KEMENTERIAN KESEHATAN REPUBLIK INDONESIA

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HEALTH SECURITY PARTNERS

BOOK OF ABSTRACTS

"LESSON LEARNED & BEST PRACTICES IN COVID-19 PANDEMIC RESPONSE FOR EARLY DETECTION AND PROMPT RESPONSE TO ANY FUTURE PANDEMIC"

VASA HOTEL SURABAYA

AUGUST 29-SEPTEMBER 1, 2022

9TH NSCE

THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

BOOK OF ABSTRACTS

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THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

WELCOME MESSAGE

Dear Conference Participants,

Greeting and welcome to the 9th National Scientific Conference on Epidemiology (NSCE), where FETP students, trainees, and alumni share their scientific finding through oral and poster presentations featuring public health research and outbreak investigations. This year, we accepted 58 presentations (40 oral and 18 posters) from five universities (UI, UGM, UNAIR, UNUD, and UNHAS), FETP-Intermediate, FETP-Frontline, and FETP-Veterinary (FETP-V) Indonesia.

The conference will be held from 29 August to 1 September 2022 at Vasa Hotel Surabaya which is strategically located in the heart of Surabaya and will be Indonesia's largest annual event devoted to the science and practice of field epidemiology. Field epidemiologists are the persons who help tracking, containing, and eliminating outbreak before it becomes epidemic. They quickly communicate crucial information about health problems in a community, including communicable and non-communicable diseases, and environmental hazards.

This year's theme is "**Lessons Learned & Best Practices in COVID-19 Pandemic Response for Early Detection and Prompt Response to Any Future Pandemic**". During the pandemic, field epidemiologists have played an important role in supporting COVID-19 preparedness and response activities. The field epidemiologists have been working all the time to trace contacts, investigate, and manage cases, analyze COVID-19 data, educate their communities, and many more. In many provinces and districts, FETP students and graduates are critical part of the workforce in place to conduct contact tracing and case investigations. Ministry of Health salutes the outstanding work done by the FETPs at the forefront of disease surveillance, public health emergency and disease outbreak response and your effort to build the field epidemiology workforce needed to detect and respond to disease outbreaks before they become pandemics with devastating human and economic consequences.

We are pleased to have our colleagues from the Ministry of Health, BNPB, DKI Jakarta Provincial Health Office, Soekarno-Hatta Port Health Office, Faculty of Public Health University of Indonesia, FETP Faculty of Medicine University of Udayana, Persatuan Ahli Epidemiologi Indonesia (PAEI), US CDC, and World Health Organization Indonesia as speakers in plenary sessions. In breakout sessions, there will be oral presenters which will be divided into 10 sessions and poster presenter from FETP students/trainees and alumni.

My gratitude to the Organizing Committee from the Surveillance Team, Directorate Surveillance and Health Quarantine, FETP Indonesia Secretariat, WHO Indonesia, U.S. CDC Indonesia Country Office, and Health Security Partners (HSP) who are working hard for this conference. I wish you to have a wonderful conference experience, experience the unique Javanese culture, heritage and traditions. Once again, welcome, and enjoy the conference.

Surabaya, August 19, 2022

Dr. dr. Maxi Rein Rondonuwu, DHSM., MARS
Director General of Disease Prevention and Control

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THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

Investigation Suspect Diphtheria in Piyungan, Bantul District-2022

Mrs. Mija Darwanti [1], Mr. Abuzar Al Ghifari [1], Mrs. Risalia Reni Arisanti [1], Mr. Adi Isworo [1], Mr. Samsu Aryanto [2], Mrs. Indah Laily Fadilah [3], Mr. Andri Setyo Dwi Nugroho [4]

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Background

On March 13, 2022, Bantul District Health Office (DHO) notified a case with diphtheria suspect symptoms based in the Piyungan subdistrict. The investigation was conducted to confirm the outbreak and risk factors for control measures.

Methods

The study uses a descriptive design. Active case finding was conducted in March 2022. A suspect is a defined person with one or more symptoms of pharyngitis, tonsillitis, laryngitis, tracheitis, with and without fever, pseudomembrane that bleeds easily when removed or manipulated and close contact with the child A in Piyungan from February 24-March 29, