5695) doi:10.5210/ojphi.v7i1.5695

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Abstract

Muhammad Ilyas is MSc in epidemiology and biostatistics from the Aga khan university, Karachi Pakistan. He is currently working as research specialist / project manager at the department of Paediatrics and child health in AKU, Karachi. He is looking after the field activates data collection and verbal autopsies in the demographic and health surveillance system. He is also supervising a multicenter large cohort study on maternal and neonatal mortalities and morbidities. last year he got the travel award but could attended due to delay in visa.

(Online J Public Health Inform 2015;7(1):e5696) doi:10.5210/ojphi.v7i1.5696

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Abstract

A recent assessment of the Sudan public health surveillance system found fragmented and siloed disease programs and an overburdened workforce due to vertical systems and inefficient processes. A plan of action was developed to support improving public health surveillance strengthening by: 1) implementing a strategic approach to achieving IHR (2005), 2) implementing One Health and IDSR aims, and 3) establishing an E-surveillance ICT platform for increasing public health surveillance capacity to safely and rapidly detect and report infectious diseases in Sudan.

(Online J Public Health Inform 2015;7(1):e5697) doi:10.5210/ojphi.v7i1.5697

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Online J Public Health Inform 2015;7(1):e5697

URL:



Abstract

Surveillance practice is evolving rapidly: globalization of health threats, emergence of infectious diseases, and explosion of easily accessible new technologies. This fluid environment challenges the public health community, but provides it with a fertile environment to innovate and improve its practice. As surveillance is a core function of public health practice, public health practitioners need to be well equipped to achieve this function and address present and future public health challenges. We developed a training course that focused on the practical use of surveillance concepts and principles. We are sharing findings on the development of the course and learner outcomes.

(Online J Public Health Inform 2015;7(1):e5698) doi:10.5210/ojphi.v7i1.5698

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Online J Public Health Inform 2015;7(1):e5698

URL:



Abstract

Emergency department chief complaint (EDCC) data provides an opportunity for capturing the early mental health impact of disaster events at the community level, and to track their impact over time. Mental health keyword lists were generated and used to conduct a study of mental health EDCCs after Hurricane Sandy in New York State. Compared with the unaffected area, the relative risk of EDCCs in the affected counties was significantly higher during the 12-day Sandy period (RR 1.16, 95% CI 1.03-1.31), as well as in the 1-year post-Sandy period (RR 1.12, 95% CI 1.01-1.25).

(Online J Public Health Inform 2015;7(1):e5699) doi:10.5210/ojphi.v7i1.5699

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5699

URL:



Abstract

This presentation compares surveillance algorithms used in the National Poison Data System to identify incidents of public health significance with recently expanded filtering capabilities and with methods beyond the NPDS generalized historical limits model. Collected data series from 55 poison centers over 7 years include hourly counts of general call volumes and of substance-specific (e.g. CO exposure) calls. By applying current, modified, and novel methods to known and simulated clusters among these data, the authors will present the most efficient algorithms for identifying incidents of public health significance.

(Online J Public Health Inform 2015;7(1):e5700) doi:10.5210/ojphi.v7i1.5700

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5700

URL:



Abstract

The objective of this presentation is to evaluate progress in the development of semantically interoperable content for public health (PH) systems that monitor PH threats. It was demonstrated that while progress towards content standardization for exchange of these data exists, there are some gaps that became evident through this study. Our results demonstrate that content standards for monitoring PH threats at a patient-level are better defined than at population level. Results of this study underline the importance of better coordination of data harmonization efforts between and within domains of PH knowledge.

(Online J Public Health Inform 2015;7(1):e5701) doi:10.5210/ojphi.v7i1.5701

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5701

URL:



Abstract

We describe challenges and lessons learned using biosurveillance methods for identifying Chikungunya (CHIKV) infections. Surveillance was performed using VA ESSENCE, electronic laboratory data and facility reports. As of Aug. 14, 2014, 21 confirmed/probable cases were identified at 10 hospitals. The principal challenges were lack of a specific ICD-9 code for CHIKV, use of non-specific symptom codes at initial and subsequent encounters, lack of CHIKV testing, long turn-around times for results, poor uniformity in test names, and infection control not being notified of suspected/confirmed CHIKV cases. Based on our experience, a combination surveillance strategy using multiple data sources is essential for CHIKV detection.

(Online J Public Health Inform 2015;7(1):e5702) doi:10.5210/ojphi.v7i1.5702

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5702

URL:



Abstract

Using the Michigan Syndromic Surveillance System changes in emergency department (ED) volume are being monitored as health insurance coverage expands through the Healthy Michigan Plan (HMP), which provides healthcare coverage to low-income adults. Seasonally adjusted monthly ED visits prior to and after the HMP implementation on April 1, 2014 are being compared. Preliminary data show increasing trends in ED utilization among populations with previously low levels of health insurance coverage. Increased health insurance coverage may expand healthcare service options beyond EDs. Alternatively, the demand for primary care services may exceed the level of access leading to increased ED utilization for primary care.

(Online J Public Health Inform 2015;7(1):e5703) doi:10.5210/ojphi.v7i1.5703

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5703

URL:



Abstract

The New York City (NYC) syndromic surveillance system has been monitoring syndromes from city emergency department (ED) visits since 2001. We conducted an evaluation of statistical aberration detection methods currently in use in our system as well as alternative methods, applying six temporal and four spatio-temporal aberration detection methods to two years of ED visits in NYC spiked with synthetic outbreaks. We found performance varied between the methods in regard to sensitivity, specificity, and timeliness, and implementation of these methods will depend on needs, frequency of signals, and technical skill.

(Online J Public Health Inform 2015;7(1):e5704) doi:10.5210/ojphi.v7i1.5704

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5704

URL:



Abstract

Wikipedia usage data has been harnessed to estimate the prevalence of influenza-like illness (ILI) in the US population. By observing the number of times certain key Wikipedia articles are viewed each day, a model was developed that accurately estimated ILI, within 0.27% of official Centers for Disease Control and Prevention data. Additionally, this method was able to accurately determine the week in which ILI peaked 17% more often than Google Flu Trends. This work demonstrates the power of open, freely available data to aid in disease surveillance.

(Online J Public Health Inform 2015;7(1):e5705) doi:10.5210/ojphi.v7i1.5705

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5705

URL:



Abstract

This study estimates the number of tuberculosis cases that are potentially misdiagnosed as alternative respiratory illnesses in months prior to receiving a correct diagnosis. Inpatient and emergency department records in the state of California, from 2005 to 2011, were analyzed for patients that had an initial tuberculosis diagnosis along with a previous recorded visit. Tuberculosis patients were far more likely to receive a respiratory diagnosis in a window 5 to 90 days prior to their initial tuberculosis diagnosis than were uninfected patients. Findings suggest that more than 20% of tuberculosis cases are potentially missed in inpatient and emergency department settings.

(Online J Public Health Inform 2015;7(1):e5706) doi:10.5210/ojphi.v7i1.5706

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5706

URL:



Abstract

(Introduction): In the tropics, influenza age-risk groups and the temporal distribution are not as thoroughly studied. (Objective): Here we determine these aspects in Abidjan. Materials and methods: We conducted a review from INHP influenza surveillance database and climatological data from the National Weather Service from 2007 to 2012. (Results): The largest number of positive specimens was from young children aged 0-4 years. The highest monthly and seasonally proportions of influenza viruses were observed in the long rainy season. ARIMAX (2,0,0)RF perform best only with rainfall. (Conclusion): Public health measures must be strengthened at the approach of rainy seasons.

(Online J Public Health Inform 2015;7(1):e5707) doi:10.5210/ojphi.v7i1.5707

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5707

URL:



Abstract

During all phases of the disaster management cycle, public health surveillance plays a valuable role. Surveillance provides public health officials and stakeholders the information they need to respond to disasters and take action in an appropriate and timely manner. There is a lack of standardized guidance on implementing public health surveillance during domestic disasters. The draft document seeks to fill this need by providing guidance on planning, initiating, modifying, conducting, and evaluating disaster public health surveillance in the U.S. In this session, we plan to engage the audience to receive feedback on the draft document proposal.

(Online J Public Health Inform 2015;7(1):e5708) doi:10.5210/ojphi.v7i1.5708

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5708

URL:



Abstract

The Environmental Public Health Tracking Network (Tracking Network) is a national surveillance system that integrates environmental hazard, exposure, and health outcome data into one system. The Tracking Network launched in July 2009, and has since been receiving data from 23 funded state and local health departments, and several national partners. Despite this success, some challenges exist in obtaining more timely and complete data. This presentation will discuss how the Tracking Network is exploring the use of EHR to meet Tracking Network surveillance challenges and provide other opportunities to enhance environmental public health surveillance.

(Online J Public Health Inform 2015;7(1):e5709) doi:10.5210/ojphi.v7i1.5709

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5709

IIRI .



Abstract

We apply a novel semantic scan statistic approach to solve a problem posed by the NC DETECT team, North Carolina Division of Public Health (NC DPH) and UNC Department of Emergency Medicine Carolina Center for Health Informatics, and facilitated by the ISDS Technical Conventions Committee. This use case identifies a need for methodology that detects emerging, potentially novel outbreaks in free-text emergency department (ED) chief complaint data. Our semantic scan approach successfully addresses this problem, eliminates the need for classifying cases into pre-defined syndromes and identifies emerging clusters that public health officials could not have predicted in advance.

(Online J Public Health Inform 2015;7(1):e5710) doi:10.5210/ojphi.v7i1.5710

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5710

URL:



Abstract

The Scalable Data Integration for Disease Surveillance project (SDIDS) is developing tools to integrate and present surveillance data from multiple sources, with an initial focus on malaria. Consideration of data quality is particularly important when integrating data from diverse clinical, population-based, and other sources. We used a hierarchical system to organize data quality properties by capturing metadata elements relevant to provenance and generate a framework with which to assess the quality of the surveillance indicators. The resulting framework enables diverse decision makers to consistently and confidently interpret available surveillance data, indicators, and the analyses based on them.

(Online J Public Health Inform 2015;7(1):e5711) doi:10.5210/ojphi.v7i1.5711

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5711

IIRI .



Abstract

This presentation aims to update the public health practice community on the continuing development of the Public Health Community Platform (PHCP). Public health is at a precipice of increasing demand for the consumption and analysis of large amounts of disparate data, the centralization of local and state IT offices, and the compartmentalization of programmatic technology solutions. The PHCP is being developed as a platform to host technological solutions and accompanying community involvement for common public health problems.

(Online J Public Health Inform 2015;7(1):e5712) doi:10.5210/ojphi.v7i1.5712

 ${\it \#\#Reviewer\ names\ will\ be\ inserted\ here} {\it \#\#published\ 15}.$

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5712

URL:



Abstract

As a part of the Korea-US joint Biosurveillance Portal project, we have developed the military syndromic surveillance system with electronic medical records from military hospitals for early identification of bio-terror related events among Armed Forces in Korea. Respiratory, Gastrointestinal, Botulism, Dermatologic, Neurologic, Hemorrhagic and Fever syndromes were defined by different ICD-10 codes and their alert thresholds were developed based on the characteristics of time series derived using daily counts of ICD-10 codes for each syndrome.

(Online J Public Health Inform 2015;7(1):e5713) doi:10.5210/ojphi.v7i1.5713

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5713

URL:



Abstract

Public health surveillance guides efforts to detect and monitor disease and injuries, assess the impact of interventions and assist in the management of and recovery from large-scale public health incidents. Actions informed by surveillance information take many forms, such as policy changes, new program interventions, public communications and investments in research. Local, state and federal public health professionals, government leaders, public health partners and the public are dependent on high quality, timely and actionable public health surveillance data. This Surveillance Strategy aims to improve overall surveillance capabilities, and by extension those of the public health system at large.

(Online J Public Health Inform 2015;7(1):e5714) doi:10.5210/ojphi.v7i1.5714

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5714

URL:



Abstract

ED chief complaint and discharge diagnosis data accessed through a syndromic surveillance system can be used for effective, timely monitoring of RSV hospitalizations in children < 5 years old and may be a more efficient and complete means of monitoring seasonality of RSV activity by region and statewide compared to hospital-based laboratory data reporting. Additionally, this surveillance technique can efficiently monitor RSV activity as well as estimate hospital admissions due to RSV and may be a useful approach for other states with syndromic surveillance systems.

(Online J Public Health Inform 2015;7(1):e5715) doi:10.5210/ojphi.v7i1.5715

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5715

URL:



Abstract

We describe pertussis surveillance in VA from 2010-2014. 275 cases of pertussis were identified using the Hospital-Acquired Infection and Influenza Surveillance System which utilizes QC Pathfinder and VA ESSENCE applications. Nineteen cases were identified by both applications. Sixty-two cases were laboratory confirmed. Of the 275 cases, 10% required hospitalization, 43% of patients were tested for pertussis, and 54% had documentation of a Tdap vaccine (regardless of whether vaccine was given prior to encounter). VA could improve on testing of potential pertussis cases as well as vaccination rates.

(Online J Public Health Inform 2015;7(1):e5716) doi:10.5210/ojphi.v7i1.5716

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5716

URL:



Abstract

ChatterGrabber is an open source, natural language processing based toolkit for public health social media surveillance. ChatterGrabber is designed to collect and categorize a high volume of content at a low cost, providing a readily deployable solution for Epidemiologists to track emergent outbreaks in the field and an additional signal for syndromic surveillance. Sensitivity and specificity of results are maximized through the use of a novel pull method and genetic algorithm optimization of text classifiers. This enables the creation of long term surveillance experiments wholly independent of member reporter networks and hashtag tracking. Such records may also yield additional soft data through shared symptoms, rumors, and observations crucial to an epidemiological investigation.

(Online J Public Health Inform 2015;7(1):e5717) doi:10.5210/ojphi.v7i1.5717

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<u>Please cite as:</u>

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5717

URL:



Abstract

Public health agencies strive to develop and maintain cost-effective disease surveillance systems to better understand the burden of disease within their jurisdiction. The emergence of novel influenza and other respiratory viruses such as MERS-CoV along with other emerging diseases including Ebola virus disease offer new challenges to public health practitioners. The authors conducted a series of surveys of influenza surveillance coordinators to identify and define these challenges. The results emphasize the importance of maintaining sufficient infrastructure and the trained personnel needed to operate these surveillance systems for optimal disease detection and public health preparedness and response readiness.

(Online J Public Health Inform 2015;7(1):e5718) doi:10.5210/ojphi.v7i1.5718

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5718

URL:



Abstract

We developed early warning algorithms for influenza using data from the Alberta Real-Time Syndromic Surveillance Net (ARTSSN). In addition to looking for signatures of potential pandemics, the model was operationalized by using the algorithms to provide regular weekly forecasts on the influenza trends in Alberta during 2012-2014. We describe the development of the early warning model and the predicted influenza peak time and attack rate results. We report on the usefulness of this model using real-time ARTSSN data, discuss how it was used by decision makers and suggest future enhancements for this promising tool in influenza planning and preparedness.

(Online J Public Health Inform 2015;7(1):e5719) doi:10.5210/ojphi.v7i1.5719

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5719

URL:



Abstract

We propose StarScan, a new star-shaped scan statistic for detecting irregularly-shaped spatial clusters. StarScan generalizes the traditional, circular spatial scan statistic by allowing the radius of the cluster around a center location to vary continuously with the angle, but penalizes the log-likelihood ratio score proportional to the total change in radius. StarScan was compared with circular scan and fast subset scan on simulated respiratory outbreaks and bioterrorist anthrax attacks injected into real-world Emergency Department data. Given a small amount of labeled training data, StarScan learns appropriate penalties for both compact and elongated clusters, resulting in improved detection performance.

(Online J Public Health Inform 2015;7(1):e5720) doi:10.5210/ojphi.v7i1.5720

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Online J Public Health Inform 2015;7(1):e5720

URL:



Abstract

We found substantial annotator variability in identifying supporting, refuting, or uncertain evidence for the diagnosis of pneumonia in clinical text. Future work will expand these methods to a larger case sample and incorporate a more formal linguistic analysis to identify specific lexical cues thereby extending existing taxonomies of uncertainty and improving automated NLP algorithms.

(Online J Public Health Inform 2015;7(1):e5721) doi:10.5210/ojphi.v7i1.5721

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Online J Public Health Inform 2015;7(1):e5721

URL:



Abstract

The Affordable Care Act is intended to reduce healthcare costs through policy changes. These include expanding healthcare coverage, potentially reducing costly emergency department visits, and reducing hospital readmissions. The feasibility of achieving savings via these routes is in question. Healthcare-seeking behavior is complex; expanding insurance coverage may increase ED usage. This study shows a positive correlation between ED usage and public insurance coverage rates. Readmission rates may be driven by factors beyond the control of hospital policy; this study corroborates that finding. In both cases, data collected automatically for syndromic surveillance is shown to be informative for healthcare policy questions.

(Online J Public Health Inform 2015;7(1):e5722) doi:10.5210/ojphi.v7i1.5722

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5722

URL:



Abstract

Ambulatory practice syndromic surveillance data needs to demonstrate utility beyond infectious disease outbreak detection to warrant integration into existing systems. The nature of ambulatory practice care makes it well suited for monitoring health domains not covered by emergency departments. This project demonstrates collection of height and weight measurements from ambulatory practice syndromic surveillance data. These data are used to calculate patient BMI, an important risk factor for many chronic diseases. This work is presented as a proof-of-principle for applying syndromic surveillance data to additional health domains.

(Online J Public Health Inform 2015;7(1):e5723) doi:10.5210/ojphi.v7i1.5723

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5723

URL:



Abstract

This review was carried out to find out the types of national data available in the field of disability and to find out the possible methodology for establishing a disability surveillance system in Sri Lanka. Disability data differ from one data source to the other. Further, current disability data in Sri Lanka are non-comparable locally and internationally because they are not based on a scientific disability classification system. This highlights the great need of establishment of a national disability surveillance system based on scientific methods such as ICF.

(Online J Public Health Inform 2015;7(1):e5724) doi:10.5210/ojphi.v7i1.5724

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Online J Public Health Inform 2015;7(1):e5724

URL:



Abstract

We analyzed VHA syndromic surveillance data to assess the opioid epidemic among Veterans in terms of trends over time by age and US Census region from 2004 through 2014.

(Online J Public Health Inform 2015;7(1):e5725) doi:10.5210/ojphi.v7i1.5725

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5725

URL:



Abstract

The increase in technology use in Africa provides an opportunity to advance training delivery. The World Health Organization Regional Office for Africa (WHO-AFRO) and the Centers for Disease Control and Prevention developed an electronic learning course targeting district and national surveillance health officers responsible for disease prevention, detection and response functions. The e-Learning course is based on the Integrated Disease Surveillance and Response framework which incorporates core capacities for the International Health Regulations (2005) and supports the prevent-detect-respond goals of the Global Health Security Agenda. The course was piloted in 7 African countries, and will be implemented in 47 WHO-AFRO countries.

(Online J Public Health Inform 2015;7(1):e5726) doi:10.5210/ojphi.v7i1.5726

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5726

URL:



Abstract

School closures implemented pre-emptively, before the peak of influenza activity, are an effective mitigation strategy to slow disease transmission during influenza pandemic. Prolonged school closures may impose unintended economic and social costs to students families. To better understand this unintended impact, we conducted household surveys in five different regions of the United States following school closures implemented for various reasons. One of the primary challenges for families during unplanned school closures is making emergency childcare arrangements. While the most frequently childcare is provided by a non-working household member, this option is not available for families where all adults are employed full-time. Although disruption of subsidized school lunch program did not appear as a difficulty for the majority of eligible families during these school closures, more research might be needed on closures that last longer than 7 days.

(Online J Public Health Inform 2015;7(1):e5727) doi:10.5210/ojphi.v7i1.5727

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5727

URL:



Abstract

The Biosurveillance Portal (BSP) is a web-based tool that currently is being developed by the Joint Program Executive Office for Chemical and Biological Defense. The BSP will ultimately facilitate collaboration, communication, information sharing, and provide a centralization of biosurveillance resources in support of the detection, management and mitigation of biological events. The BSP is being developed based on U.S. Special Operations Command biosurveillance requirements. As additional stakeholders are engaged and the BSP matures it will provide information sharing across the DoD biosurveillance community of interest and other government agencies to promote a whole of government biosurveillance capability.

(Online J Public Health Inform 2015;7(1):e5729) doi:10.5210/ojphi.v7i1.5729

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Online J Public Health Inform 2015;7(1):e5729

URL:



Abstract

Study aims to use existing syndromic surveillance data to describe demographic and utilization characteristics among chronic high frequency emergency department (ED) users in order to better understand the health complaints affecting this population. A retrospective study was conducted from 44 acute care hospital EDs between January 1, 2012 and December 31, 2013. Analyses were conducted at the patient level based on medical record number and at the visit level based on chief complaint to characterize health complaints. This assessment determined a portion of visits by high frequency ED users could be directed to other health care services for appropriate treatment erin.austin@vdh.virginia.gov

(Online J Public Health Inform 2015;7(1):e5730) doi:10.5210/ojphi.v7i1.5730

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Online J Public Health Inform 2015;7(1):e5730

URL:



Abstract

The current data structures of the syndromic surveillance systems do not allow the for the full analytical potential that GIS tools possess.

(Online J Public Health Inform 2015;7(1):e5731) doi:10.5210/ojphi.v7i1.5731

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Online J Public Health Inform 2015;7(1):e5731

URL:



Abstract

The health hazards posed by the 2104 surge of unaccompanied alien children to the Lower Rio Grande Valley border were minimal.

(Online J Public Health Inform 2015;7(1):e5732) doi:10.5210/ojphi.v7i1.5732

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5732

URL:



Abstract

This study quantified the opportunities for reducing perinatal HIV transmission if pregnancy status was available on laboratory reports. For mothers whose HIV status was known before pregnancy and who had an HIV test during pregnancy, the highest transmission rate occurred in those without a viral load test (7.0%). This analysis suggests pregnancy status on laboratory reports would be useful for targeting women who have an HIV test during pregnancy but no viral load test. Health Departments should continue to work on the identification of pregnancy status on HIV laboratory reports and should require this information in their laboratory reporting guidelines.

(Online J Public Health Inform 2015;7(1):e5733) doi:10.5210/ojphi.v7i1.5733

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Online J Public Health Inform 2015;7(1):e5733

URL:



Abstract

The objective of the Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS) is to provide a unified approach to monitor national trends in antimicrobial resistance (AMR) and antimicrobial use (AMU) in humans and animals and to facilitate the assessment of the public health impact of antimicrobial use. CIPARS is a combination of passive and active surveillance that is coordinated by the Public Health Agency of Canada (PHAC) but is based on extensive collaborations. Stakeholder engagement has led to action based on surveillance results. This One-Health approach provides a holistic understanding of AMR in Canada and enables the evaluation of interventions.

(Online J Public Health Inform 2015;7(1):e5734) doi:10.5210/ojphi.v7i1.5734

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Online J Public Health Inform 2015;7(1):e5734

URL:



Abstract

The goal is to identify and monitor MERS like syndrome cases in the syndromic surveillance system. In consultation with the state and local jurisdictions, five case definitions were developed to monitor MERS like syndromes. From May through July, 2014 fifteen reporting jurisdictions participated in MERS enhanced surveillance. During this enhanced surveillance time period 171 probable MERS cases were identified and all of them were ruled out. The MERS collaborative efforts between BioSense programs, CDC subject matter experts and jurisdictions will help develop more comprehensive definitions to conduct enhanced surveillance at the national level using multiple syndromic surveillance systems.

(Online J Public Health Inform 2015;7(1):e5735) doi:10.5210/ojphi.v7i1.5735

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Online J Public Health Inform 2015;7(1):e5735

URL:



Abstract

In 2011, Washington State voters passed an initiative which closed state liquor stores and opened private sector liquor sales. We examined trends in alcohol-related emergency department (ED) visits associated with this law change. Data were from the King County syndromic surveillance system. Alcohol-related ED visits were identified using chief complaint search strings and diagnosis codes. We used a linear regression model with a spline at the date of law change and controlled for other factors. Significant increases in alcohol-related ED visits were observed associated with the law change among minors (age <21) and adults ages 40 and older.

(Online J Public Health Inform 2015;7(1):e5736) doi:10.5210/ojphi.v7i1.5736

###Reviewer names will be inserted here### published 15.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5736

URL:



Abstract

We provided emergency department providers with a real-time laboratory-based influenza surveillance tool, and evaluated the utility and acceptability of the surveillance information using provider surveys. The majority of emergency department providers found the surveillance data useful and indicated the additional information impacted their clinical decision making regarding influenza testing and treatment.

(Online J Public Health Inform 2015;7(1):e5737) doi:10.5210/ojphi.v7i1.5737

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Online J Public Health Inform 2015;7(1):e5737

URL:



Abstract

An evaluation study was conducted in Chad to improve meningitis surveillance after the introduction of the serogroup A meningococcal conjugate vaccine. This project was carried out in four phases. Phase 1: Determine the actual costs of the current meningitis surveillance system; phase 2: Evaluate the performance and quality of the system; phase three: Determine the potential costs of scaling up the surveillance system to a feasible operational standard; and phase four: Use the results from Chad to develop a surveillance cost model that can be used for predicting the costs of surveillance strategies in other African meningitis belt countries.

(Online J Public Health Inform 2015;7(1):e5738) doi:10.5210/ojphi.v7i1.5738

###Reviewer names will be inserted here### published 15.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5738

URL:



Abstract

In December 2013, an emergence of chikungunya was observed in the French Caribbean region. The French syndromic surveillance system SurSaUD, based on the daily collection of attendances on emergency departments and calls to associations SOS Medecins, ensure a complementary surveillance with the specific system based on a sentinel general practitioners network. This study describes the temporal pattern of the chikungunya epidemic and the characteristics of patients in the French overseas territories of Americas using the syndromic surveillance system.

(Online J Public Health Inform 2015;7(1):e5739) doi:10.5210/ojphi.v7i1.5739

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5739

URL:



Abstract

Implemented 10 years ago, the French syndromic surveillance system Oscour, based on emergency departments, has been assessed using four major evaluation criteria in syndromic surveillance: stability and regularity of data transmission, the coverage at the national level, data quality, particularly for medical information and the utility of the system for the public health surveillance. In 2014, about 40,000 daily attendances are extracted automatically from 600 ED departments located all over the territory, covering 80% of the national attendances. About 12,800 different ICD10 codes have been used in 2013, enabling a large public health surveillance.

(Online J Public Health Inform 2015;7(1):e5740) doi:10.5210/ojphi.v7i1.5740

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Online J Public Health Inform 2015;7(1):e5740

URL:



Abstract

The difference between observed and predicted ILI rates during the winter holiday period varies across HHS region and influenza seasons. Most frequently, the last week in December had higher observed than predicted ILI rates, and the first week of January had lower observed than predicted ILI rates.

(Online J Public Health Inform 2015;7(1):e5741) doi:10.5210/ojphi.v7i1.5741

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Online J Public Health Inform 2015;7(1):e5741

URL:



Abstract

A case detection algorithm (CDA) originally designed for automated surveillance of acute respiratory infection was enhanced with an automated classifier for chest imaging reports in order to detect cases of pneumonia. This detection method revealed cases of pneumonia treated in the outpatient setting that were misdiagnosed or had a treatment delay. We also report the antibiotics chosen for treatment, both when pneumonia is recognized and missed. A pneumonia CDA can be used in future studies to assess quality of care and outcomes in CAP treated in the outpatient setting.

(Online J Public Health Inform 2015;7(1):e5742) doi:10.5210/ojphi.v7i1.5742

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5742

URL:



Abstract

In recent years the transmission of HIV drug-resistant strains among infected persons has been an on-going concern. Measuring the burden of antiretroviral resistance has risen in importance, ranking alongside other major public health concerns when planning HIV prevention campaigns. The aim of this presentation is to illustrate a public health surveillance method for monitoring antiretroviral drug resistance in persons diagnosed with human immunodeficiency virus infection. We developed procedures for examining HIV related electronic laboratory reports (ELR) transmitted to our health department surveillance system that link to corresponding clinical and demographic data for patients with varying degrees of antiretroviral drug resistance.

(Online J Public Health Inform 2015;7(1):e5743) doi:10.5210/ojphi.v7i1.5743

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Online J Public Health Inform 2015;7(1):e5743

URL:



Abstract

Chikungunya is not a U.S. nationally notifiable disease and tracking travel-associated and locally acquired cases is currently dependent on voluntary reporting via ArboNET. Electronic healthcare reimbursement claims covering a large proportion of visits to providers" offices may help overcome some of the limitations of ArboNET in documenting timing, occurrence, and spread of Chikungunya in the U.S.

(Online J Public Health Inform 2015;7(1):e5744) doi:10.5210/ojphi.v7i1.5744

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5744

URL:



Abstract

An epidemic of \"ebolavirus\" in West Africa, which was first identified in March 2014, is now the largest Ebola Virus Disease (EVD) outbreak on record. The West African epidemic will only be quelled through widespread adherence of public health initiatives promoting barrier-nursing techniques, health education, and the rapid identification of cases. The ongoing EVD outbreak in West Africa is unlikely to affect public health in the U.S. significantly.

(Online J Public Health Inform 2015;7(1):e5745) doi:10.5210/ojphi.v7i1.5745

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5745

URL:



Abstract

In support of Meaningful Use public health reporting, health departments are expanding their capacity to receive electronic health data. The Illinois Department of Health is working with the Illinois Health Information Exchange to build services and applications to improve the quality and utility of surveillance data. The Master Patient Index is an innovative component of the technology that will integrate public health data across surveillance systems. This presentation will cover the application of the MPI to ambulatory syndromic surveillance as well as other surveillance systems and highlight potential use cases.

(Online J Public Health Inform 2015;7(1):e5746) doi:10.5210/ojphi.v7i1.5746

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Online J Public Health Inform 2015;7(1):e5746

URL:



Abstract

We used an ED syndromic surveillance system to understand the factors driving respiratory ED attendances in England and how these can be characterised by the syndromic indicators available. Respiratory indicators were observed to peak at different points during winter, with further variation observed in the distribution of attendances by age. Multiple linear regression revealed acute respiratory infection and bronchitis were sensitive to increasing RSV activity in infants. A less specific all respiratory indicator was found to be sensitive to RSV, showing the ability for this ED system to make full use of data even from sites using basic diagnosis coding.

(Online J Public Health Inform 2015;7(1):e5747) doi:10.5210/ojphi.v7i1.5747

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Online J Public Health Inform 2015;7(1):e5747

URL:



Abstract

This was a prospective cohort study involving an ED rapid HIV screening program targeting high risk patients. 1090 patients underwent ED HIV testing over a 33 month period. 43% (467/1090) were male and 74%(804/1090) were African American. Mean age was 27 years. 32/1090 tested positive of which 31 were confirmed on follow up testing (3%; 95%CI, 2-4%). 27/31 patients were previously undiagnosed (87%; 95%CI, 71-95%), while 4 patients had reported prior positive results.100% of HIV positive patients were linked to outpatient care. ED testing, including linkage to outpatient care is feasible, and yielded higher rates of HIV than previously reported.

(Online J Public Health Inform 2015;7(1):e5748) doi:10.5210/ojphi.v7i1.5748

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5748

URL:



Abstract

The goal of this analysis is to compare the results of influenza-like-illness (ILI) text and International Classification of Diseases (ICD) code classifiers applied to the Louisiana Office of Public Health (OPH) syndromic surveillance data reported by New Orleans area emergency departments and the Greater New Orleans Health Information Exchange (GNOHIE) data reported by New Orleans area outpatient clinics. This study adds to the evidence supporting the emerging use of outpatient data for syndromic surveillance.

(Online J Public Health Inform 2015;7(1):e5749) doi:10.5210/ojphi.v7i1.5749

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Online J Public Health Inform 2015;7(1):e5749

URL:



Abstract

NC DETECT emergency department (ED) data were analyzed to assess the impact of applying the BioSense 24-hour rule that combines ED visits into a single visit if the patient ID and facility ID are the same and the earliest recorded times occur within the same 24-hour time frame. 4,822,347 unique ED visits from 2013 NC DETECT data were included in this analysis. Applying the 24-hour rule reduced the overall ED visit count in NC by approximately 1.7%. The percentage of ED visits lost was higher for certain types of visits, e.g. behavioral health, healthcare utilization, GI illness and varied significantly across counties in NC.

(Online J Public Health Inform 2015;7(1):e5750) doi:10.5210/ojphi.v7i1.5750

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Online J Public Health Inform 2015;7(1):e5750

URL:



Abstract

This presentation discusses the functionality that is incorporated into ESSENCE to prepare it for the ICD10 transition. The features that allow usage of both ICD9 and ICD10 classification systems simultaneously will also be presented.

(Online J Public Health Inform 2015;7(1):e5751) doi:10.5210/ojphi.v7i1.5751

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5751

URL:



Abstract

We developed Persistent Health Assessment Tools, PHAT, to equip public health policy makers with more precise tools and timely information for measuring the success of obesity prevention programs. PHAT monitors social media to supplement traditional surveillance by making real-time estimates based on observations of obesity-relevant behaviors. Specifically, we developed models for predicting obesity rates from sets of tweets and developed a dashboard to provide interactive navigation and time slicing.

(Online J Public Health Inform 2015;7(1):e5752) doi:10.5210/ojphi.v7i1.5752

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Online J Public Health Inform 2015;7(1):e5752

URL:



Abstract

Google Flu Trends (GFT) is an internet search query-based application that has been proven to add value to influenza surveillance and forecasting tools. Previous validation studies have focused on national or regional predictions. While these results have been promising, GFT has yet to be extensively validated at the city level. The AHRQ has provided weekly data for influenza-related emergency room visits across 19 cities. Correlation coefficients with city-level GFT range from .67 to .93 with a median of .84. Characterizing the effectiveness of GFT at the local level is crucial to its integration into new surveillance and prediction tools.

(Online J Public Health Inform 2015;7(1):e5753) doi:10.5210/ojphi.v7i1.5753

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Online J Public Health Inform 2015;7(1):e5753

URL:



Abstract

During 2014 testing and demonstrations organized by the Integrating the Healthcare Enterprise, we demonstrated the feasibility of using healthy weight (HW) IT standards in public health surveillance for chronic conditions through the collection and visualization of patient height, weight and behavioral data. HW surveillance could identify the need for, shape the design of, and support monitoring and evaluation of public health interventions.

(Online J Public Health Inform 2015;7(1):e5754) doi:10.5210/ojphi.v7i1.5754

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Online J Public Health Inform 2015;7(1):e5754

URL:



Abstract

HIV post-exposure prophylaxis (PEP) prescriptions are not uniformly monitored in the United States. We developed a method to identify PEP-related visits in New York City emergency departments (EDs). Using ED data, we observed a threefold increase in PEP-related visits to NYC EDs from 2002-2013. 73% of PEP-related visits were among males, and 45% among adults ages 25-34 years. Incorporation of this method of PEP monitoring in the NYC syndromic surveillance system will be used to observe trends and inform HIV outreach efforts.

(Online J Public Health Inform 2015;7(1):e5755) doi:10.5210/ojphi.v7i1.5755

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Online J Public Health Inform 2015;7(1):e5755

URL:



Abstract

Presentation of the results of a nationwide survey designed to assess the syndromic surveillance practices and capacity-building assistance needs of state and territorial public health authorities in the United States.

(Online J Public Health Inform 2015;7(1):e5756) doi:10.5210/ojphi.v7i1.5756

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Online J Public Health Inform 2015;7(1):e5756

URL:



Abstract

Description of a statistical model to account for weather variation in influenza-like illness surveillance.

(Online J Public Health Inform 2015;7(1):e5757) doi:10.5210/ojphi.v7i1.5757

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5757

URL:



Abstract

This study estimated the early warning timeliness of a chief complaint-based syndromic surveillance system towards seasonal influenza epidemics. Findings showed that the timliness of ILI data sources changed across two influenza epidemic seasons. ILI reported from different levels of health facilities and patient groups showed distinct timeliness towards influenza epidemics indicated by virus positive rate (VPR) from National Influenza Surveillance Network. The changes of dominant strains, clinical manifestations, population groups affected in different influenza seasons might account for this inconsistency.

(Online J Public Health Inform 2015;7(1):e5758) doi:10.5210/ojphi.v7i1.5758

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Online J Public Health Inform 2015;7(1):e5758

URL:



Abstract

This session discusses an assessment of the effect of patient self-registration methods in hospital emergency departments on data in a syndromic surveillance system and provides suggestions for best practices in identifying and analyzing these data.

(Online J Public Health Inform 2015;7(1):e5759) doi:10.5210/ojphi.v7i1.5759

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5759

URL:



Abstract

The challenges facing surveillance for dog bite injuries include the lack of a standardized reporting form, consistent information being collected, and utilization of the information that is collected. Potential solutions include a standardized reporting form, greater emphasis on reporting, and a repository for information. These solutions can be accomplished in part by including dog bite injuries in current or developing disease surveillance systems.

(Online J Public Health Inform 2015;7(1):e5760) doi:10.5210/ojphi.v7i1.5760

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5760

URL:



Abstract

To track outbreaks of influenza (flu), we computed twitter rates from 31 US cities and compare rates to influenza-like-illness (ILI) surveillance rates. Over 2 flu seasons, 2012-14, significant correlations and similar graphic patterns were observed. We demonstrate an interactive dashboard \"SMART\" that allows practitioners to monitor and visualize daily changes of flu tweets and related news. Compared to regional or national approaches such a GoogleFluTrends, this system allows rapid public opinion analysis and flu outbreak detection at the local level. The SMART dashboard can provide timely and actionable information for local for agencies and practitioners.

(Online J Public Health Inform 2015;7(1):e5761) doi:10.5210/ojphi.v7i1.5761

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5761

URL:



Abstract

Developing a modular approach to infectious disease genomic analysis that can easily integrate with public health analytics systems. Using dynamic approaches to genomic sequence analysis, relevant whole genome data can be quickly and accurately visualized and correlated, using a minimum of computational resources. We propose to develop visualization modules that integrate disparate data sources including integrate geospatial location metadata with associated epidemiological factors to enable faster outbreak identification and enhance surveillance.

(Online J Public Health Inform 2015;7(1):e5762) doi:10.5210/ojphi.v7i1.5762

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5762

URL:



Abstract

Substance abuse results in considerable morbidity each year in the United States. The relationship between drug overdose emergency department visits and deaths that opiate use contributed to or caused in Virginia was assessed for 2012-2013 to determine if syndromic surveillance data can be used to provide a real-time and accurate picture of the population at risk for drug overdose. Drug overdose emergency department visits showed divergent demographics from opiate deaths with respect to sex and age distributions. This may indicate a shift in the population previously identified as at risk for drug use morbidity.

(Online J Public Health Inform 2015;7(1):e5763) doi:10.5210/ojphi.v7i1.5763

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5763

URL:



Abstract

The catchment areas of six health-care facilities in Uganda were determined using the cumulative case ratio: the ratio of the observed to expected utilization of a facility for a particular condition by patients from small administrative areas. Our approach is simple, reproducible, and is based on a statistical measure to decide which administrative units should be included in catchment areas.

(Online J Public Health Inform 2015;7(1):e5764) doi:10.5210/ojphi.v7i1.5764

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5764

URL:



Abstract

Investigation of infectious disease cases requires support from protocols, distributed and cooperative work, and information systems. We used form and protocol reviews together with qualitative research to study public health work practices, data requirements, and information needs. We found that the forms and protocols did not fully align, and that current information systems were limited in their ability support data analysis. We propose that better alignment between protocols, work practices, and system functionality such as integrated information visualization will improve the disease investigation process.

(Online J Public Health Inform 2015;7(1):e5765) doi:10.5210/ojphi.v7i1.5765

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5765

URL:



Abstract

Reduction in HIV transmission needs continuous, comprehensive and effective communication methods to motivate adolescents to reduce risk of HIV infection. Life skills education, an integral part of school-based AIDS programs, is a timely prevention effort. The main goal of the life skills approach is to enhance young people ability to take responsibility for making healthier choices, resisting negative pressures, and avoiding risk behaviors. A cross sectional study design was done. The number of students was 1467. This study showed that family life and HIV/AIDS education with some socio demographic factors contributed to the improvement of life skills education program.

(Online J Public Health Inform 2015;7(1):e5766) doi:10.5210/ojphi.v7i1.5766

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Online J Public Health Inform 2015;7(1):e5766

URL:



Abstract

The functioning electronic databases for fast and reliable disease early warning and response networks (EWARN) have been found very effective in early detection, confirmation and response to disease outbreaks but launching the implementation of such electronic systems is always time consuming due to resource constraints and other limitations during crises. Thus application of data analytical approaches can serve as reliable alternative for electronic database system during the initial launching phase that facilitate monitoring of health situation without any delay during humanitarian crises. Furthermore, this approach can help in improving overall health information management capacities and capabilities of resource poor countries.

(Online J Public Health Inform 2015;7(1):e5767) doi:10.5210/ojphi.v7i1.5767

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5767

URL:



Abstract

Vigila is a national electronic surveillance system implemented by the Peruvian Navy in order to monitor infectious diseases. Vigila includes 169 reporting establishments, which treat active military, retired military, dependents, and civilian employees. The goal of this study was to establish baselines of acute diarrheal disease in the Peruvian Navy and detect outbreaks of acute diarrheal disease from 2009-2013. There were 39,764 cases of acute diarrheal disease reported, and 25 outbreaks were detected using Exponentially Weighted Moving Average (EWMA) control charts. These analyses demonstrate the utility of syndromic surveillance in a resource-limited setting.

(Online J Public Health Inform 2015;7(1):e5768) doi:10.5210/ojphi.v7i1.5768

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5768

URL:



Abstract

We aim to disseminate field lessons gained from studying zoonotic diseases among children with diarrhea in the Nairobi Urban Health and Demographic Surveillance System. Despite the numerical importance of slums in sub-Saharan Africa, little is known on the practice of health surveillance in those resource-limited areas. Challenges and lessons gained concern sustaining community participation over the years, engaging with gatekeepers, hiring and training local fieldworkers, ensuring safety of employees and material, and offering clinical care to children with diarrhea in their households.

(Online J Public Health Inform 2015;7(1):e5769) doi:10.5210/ojphi.v7i1.5769

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5769

URL:



Abstract

Dengue is endemic in Singapore, and the most recent epidemic occurred in 2013. The mean of weekly number of dengue cases over a five-year period provides an indication of the baseline level. In view of increased laboratory testing for dengue in 2013, an adjustment was made to the computation of the baseline level for 2014. The assumption for our approach in incorporating an adjustment factor was that the proportion of hospitalizations among laboratory-confirmed cases remained constant between 2012 and 2013. This adjustment has helped to provide a more accurate indication of the baseline level of dengue for 2014.

(Online J Public Health Inform 2015;7(1):e5770) doi:10.5210/ojphi.v7i1.5770

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5770

URL:



Abstract

In an effort to evaluate patient stated \"fever\" chief complaints and diagnoses utilizing emergency department data from the Los Angeles County Syndromic Surveillance project, each were compared with measured patient body temperatures in the fever range.

(Online J Public Health Inform 2015;7(1):e5771) doi:10.5210/ojphi.v7i1.5771

###Reviewer names will be inserted here### published 15.

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5771

URL:



Abstract

Firearm-related injuries pose a substantial public health risk in the United States, and traditional means of studying this issue rely primarily on retrospective analyses. Syndromic surveillance, collected in over 30 Houston area emergency departments, is well suited to characterize and analyze gunshot injuries in the area in near real-time. Over the past two years, more than 900 gunshot-related injury visits were identified using this method, and ArcGIS effectively identified incident densities in ZIP codes throughout Houston. Most patients were males (86.3%), between the ages of 18 and 34 (64.7%).

(Online J Public Health Inform 2015;7(1):e5772) doi:10.5210/ojphi.v7i1.5772

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Online J Public Health Inform 2015;7(1):e5772

URL:



Abstract

In early September 2014, during the yearly increase in respiratory visits associated with the start of the school year, reports of more severe infection caused by Enterovirus D68 (EV-D68) in children in other parts of the country began circulating. Public health officials in Florida, as well as the media, questioned whether children in the state were being infected by this virus capable of causing more severe illness, especially among asthmatics. As is the case with many incipient outbreaks, syndromic surveillance played an integral role in early efforts to detect the presence of this illness.

(Online J Public Health Inform 2015;7(1):e5773) doi:10.5210/ojphi.v7i1.5773

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Online J Public Health Inform 2015;7(1):e5773

URL:



Abstract

Since its inception in 2008, Public Health Ontario (PHO) has grown through new funding, as well as a series of program transfers from the Government of Ontario, including infectious disease (ID) surveillance. In an effort take a strategic approach to ID surveillance, PHO has developed its first Infectious Disease Surveillance Framework. The overarching aim of the framework is to establish key priorities, strategies, and actions to guide ID surveillance over the next five years. The presentation will outline the development process for the framework, highlight its key elements, and identify examples of initiatives planned for implementation.

(Online J Public Health Inform 2015;7(1):e5774) doi:10.5210/ojphi.v7i1.5774

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5774

URL:



Abstract

Results of transitioning Pertussis related case notifications from the John Peter Smith Network to an electronic notification system.

(Online J Public Health Inform 2015;7(1):e5775) doi:10.5210/ojphi.v7i1.5775

###Reviewer names will be inserted here### published 15.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

 $On line\ J\ Public\ Health\ Inform\ 2015; 7(1):e5775$

URL:



Abstract

A syphilis birth registry match was completed for the first time in Louisiana to identify infants perinatally exposed to syphilis that were missed by routine surveillance activities. The match used a locally-developed, deterministic match and identified 18 potential cases of congenital syphilis. These cases could significantly increase Louisiana congenital syphilis case rate which was the highest in the nation in 2012. The match also identified the need of guidelines for the initiation of congenital syphilis investigations. Other states may wish to conduct a similar birth registry match to ensure complete surveillance for cases of congenital syphilis.

(Online J Public Health Inform 2015;7(1):e5776) doi:10.5210/ojphi.v7i1.5776

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5776

URL:



Abstract

The United States Department of Agriculture (USDA) Animal and Plant Inspection Service (APHIS) announced the first diagnosed case of PEDV in U.S. swine on May 17, 2013. NBIC has been monitoring this epidemic primarily due to economic concerns. Without a formal response protocol by a single coordinating agency, PEDV spread rapidly between states. Though APHIS have been actively involved from the beginning of emergence, the Federal Order announced on June 5, 2014 marks more formalized and coordination response, which NBIC predicts will exert greater control over the epidemic despite the predicted viral surge in the colder months.

(Online J Public Health Inform 2015;7(1):e5777) doi:10.5210/ojphi.v7i1.5777

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5777

URL:



Abstract

Although chronic hepatitis C virus (HCV) infection results in substantial morbidity and mortality, many cases are undiagnosed and reporting to public health is often incomplete. To determine how well surveillance data documents deaths due to HCV, we linked reported HCV cases to death certificate records. Electronic record linkage found 346 deaths and an additional 254 persons were identified as having chronic HCV as a cause of death that had never been reported to public health. These results suggest that enhanced surveillance is needed to allow for more accurate representation of prevalence and mortality trends amongst the HCV population in Utah.

(Online J Public Health Inform 2015;7(1):e5778) doi:10.5210/ojphi.v7i1.5778

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5778

URL:



Abstract

The RecentMax algorithm seeks to detect typical outbreaks of transmissible disease (particularly influenza-like illness) in time-series data better than existing algorithms like CDC EARS C1/C2/C3.

(Online J Public Health Inform 2015;7(1):e5779) doi:10.5210/ojphi.v7i1.5779

###Reviewer names will be inserted here### published 15.

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5779

URL:



Abstract

Asthma is one of the numerous syndromic indicators daily monitored at the regional and national levels by the French syndromic surveillance system based on the emergency departments Oscour network. This indicator presents important daily fluctuations and can be influenced by several environmental, infectious and societal factors. Particularly the short-term impact on asthma of episodes like the air pollution peak experienced in March 2014 and the thunderstorm occurred in July 2014 has been analysed by age group on the Paris area, as well as the effect intrinsic factors (day-of-week, seasonal period, holidays).

(Online J Public Health Inform 2015;7(1):e5780) doi:10.5210/ojphi.v7i1.5780

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5780

URL:



Abstract

This presentation tried to understand the spatio-temporal evolution of hand, foot and mouth disease epidemics in East Asia. In addition, we want to elucidate the relationship between weather conditions and HFMD epidemics.

(Online J Public Health Inform 2015;7(1):e5781) doi:10.5210/ojphi.v7i1.5781

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5781

URL:



Abstract

Unintentional Ingestions (UIs) in NYC were investigated for children under 5 years using syndromic surveillance data. Emergency Department visits for UIs have remained stable in this population from 2010 through July 2014, with foreign bodies such as coins and medications comprising the bulk of these visits. Among medications, analgesics were the most common known source of poisoning. Our results corroborate findings from the Poison Control Center and will be used to identify all UIs in near real-time. Our results also suggest a link between accidental medicinal UIs and poverty level and living with grandparents, which we will further explore in future studies.

(Online J Public Health Inform 2015;7(1):e5782) doi:10.5210/ojphi.v7i1.5782

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5782

URL:



Abstract

Our aim in this work is to apply text mining and novel visualization techniques to textual data derived from online health discussion forums in order to better understand consumers experiences and perceptions of electronic cigarettes and hookah.

(Online J Public Health Inform 2015;7(1):e5783) doi:10.5210/ojphi.v7i1.5783

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5783

URL:



Abstract

Data validation tools and process development

(Online J Public Health Inform 2015;7(1):e5784) doi:10.5210/ojphi.v7i1.5784

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5784

URL:



Abstract

This was a retrospective study that combined with emergency department visit chief complaint and power outage data to evaluation of carbon monoxide poisoning during hurricane Sandy in three most affected New York State counties.

(Online J Public Health Inform 2015;7(1):e5785) doi:10.5210/ojphi.v7i1.5785

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5785

URL:



Abstract

Real-time emergency department (ED) data are currently received from 78 of 80 New Jersey acute care and satellite EDs by Health Monitoring Systems Inc. (HMS) EpiCenter system. After the 2012 Superstorm Sandy, NJDOH initiated a plan to develop severe weather surveillance using ED data to track both health and mental health outcomes during adverse weather conditions to alert the public about emerging health hazards. Data from 68 out of a total of 80 emergency departments with dates from October 28, 2012 to November 17, 2012 were used in this analysis. Validation results for classifications were reviewed and issues are addressed.

(Online J Public Health Inform 2015;7(1):e5786) doi:10.5210/ojphi.v7i1.5786

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5786

URL:



Abstract

ILINet is used by sentinel healthcare providers for reporting influenza surveillance data. The Florida Department of Health receives urgent care center data through the ESSENCE syndromic surveillance system from participating facilities, and which can include discharge diagnoses. Seminole County is unique in that its sentinel providers located in four separate urgent care centers report into both systems, and their discharge diagnoses are recorded in ESSENCE. Data from the two systems were therefore compared both among and between the individual sentinel providers in order to identify differences in reporting influenza in ILINet from actual discharge diagnoses for influenza identified through ESSENCE.

(Online J Public Health Inform 2015;7(1):e5787) doi:10.5210/ojphi.v7i1.5787

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5787

URL:



Abstract

A simple and an efficient algorithm is proposed for prospective disease surveillance using spatial CUSUSM charts. With this method, spatially correlated Poisson CUSUSM statistics are computed for small neighborhoods and the false discovery rate is controlled using the popular Benjamini-Yekutieli procedure. Simulation studies provide convincing evidence of the strength of the method in rapid identification of disease clusters. The results produced by the method are easily interpretable without a high level of statistical expertise.

(Online J Public Health Inform 2015;7(1):e5788) doi:10.5210/ojphi.v7i1.5788

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5788

URL:



Abstract

Data sharing remains a barrier to joint surveillance and the establishment of contingency plans among countries and institutions. Summary statistics are hard to interpret and compare, and nomenclatures for animal disease classification are seldom used. SSynCAHD (Syndromic Classification in Animal Health Data) proposes to harmonise, through the development on an ontology, syndromic surveillance data use rather than data recording. This will be achieved by standardising classification into syndromes, based on records from different sources of animal health data which are (and will continue to be) recorded using an institution own vocabulary.

(Online J Public Health Inform 2015;7(1):e5789) doi:10.5210/ojphi.v7i1.5789

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Online J Public Health Inform 2015;7(1):e5789

URL:



Abstract

ovariate studies associating the presence of regularly shaped geographic clusters with environmental factors are routinely done using the Circular Scan. However, if the study employs irregular clusters instead, accurate results depend on the generation of a rich family of variants of the primary cluster. We employ climate information to assess the possible spatial dependence on the occurrence of Chagas" disease irregular clusters in Central Brazil, using a modification of the Spatial Scan Statistic, the Geo-Dynamic Scan. It finds more potentially useful variants of the primary cluster with more desirable covariate values. This information could be useful in Chagas" disease surveillance.

(Online J Public Health Inform 2015;7(1):e5790) doi:10.5210/ojphi.v7i1.5790

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Online J Public Health Inform 2015;7(1):e5790

URL:



Abstract

Slaughterhouses are a potential source of data which is under-used for cattle health monitoring. The objective of this work was to assess the performance of several algorithms for outbreak detection based on weekly proportions of whole carcass condemnation. Data from 177,098 cattle slaughtered in one French slaughterhouse from 2005 to 2009 were used. The Shewart p chart, one-sided confidence interval of a negative binomial regression model, and EWMA and CUSUM on residuals of a negative binomial model were investigated. The highest sensitivity was obtained using negative binomial regression and the highest specificity using CUSUM or EWMA.

(Online J Public Health Inform 2015;7(1):e5791) doi:10.5210/ojphi.v7i1.5791

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Online J Public Health Inform 2015;7(1):e5791

URL:



Abstract

This paper describes the national syndromic surveillance delivered by the Public Health England Real-time Syndromic Surveillance Team. We demonstrate how this service is increasingly responding to, and providing public health support for, a range of environmental incidents. Case studies of a number of incidents are illustrated.

(Online J Public Health Inform 2015;7(1):e5792) doi:10.5210/ojphi.v7i1.5792

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Online J Public Health Inform 2015;7(1):e5792

URL:



Abstract

In order to transition the forecasting, estimation and management of epidemic risks to individual administrative areas, the Agency for Consumer Rights Protection of Kazakhstan has developed the Regional Sanitary-Epidemiological Passport (RSEP). The RSEP will contain information on the infectious incidence rate dynamics according to the main infections (7 nosologies) with a forecast for 2-3 years, and natural and soil foci GIS maps for especially dangerous pathogens with their activity forecast for 3-5 years. Approbation of RSEP was conducted for the Crimean-Congo hemorrhagic fever. Planned work includes estimation method adjustment, retrospective databank formation, GIS archive creation and Open-source EIDSS system application.

(Online J Public Health Inform 2015;7(1):e5793) doi:10.5210/ojphi.v7i1.5793

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Online J Public Health Inform 2015;7(1):e5793

URL:



Abstract

In 2012, the Syndromic Surveillance Program (SSP) of the Georgia Department of Public Health and Effingham County Schools began collecting syndromic surveillance school nurse clinic visit data. The hypothesis was that these data could provide situational awareness during a pandemic, inform health interventions, elucidate disease burden in students, and characterize school nurse activities. Analysis of the data highlighted a significant burden of asthma and diabetes management and a disparate burden of illnesses across schools. In response to the initial findings of this project, chronic disease programs at the state health department are considering funding Effingham schools for targeted health interventions.

(Online J Public Health Inform 2015;7(1):e5794) doi:10.5210/ojphi.v7i1.5794

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Online J Public Health Inform 2015;7(1):e5794

URL:



Abstract

We evaluated the usefulness of 3 administrative health care databases for sexually transmitted disease (STD) surveillance. Strengths include availability of diagnosis and procedure codes for large numbers of records. All data sources offer standardized data values. However, none of the sources include laboratory test results or inpatient medications, although several contain outpatient prescription claims. Despite limitations, administrative health care data provide new opportunities for STD surveillance among large numbers of health care consumers. These data may be particularly useful for non-reportable STD and STD clinical sequelae, but delayed availability may limit their utility for public health response.

(Online J Public Health Inform 2015;7(1):e5795) doi:10.5210/ojphi.v7i1.5795

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Online J Public Health Inform 2015;7(1):e5795

URL:



Abstract

Ascariasis infection are common in worldwide. But information about surveillance on ascariasis in Sri Lanka is insufficient. This preliminary study was designed to determine the prevalence of ascariasis infections and their association with nutritional status children. Shared toilet facilities, live in attached houses, de-worming before 6 - 12 months period and before 12 months identified as risk factors of ascariasis and no statistically significant association between nutritional status and ascariasis. Socio-demographic determinants and sanitary conditions should be considered, to plan ascariasis Surveillance system on children.

(Online J Public Health Inform 2015;7(1):e5796) doi:10.5210/ojphi.v7i1.5796

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Online J Public Health Inform 2015;7(1):e5796

URL:



Abstract

This abstract is devoted to development of method for rapid detection of the DNA-containing viral pathogens of pig in clinical materials using conventional multiplex PCR platform

(Online J Public Health Inform 2015;7(1):e5797) doi:10.5210/ojphi.v7i1.5797

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5797

URL:



Abstract

A general-purpose method for automatic detection algorithm reengineering based upon Twitter keyword queries using user relevance/irrelevance feedback has been demonstrated to have superior performance and versatility compared to more static detection methods. A demonstration of the capability with an initial user interface has been performed. An extension of the processing that includes initial query term expansion prior to application of the customized detection is being investigated.

(Online J Public Health Inform 2015;7(1):e5798) doi:10.5210/ojphi.v7i1.5798

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Online J Public Health Inform 2015;7(1):e5798

URL:



Abstract

We conducted an initial assessment of the biosurveillance capabilities of a new software application called Praedico and compared results obtained from previous queries with the ESSENCE.

(Online J Public Health Inform 2015;7(1):e5799) doi:10.5210/ojphi.v7i1.5799

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Online J Public Health Inform 2015;7(1):e5799

URL:



Abstract

Present how a surveillance tool such as SAGES was used for disease surveillance for mass gathering activities. Presentation will contain some visualizations that were created from the SAGES toolkit.

(Online J Public Health Inform 2015;7(1):e5800) doi:10.5210/ojphi.v7i1.5800

###Reviewer names will be inserted here### published 15.

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5800

URL:



Abstract

We evaluated the performance of an electronic smart-card based school absenteeism surveillance system which was initiated in 2008 in Hong Kong. The result demonstrated the feasibility and potential benefit of employing electronic school absenteeism data as captured automatically by a smart card system as an alternative data stream for monitoring influenza activities, and flexibility in establishing surveillance for emerging diseases. The increasing popularity of usage of smart card technology in various community settings might also represent potentially timely and cost-effective opportunities for innovative surveillance systems.

(Online J Public Health Inform 2015;7(1):e5801) doi:10.5210/ojphi.v7i1.5801

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Online J Public Health Inform 2015;7(1):e5801

URL:



Abstract

Twelve new locally defined case definitions were added to NC DETECT in May and June 2014 to facilitate timely surveillance for poisoning and overdose in North Carolina. The case definitions cover acute alcohol poisoning, poisoning, unintentional poisoning, heroin overdose, medication or drug overdose, methadone overdose, opioid overdose, prescription opioid analgesic overdose, Narcan/naloxone, and unintentional medication or drug overdose. Authorized users can monitor trends and review line listing details for their jurisdictions and compare their counties at the aggregate level to other counties and the state.

(Online J Public Health Inform 2015;7(1):e5802) doi:10.5210/ojphi.v7i1.5802

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5802

URL:



Abstract

Tanzania has a decentralised program for HIV Care services. An electronic patient record system has been developed for patient monitoring in clinics to enable accurate, anonymous information to be collated and analysed at the national level. This write-up, represents recent analysis of the anonymised data from 348 care and treatment clinics (CTC) across Tanzania assessing adults patients before ART initiation. Of importance to this gathering is the provision of quick results for policy makers and implementers to use in their decision making, but also demonstrate how a national electronic database can be interrogated and analysed for important markers of progress.

(Online J Public Health Inform 2015;7(1):e5803) doi:10.5210/ojphi.v7i1.5803

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5803

URL:



Abstract

Reaching contagious people in a timely manner is essential to limit disease spread. We examined communicable disease cases with undelivered mail to ascertain failure causes and rates. We identified the source of address, reason for return and patient demographics from the case files. This yielded a framework of address information flow. This framework allows us to establish a baseline for future research including cost-effectiveness analyses for streaming lining the process for improvements.

(Online J Public Health Inform 2015;7(1):e5804) doi:10.5210/ojphi.v7i1.5804

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Online J Public Health Inform 2015;7(1):e5804

URL:



Abstract

This project examines school absence data in the twin cities of Champaign and Urbana during the 2009 H1N1 pandemic. These school districts differ in their catchment policies with Urbana using traditional neighborhood schools and Champaign schools being integrated city-wide. Analysis of these data showed that there is a difference both in time and severity between the two school districts. Urbana schools show a distinct time of increased absences over the course of October 2009, while Champaign schools show a general peak in absences in mid-October. There were no significant correlations among absences and low-income composition, school population, or ethnic composition.

(Online J Public Health Inform 2015;7(1):e5805) doi:10.5210/ojphi.v7i1.5805

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5805

URL:



Abstract

The Now Trending website provides insight into the health concerns of communities by pulling information from Twitter and providing easy to digest analytics of health topics in Tweets. All public health entities should know about this free tool and how it can be used to enhance their public health mission.

(Online J Public Health Inform 2015;7(1):e5806) doi:10.5210/ojphi.v7i1.5806

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5806

URL:



Abstract

Communicable disease reporting remains a challenging task for public health. To understand modern reporting behaviors and challenges, we investigated a sample of chlamydia laboratory and provider communicable disease documentation sent to a local health department. We measured the delay between a chlamydia positive test result and when reports were sent to public health in addition to comparing the results to state law. Laboratory reporting has improved given the adoption of electronic lab reporting. However, provider reports still lag and tend to be fax-based. Given the movement towards electronic health record (EHR) systems, health IT platforms may further improve the timeliness of public health reporting.

(Online J Public Health Inform 2015;7(1):e5807) doi:10.5210/ojphi.v7i1.5807

###Reviewer names will be inserted here### published 15.

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5807

URL:



Abstract

Cancer-related deaths have been projected to increase in sub-Saharan Africa. Cancer control programmes require good quality data in order to provide information for planning and implementing cancer control and prevention activities. Cancer registration and follow-up of cancer cases to estimate survival are useful tools in cancer control programmes. We followed up 136 cases of breast cancer diagnosed from the year 2006 to 2008. The majority of cases (62.5%) could not be reached either by phone or at the residential address indicated in the folders. We recommend a strengthened system of demographic information collection on cases for effective surveillance.

(Online J Public Health Inform 2015;7(1):e5808) doi:10.5210/ojphi.v7i1.5808

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5808

URL:



Abstract

Compared to inferences based on the official line list, publicly-available line lists were able to provide generally similar inferences on descriptive epidemiology and transmissibility with little time-lag, but less accurate estimates of severity because of the lack of publicly-available information on discharge dates for recovered cases. Our findings highlight the potential value in constructing a minimum dataset with standardized format and definition, and regular updates of patient status.

(Online J Public Health Inform 2015;7(1):e5809) doi:10.5210/ojphi.v7i1.5809

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Online J Public Health Inform 2015;7(1):e5809

URL:



Abstract

This presentation highlights the value of ongoing training to professional staff in zoonotic disease. This training program was designed to improve surveillance capability within the USDA-Veterinary Service division, and to improve knowledge, skills and comfort with an outbreak investigation.

(Online J Public Health Inform 2015;7(1):e5810) doi:10.5210/ojphi.v7i1.5810

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5810

URL:



Abstract

An action research through community-based approaches is developed to reduce disease transmission and environmental management for control of dengue hemorrhagic fever in Padang, West Sumatera, Indonesia. The pupal survey showed the positive containers decreased from 33.3% into 4%. The incident of dengue hemorrhagic fever in Jati village decrease became null within 4 years. The output of the implementations is succeeding to environmental management for control of dengue hemorrhagic fever and had a multiplayer effect such as growing another community based action in education, income generating activity. After 4 years of monitoring the program is still continuously and sustainable afterward.

(Online J Public Health Inform 2015;7(1):e5811) doi:10.5210/ojphi.v7i1.5811

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5811

URL:



Abstract

Employing anthropological and ecohealth approaches in research and management of human and animal diseases among pastoral and agro pastoral communities in Tanzania so as to provide scientific evidence for disease burden and drivers that can be attributed to environmental, economic and socio-ecological factors, enabling an innovative One Health approaches as a catalyst to develop and test a multi-sectoral community-based interventions to detect and control high-burden infectious diseases with high impact on food security

(Online J Public Health Inform 2015;7(1):e5812) doi:10.5210/ojphi.v7i1.5812

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5812

URL:



Abstract

We discuss our efforts in detection and tracking using Twitter data collected from January 2013 to the present and discuss various issues that arise in using Twitter data. We discuss various keyword methods, as well as methods for classifying a user as \"sick\". We discuss some of our successes and failures and provide some insight into the utility and limitations of Twitter. We discuss variations on the basic surveillance theme such as watching for a known disease, a known set of symptoms, and the more general problem of detecting an unusual number of sick individuals within a county.

(Online J Public Health Inform 2015;7(1):e5813) doi:10.5210/ojphi.v7i1.5813

 ${\it \#\#Reviewer\ names\ will\ be\ inserted\ here} {\it \#\#published\ 15}.$

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5813

URL:



Abstract

This paper describes the design and application of a new statistical method for real-time syndromic surveillance, used by Public Health England. The Rising Activity, Multi-level Mixed effects, Indicator Emphasis (RAMMIE) statistical method was developed and tested alongside existing methods before being applied to a suite of syndromic surveillance in operation in England. The RAMMIE method has proved to be a reliable, effective method for generating automated alarms for syndromic surveillance. The multi-level models have enabled local models to be created for the first time across all systems and models have proved themselves to be robust across all the signals.

(Online J Public Health Inform 2015;7(1):e5814) doi:10.5210/ojphi.v7i1.5814

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Online J Public Health Inform 2015;7(1):e5814

URL:



Abstract

The presentation will highlight the proposed idea of Public Health Foundation of India (PHFI), to set up a nodal agency for disaster preparedness and surveillance in Odisha, India in collaboration with the National Disaster Management Authority (NDMA), India. The presentation will elaborate on the proposed plan and its objectives thereby defining the roles that other states, partners and government may play its functioning. The roles and responsibilities of the proposed strategic unit will be presented to seek suggestions bring up the unit. It will also focus upon various challenges and roadblocks in establishing such an institute.

(Online J Public Health Inform 2015;7(1):e5815) doi:10.5210/ojphi.v7i1.5815

###Reviewer names will be inserted here### published 15.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5815

URL:



Abstract

Public health surveillance is essential for early detection and rapid response to cholera outbreaks. In 2003, Cameroon adopted the integrated disease surveillance and response (IDSR) strategy. We describe cholera surveillance within IDSR-strategy in Cameroon. Data is captured at health facility, forwarded to health district that compiles and directs data to RDPH in paper format. RDPH sends the data to the national level via internet and from there to the WHO. The surveillance system is passive with no data analysis at districts. Thus the goal of IDSR-strategy of data analysis and rapid response at the district has not been met yet.

(Online J Public Health Inform 2015;7(1):e5816) doi:10.5210/ojphi.v7i1.5816

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5816

URL:



Abstract

Tracking electronic communicable disease laboratory reports through reportable disease case creation is a valuable tool for ensuring complete reporting of communicable diseases. In New York State we follow every lab report from its origin through every action taken to case completion or record dismissal. All of these steps can be traced to determine if appropriate action was taken. In this process we also analyze the timeliness of these procedures.

(Online J Public Health Inform 2015;7(1):e5817) doi:10.5210/ojphi.v7i1.5817

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5817

URL:



Abstract

Multiple reports from the Government Accounting Office (GAO) from 2009 and 2011, and a recent April 2013 report from the HHS Assistant Secretary of Preparedness and Response (ASPR), identified significant problems across health surveillance systems, limiting their effective use across health agencies. Findings indicate that duplication in biosurveillance activities leads to similar or identical analyses and consequently inefficient use of limited resources. To address this problem, we inventoried surveillance systems, programs, and initiatives to identify key analytics, data source, statistical, and system architecture gaps and commonalities. Published surveillance review articles and independent analysis enabled a preliminary inventory of 236 systems; we provide pilot analysis of 30 systems for an initial understanding of gaps and commonalities.

(Online J Public Health Inform 2015;7(1):e5818) doi:10.5210/ojphi.v7i1.5818

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5818

URL:



Abstract

The study investigates the need of surveillance during mass gathering events in Wales, UK. An evidenced based risk assessment tool is designed to identify the risk level of an event by grading risk variables present during the occurrence of event. This tool was observed consistent when compared with the international events. The need for a continuous surveillance is associated to the risk level of the mass gathering event. Enhancing the current surveillance system to establish a collaborated department would require less resources to monitor events and for training in emergency conditions.

(Online J Public Health Inform 2015;7(1):e5819) doi:10.5210/ojphi.v7i1.5819

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5819

URL:



Abstract

Utilization of local surveillance data has been shown to help risk stratify patients presenting to the emergency department. We performed a retrospective cross-sectional medical record review of all adolescent visits to two large urban pediatric EDs in Washington, DC over one calendar year (n=19001). Modeling real time surveillance and other clinical information readily available in the electronic medical record may improve prediction of sexually transmitted infections in adolescents presenting to the ED, decrease empiric treatment, and allow for targeted public health prevention.

(Online J Public Health Inform 2015;7(1):e5820) doi:10.5210/ojphi.v7i1.5820

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Online J Public Health Inform 2015;7(1):e5820

URL:



Abstract

Description of the development of an auto-generated color coded map showing an academic medical centers current seven day moving average influenza-like illness rate by zip code.

(Online J Public Health Inform 2015;7(1):e5821) doi:10.5210/ojphi.v7i1.5821

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5821

URL:



Abstract

Describes the development and validation of an Ebola virus disease syndrome definition within the GUARDIAN (Geographic Utilization of Artificial Intelligence in Real-Time for Disease Identification and Alert Notification) surveillance system.

(Online J Public Health Inform 2015;7(1):e5822) doi:10.5210/ojphi.v7i1.5822

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5822

URL:



Abstract

The Vaccon Sentiment Ontology (VASON) provides knowledge on the factors driving vaccine refusal by analyzing content of online social media. VASON facilitates concept extraction and analysis of the extracted concepts using an Natural Language Processing (NLP) module.

(Online J Public Health Inform 2015;7(1):e5823) doi:10.5210/ojphi.v7i1.5823

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5823

URL:



Abstract

We propose an epidemic detection algorithm that uses the information about the state of infection in multiple populations. Our method is based on the combination of the Quickest Detection and Sequential Regression Monte Carlo. As a result, we produce a detection map of the model states, where an epidemic is announced.

(Online J Public Health Inform 2015;7(1):e5824) doi:10.5210/ojphi.v7i1.5824

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5824

URL:



Abstract

Absenteeism has great advantages in promoting the early detection of epidemics. The spatial patterns of the data generally are polytropy and heterogeneity. The public health experts pay more attention to whether an outbreak will happen or/and how large the epidemic will be of school absenteeism data in spatial patterns. We construct simultaneously two set of random effects (u1, u2) in RE-ZIP to quantify this two kind spatial heterogeneity for 62 schools.

(Online J Public Health Inform 2015;7(1):e5827) doi:10.5210/ojphi.v7i1.5827

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Online J Public Health Inform 2015;7(1):e5827

URL:



Abstract

In Connecticut, foodborne disease surveillance and response is a collaborative effort requiring real-time data sharing between key stakeholders including: DPH Epidemiology, DPH Laboratory, DPH Food Protection Program, Yale EIP, and local health department staff. Since 2011 a centralized electronic surveillance system has been used for routine enteric disease surveillance, cluster detection and monitioring, information sharing among key stakeholders, and documentation.

(Online J Public Health Inform 2015;7(1):e5828) doi:10.5210/ojphi.v7i1.5828

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Online J Public Health Inform 2015;7(1):e5828

URL:



Abstract

The abstract is devoted to monitoring studies of circulation of the AIV subtypes H5 and H7 in wild waterfowl and shorebirds around the Azov-Black Sea in Ukraine

(Online J Public Health Inform 2015;7(1):e5829) doi:10.5210/ojphi.v7i1.5829

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Online J Public Health Inform 2015;7(1):e5829

URL:



Abstract

The abstract is devoted to interlaboratory testing and clarification of the PCR-based test for its implementation in Ukraine.

(Online J Public Health Inform 2015;7(1):e5830) doi:10.5210/ojphi.v7i1.5830

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5830

URL:



Abstract

Since 2012, the ISDS Research Committee (RC) has been using an updated literature search process to identify literature related to disease surveillance. These articles are primarily in the medical literature, but one-third are published in other disciplines. ISDS members may not have access to those articles published outside the health sciences, making the ISDS article repository a valuable resource for those conducting work in surveillance.

(Online J Public Health Inform 2015;7(1):e5831) doi:10.5210/ojphi.v7i1.5831

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5831

URL:



Abstract

New York City (NYC) emergency departments (EDs) expressed interest in receiving summary reports of the data they send to the NYC Department of Health and Mental Hygiene (DOHMH) syndromic surveillance system. We conducted key informant interviews with eight ED directors to determine variables of interest, along with preferred format and frequency of reporting. A two-page report was developed, summarizing total number of ED visits, top ten chief complaints, average number of visits by day of week and shift, and zip code distribution of visitors, to be sent monthly. The goal is to strengthen the relationship between the syndromic surveillance unit and the hospitals that provide us data by creating an ongoing bidirectional system of communication.

(Online J Public Health Inform 2015;7(1):e5832) doi:10.5210/ojphi.v7i1.5832

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5832

URL:



Abstract

This session discusses an assessment of the outbreak detection utility of HealthMap, a publically available event-based biosurveillance system utilizing various internet-based media resources to identify outbreaks, at the state and local level. Results may help determine whether HealthMap should be monitored more closely as a supplementary surveillance tool.

(Online J Public Health Inform 2015;7(1):e5833) doi:10.5210/ojphi.v7i1.5833

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Online J Public Health Inform 2015;7(1):e5833

URL:



Abstract

An approriate approach is needed for Mozambique reality to maintain the appropriate surveillance of influenza and other respiratory virus. Such approaches include the appropriate hospital staff (commitment and understanding), flow within the system, cost-effectiveness, case definitions and selection of the sentinel sites. The approach used at the start of the influenza surveillance yield to low income of samples, but more flu positive cases detected, with other challenges related to staff commitment, awarness and others. A second approach was adopted and specimens income increased, but the flu positivity was low and some other challenges remains to be find out and overcome.

(Online J Public Health Inform 2015;7(1):e5834) doi:10.5210/ojphi.v7i1.5834

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5834

URL:



Abstract

This paper investigates the impact of the London 2012 Olympic and Paralympic Games on syndromic surveillance systems coordinated by Public Health England. The Games had very little obvious impact on the daily number of ED attendances and general practitioner consultations both nationally, and within London. These results provide valuable lessons learned for future mass gathering events.

(Online J Public Health Inform 2015;7(1):e5835) doi:10.5210/ojphi.v7i1.5835

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5835

URL:



Abstract

Research Electronic Data Capture (REDCap) is a secure web application for building and managing surveys and databases. The Illinois Department of Public Health (IDPH) evaluated the use of REDCap for outbreak management by conducting a retrospective analysis of four recent outbreaks: a restaurant-associated foodborne illness outbreak; introduction of Middle East Respiratory Syndrome; poison ivy/sumac/oak rash outbreak; and a hospital-based New Delhi metallo-beta-lactamase cluster. IDPH evaluated how REDCap could have impacted each response using six criteria: magnitude; self-reporting of symptoms and exposures; storage and multi-site access to lab reports; reuse of templates; repeated measurements; and ability to perform long-term case follow-up.

(Online J Public Health Inform 2015;7(1):e5836) doi:10.5210/ojphi.v7i1.5836

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Online J Public Health Inform 2015;7(1):e5836

URL:



Abstract

Whole carcass condemnations (WCC) following meat inspection could be a valuable indirect indicator of national herd health to monitor. We evaluate the performance of the improved Farrington algorithm for the detection of simulated outbreaks in meat inspection data. Disease outbreaks of random sizes (leading to increased WCC at slaughter) were simulated in the time series of the number of cattle slaughtered and condemned in Switzerland between 2007 and 2012. Overall, the improved Farrington algorithm led to low false positive rates but the probability of detection was low for small outbreaks.

(Online J Public Health Inform 2015;7(1):e5837) doi:10.5210/ojphi.v7i1.5837

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5837

URL:



Abstract

Since there is often different information contained in observations from different data sources, outbreak detection systems should be multivariate by nature. Experience from public health shows that, in reality they often fail to achieve acceptable sensitivity while retaining manageable false alert rates. A valuable alternative to classical \"outbreak detection\" is \"outbreak prediction\" based on suitably selected model. We think that such an approach is particularly promising for multivariate surveillance. We propose to use Swiss multivariate surveillance data to develop model-based predictive methods which can be used to inform decisions about animal health.

(Online J Public Health Inform 2015;7(1):e5838) doi:10.5210/ojphi.v7i1.5838

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Online J Public Health Inform 2015;7(1):e5838

URL:



Abstract

On January 2, 2014 the cyclone Bejisa struck Reunion Island. In anticipation, an epidemiological surveillance was set up in order to assess the impact in the aftermath of the cyclone. Short-term health effects were assessed using a syndromic surveillance system based on data of EDs and EMS. A peak of calls to the EMS was observed the day of the cyclone and an increase of ED visits over the next two days. At the same time, a significant increase of visits for trauma, burns, conjunctivitis was detected. The reactivity and the flexibility of the syndromic surveillance system allowed to rapidly assess the health impact of the cyclone.

(Online J Public Health Inform 2015;7(1):e5839) doi:10.5210/ojphi.v7i1.5839

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Online J Public Health Inform 2015;7(1):e5839

URL:



Abstract

Multiple sources of secondary data, including syndromic surveillance data, were used to describe leading causes of childhood injury in Wake County, NC. Injury intent and mechanism were categorized and rates were computed. We rank-ordered the top five injury mechanisms in each of three data sources and determined the top ten causes of childhood injury in Wake County. Timely and comprehensive ED visit data collected in NC DETECT proved invaluable to assessing local childhood injury causes. The ranking of childhood injury causes varied greatly between data sources, highlighting the importance of including a variety of data in a community health assessment.

(Online J Public Health Inform 2015;7(1):e5840) doi:10.5210/ojphi.v7i1.5840

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5840

URL:



Abstract

Tennessee has been slowly transitioning from a jurisidcitional syndromic surveillance system to a statewide, centralized system. During this process, old jurisdictional systems are being maintained, while infrastructure is being put in place to support a statewide syndromic surveillance solution. Successess, obstacles, and lessons learned throughout this process will be discussed.

(Online J Public Health Inform 2015;7(1):e5841) doi:10.5210/ojphi.v7i1.5841

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Online J Public Health Inform 2015;7(1):e5841

URL:



Abstract

Many State Health Departments (SHDs) are considering or preparing for voluntary accreditation through the Public Health Accreditation Board (PHAB). With the 2014 release of PHAB's Standards & Departments was adhere to specific documentation criteria regarding measures for public health surveillance. This presentation will provide one SHD's approach to identifying appropriate documents to meet the public health surveillance measures from a public health informatics perspective. A document selection matrix may be helpful to other SHDs considering accreditation.

(Online J Public Health Inform 2015;7(1):e5842) doi:10.5210/ojphi.v7i1.5842

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Online J Public Health Inform 2015;7(1):e5842

URL:



Abstract

The International Health Regulations (2005) outlines eight core capacities that focus on maintaining and strengthening the ability to prevent, detect, respond and report public health threats globally. As of May 2013, 100 of the 195 State Parties that agreed to implement the regulations have failed to meet all of the core capacities. The Laboratory Response Network (LRN), an infrastructure of public health laboratories capable of responding to biological, chemical, radiological, and other emerging public health threats, fulfills five out of eight core capacities and could serve as a model for successful implementation of IHR (2005).

(Online J Public Health Inform 2015;7(1):e5843) doi:10.5210/ojphi.v7i1.5843

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Online J Public Health Inform 2015;7(1):e5843

URL:



Abstract

This research explored the spatial pattern of ILI in one poorer and numerous cross-border-mobility-populations in China. A spatial autocorrelation analysis, \"Local\" and \"Global\", \"Moran\" I, carried out in Yunnan province for 5-year sentinel surveillance data. Four counties shown high susceptible to ILI, which maybe result from poorer surrounding districts or be neighboring with Vietnam or/and Laos.

(Online J Public Health Inform 2015;7(1):e5844) doi:10.5210/ojphi.v7i1.5844

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5844

URL:



Abstract

This project aims to fill a growing county-level health data gap, increase noncommunicable disease surveillance capacity within North Carolina local health departments (LHDs), and improve situational awareness through the development of a low-cost, Excel-based surveillance tool. This prototype utilizes emergency room data collected by the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), a state-wide surveillance system, in order to visualize, monitor, and compare local health indicators. An Excel template is in development that will allow (NC DETECT) 166 registered LHD users to select common health indicators, pull annual trend data, and visualize them through meaningful reports.

(Online J Public Health Inform 2015;7(1):e5845) doi:10.5210/ojphi.v7i1.5845

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Online J Public Health Inform 2015;7(1):e5845

URL:



Abstract

Timely access to Emergency Department (ED) data is crucial for early detection of public health events. In August 2013, ED reported an increase in cases with excited delirium possibly related to synthetic marijuana (SM). We used this event to test BioSense 2.0 data to detect a novel public health event not categorized in the BioSense surveillance library. During the outbreak period (September 4-19, 2013), 21 cases of SM-related cases presented to Denver Health ED and 27 records were identified in the BioSense data. Using chief compliant and chart review as gold standard, this method was 99.6% specific and 44% sensitive.

(Online J Public Health Inform 2015;7(1):e5846) doi:10.5210/ojphi.v7i1.5846

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5846

URL:



Abstract

As part of the Center for Medicare and Medicaid Services Electronic Health Record Incentive Program, otherwise known as Meaningful Use, many New York City emergency departments participating in the city syndromic surveillance system have switched or are in the process of switching data format from text files to HL7 Messaging Standard Version 2.5.1. We evaluated data completeness, quality, and content from hospitals that are sending in both data formats in parallel. Although the sample size was small (n=4 hospitals), we found data completeness and quality improved as hospitals shifted to HL7 messaging. We will continue monitoring hospitals as they upgrade to this new format.

(Online J Public Health Inform 2015;7(1):e5847) doi:10.5210/ojphi.v7i1.5847

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Online J Public Health Inform 2015;7(1):e5847

URL:



Abstract

The objective is to evaluate the validity of the signals generated by Shewhart chart to detect the increase in febrile children with patients with common infectious diseases. There were 28,049 and 42,029 reports for febrile patients in the two study counties during the 2-year period. The sensitivity were 29.03% and 34.78%. The PPVs were 64.29% and 53.33%. The sensitivity of signals in the syndromic surveillance system was low using the Shewhart model while the PPV was relatively high which suggested that this syndromic surveillance system had potential ability to supplement conventional case report system in detecting common infectious disease outbreaks.

(Online J Public Health Inform 2015;7(1):e5848) doi:10.5210/ojphi.v7i1.5848

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5848

URL:



Abstract

The lack of access to timely health indicators can preclude the design and the effective implementation of infectious diseases control interventions. Our project aims to foster the integration of existing surveillance data to support evidence-based decision-making in malaria. The cornerstone of our approach is the use of a common knowledge platform to scale-up and extend structural and semantic mapping across existing data sources to other geographical regions and global health priority diseases. Upon completion of our project, we will have designed an open-access prototype system capable of sharing comparable surveillance data within and across countries

(Online J Public Health Inform 2015;7(1):e5849) doi:10.5210/ojphi.v7i1.5849

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5849

URL:



Abstract

Americans are increasingly accessing the internet for health information, and 35% of patients have used the internet to self-diagnose a condition. This analysis examines NYC Emergency Department syndromic surveillance chief complaints to determine if there is an increasing trend in self-diagnosis, and to characterize the types of patients who are most likely to self-diagnose. In addition, this study investigates the health impact of self-diagnosis by comparing hospital admission rates, a proxy for the severity of patient illness upon arrival at the hospital, among patients who self-diagnose versus those who do not.

(Online J Public Health Inform 2015;7(1):e5942) doi:10.5210/ojphi.v7i1.5942

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Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5942

URL:



Abstract

Environmental Health Surveillance is a critical function of public health laboratories, where monitoring water quality trends helps create information to be used for health promotion, disease mitigation, resource planning, risk analyses and other decision making.

(Online J Public Health Inform 2015;7(1):e5943) doi:10.5210/ojphi.v7i1.5943

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Online J Public Health Inform 2015;7(1):e5943

URL:



Abstract

Armed conflict and the crisis in Ukraine led to the destruction of health care facilities. The refugees dispersed throughout Ukraine, including in the Kharkiv region, bordering the Lugansk and Donetsk regions. There was a threat of importation and spread of communicable diseases. The measles situation has been worsened. To achieve the goals of eliminating measles in spite of the crisis in Ukraine implementation of the syndromic surveillance of measles should be continued in order to identify all the cases fully.

(Online J Public Health Inform 2015;7(1):e5944) doi:10.5210/ojphi.v7i1.5944

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Online J Public Health Inform 2015;7(1):e5944

URL:



Abstract

N/A

(Online J Public Health Inform 2015;7(1):e5945) doi:10.5210/ojphi.v7i1.5945

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5945

URL:



Abstract

According to world health organization report 2011, coronary artery diseases are the number one cause of death globally: more people die annually from coronary artery diseases than from any other cause. For this big burden of disease we need to know the prevalence of cardiovascular risk factors among patients undergoing elective Coronary Artery Bypass Graft surgery (CABG) in Karachi, Pakistan.

(Online J Public Health Inform 2015;7(1):e5946) doi:10.5210/ojphi.v7i1.5946

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Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2015;7(1):e5946

URL:



Abstract

The purpose of this study was to identify ideas for an enhanced dissemination of the US National Notifiable Diseases Surveillance System (NNDSS) provisional data. The author conducted a search of all US State Health Department websites looking for on-line data display tables and tools for either reportable or notifiable diseases. In addition, the scope of the search of websites was expanded to include notifiable diseases of several countries, organizations and institutions. As a result of this study the author proposes enhancement of the current US notifiable disease data display from a static format to a more interactive dashboard design.

(Online J Public Health Inform 2015;7(1):e5947) doi:10.5210/ojphi.v7i1.5947

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Online J Public Health Inform 2015;7(1):e5947

URL:



Abstract

This presentation outlines the creation of a Provincial Epidemiological and Information Centre (PEIC) in Zambia's Luapula province. This is only the second epidemiosurveillance centre in the country. Luapula province in the northern part of Zambia being one of only 3 provinces out of a total of 10 provinces that are free of theilleriosis in Zambia has the potential of being Zambia's largest disease free zone. The challenges as well as lessons learnt from setting up this epidemiosurveillance centre are presented.

(Online J Public Health Inform 2015;7(1):e5948) doi:10.5210/ojphi.v7i1.5948

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Abstract

This presentation aims to highlight key activities, technical approaches, data discoveries, lessons learned and outcomes achieved while onboarding local hospitals for syndromic Meaningful Use Stage 2 through a local health information exchange. The federal meaningful use initiative is currently a major driver to enable greater establishment of syndromic surveillance capacity across the United States. The role and efforts by local and state public health agencies in the syndromic onboarding process varies greatly. We describe efforts from a local public health agency to onboard, validate and integrate meaningful use syndromic information.

(Online J Public Health Inform 2015;7(1):e5949) doi:10.5210/ojphi.v7i1.5949

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Abstract

This presentation summarizes ways in which Analytics, Machine Learning (ML) and Natural Language Processing (NLP) can improve accuracy and efficiency in bio surveillance and public health practices. Currently, there is an abundance of data coming from most of the surveillance environments and applications. Identification and filtering of responsive messages from this big data ocean and then processing these informative datasets to gain knowledge are the two real challenges in today"s applications. Details of a Simulation environment consisting of Devices/Sensors, Web/Mobile, Clinical Records, Internet queries, Social/News media, in which this ML platform was evaluated is also discussed. Infrastructure needs for this operating environment is also covered.

(Online J Public Health Inform 2015;7(1):e5950) doi:10.5210/ojphi.v7i1.5950

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Abstract

Integration of animal vaccination against and health education on brucellosis (the activity level) by veterinary and public health workers (the actors‰ \hat{U}^a level), how to conduct the integration process, and challenges likely to be faced was conducted in pastoral communities. It was noted that integration of animal vaccination and health education would be feasible if government and other stakeholders were involved in facilitation of the programs. Key areas of improvement mentioned included; improving human resources, facilitating the necessary activities such as sensitization of the communities about the brucellosis, and providing the vaccines and diagnostic kits, collaboration with all stakeholders.

(Online J Public Health Inform 2015;7(1):e5951) doi:10.5210/ojphi.v7i1.5951

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URL:



Abstract

National surveillance of cutaneous anthrax cases in Georgia (EIDSS 2008-2013) appears secondary to epizoonotic events that are more likely to occur in populations that work with unvaccinated sheep and cattle. Six-year mean incidence rates per 100,000 were 1.32 for Georgian nationals and 9.31 for Azerbaijani nationals. The contrast between groups was pronounced in Kvemo Kartli and Kakheti where a large proportion of Azeris pastoralists live and migrate along animal corridors. One Heath recommendations include promotion of anthrax awareness campaigns, the destruction of carcasses, mapping and disinfect infected soils, and introduce a participatory health education anthrax tool.

(Online J Public Health Inform 2015;7(1):e5952) doi:10.5210/ojphi.v7i1.5952

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URL:



Abstract

Surveillance for communicable diseases of public health importance is critical in preventing and controlling outbreaks. In Ghana, this responsibility lies with the Disease Surveillance Department of the Ghana Health Service (GHS). However, the structure of Ghana"s health system means surveillance activities by the department are concentrated in GHS facilities. Active surveillance in non-GHS facilities usually occur during outbreaks. In light of the recent Ebola outbreak in West Africa, there is the need to integrate the surveillance activities to include all health facilities to ensure the prompt identification of cases.

(Online J Public Health Inform 2015;7(1):e5953) doi:10.5210/ojphi.v7i1.5953

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URL:



Abstract

The global effort of malaria control is in line with the one world one health concept, but then a globally defined (one-size-fits-all) malaria control strategy would be inefficient. A model was used to examine the likely impact of malaria parasite interventions for a steady state regional control program in endemic areas. Assumptions varied about two targeted epidemiologic control points on the basic reproductive number, Ro, which is affected by different factors and upon which the status of malaria in any community will depend. For any effective malaria control and eradication program, environmental and socio-economic factors should also be considered.

(Online J Public Health Inform 2015;7(1):e5954) doi:10.5210/ojphi.v7i1.5954

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URL:



Abstract

Before the launch of standard National Health Information System (NMHIS) in 2000, there had been acute paucity of reliable and timely health information in Pakistan. The launch of new System had put in place a standard system of data collection and transmission in the country.

(Online J Public Health Inform 2015;7(1):e5955) doi:10.5210/ojphi.v7i1.5955

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URL:



Abstract

An expert panel will share insights from the National Disaster Medical System, Vermont Department of Health, the National Park Service, and Department of Defense, regarding the application of big data analytics on situational awareness of Mass Casualty Incidents (MCIs). Moderated by Booz Allen Hamilton, the panel will share examples from their agencies about the information/data challenges of responding to MCIs, and suggest how analytic methods used to detect disease outbreaks, for example, could be applied. Booz Allen will present 10 situational awareness information-needs criteria identified in a survey of federal experts that could be used to build an analytics tool.

(Online J Public Health Inform 2015;7(1):e5957) doi:10.5210/ojphi.v7i1.5957

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URL:



Abstract

Few countries have tested the sensitivity of their polio surveillance systems, undertaken a comprehensive risk assessment or questioned whether existing polio surveillance strategies are the optimal surveillance at this stage of the global eradication initiative. To address this challenge, a risk assessment and review of Australia's polio surveillance systems were undertaken to assess the potential risk of introduction of polio by an infected person, product or specimen.

(Online J Public Health Inform 2015;7(1):e5958) doi:10.5210/ojphi.v7i1.5958

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URL:



Abstract

Surveillance evaluations of surveillance systems should provide evidence to improve public health practice. In response to surveillance evaluation findings amongst Pacific Island Countries and Territories that identified a critical need to better equip local public health officials with skills to rapidly appropriately respond to suspected infectious disease outbreaks across the Pacific, the RAPID (Response and Analysis for Pacific Infectious Diseases) project was implemented to strengthen capacity in surveillance, epidemiology and outbreak response. The RAPID project is a notable example of how evidence gathered through a surveillance evaluation can be used to improve public health surveillance practice.

(Online J Public Health Inform 2015;7(1):e5959) doi:10.5210/ojphi.v7i1.5959

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URL:



Abstract

The presentation will throw light on the status of disease survelliance in infectious disease in a state of India in comparision to the entire country. This study is first to document case rates at a state-level in India and recognise the contribution of the IDSP system for epidemiological considerations.

(Online J Public Health Inform 2015;7(1):e5960) doi:10.5210/ojphi.v7i1.5960

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Abstract

Real-time surveillance of an infectious disease in a third world country poses many problems that are not conventionally confronted by statistical researchers. As the first ones - to our knowledge - to attempt real-time forecasts of dengue fever in Thailand, we have faced these problems head-on in our quest to build a model that accurately predicts case counts in the presence of erratic reporting, shifting population dynamics, and potential climate change.

(Online J Public Health Inform 2015;7(1):e5961) doi:10.5210/ojphi.v7i1.5961

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Abstract

Field Experiences in promoting the involvement of Local Communities and Households in the implementation of the One Health initiative through participatory approaches under the East African Integrated Disease Surveillance Network (EAIDSNet)

(Online J Public Health Inform 2015;7(1):e5962) doi:10.5210/ojphi.v7i1.5962

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Abstract

Michigan has been collecting chief complaint data from emergency departments statewide to support situational awareness activities related to communicable disease since 2004. We validated the syndromic system by comparing the chief complaint data to the electronic medical records (EMR) of a tertiary hospital in southeast Michigan to better understand the utility of the system for non-communicable disease situations. Findings of this study will help determine the accuracy of the automated classification of data based on chief complaints. This study can add confidence in planning for public health preparedness activities and situational awareness.

(Online J Public Health Inform 2015;7(1):e5963) doi:10.5210/ojphi.v7i1.5963

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Abstract

There are many challenges in establishing surveillance systems for road injuries in India, predominantly rapid staff turnover, heavy workload and the absence of already existing data recording and management in hospitals. Pending administrative solutions such as improved staffing and posting, the chief measures to address these challenges were sustained dialogue and rapport-building with hospital administrators, training of data collectors, and enlisting the aid of bridge personnel, such as interns. Reiterating the value of surveillance data to negotiate for hospital resources commensurate with the high burden of road injuries may help convince hospital administrators to sustain such surveillance initiatives.

(Online J Public Health Inform 2015;7(1):e5964) doi:10.5210/ojphi.v7i1.5964

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Abstract

The worst and first outbreak of dengue fever (DF) was experienced in Lahore, Punjab in 2011. The weak disease surveillance program for DF resulted in 301 deaths out of 17531 reported confirmed patients in just 4 months of post-monsoon season. The government tackled this health crisis by ensuring interdepartmental coordination ranging from case management, vector control to advocacy and massive social mobilization campaign. The use of information technology in the form of smart phone application "SATSCAN" to track dengue surveillance activity was launched in 2012. All these efforts enabled the government to completely control dengue in 2012 in Lahore.

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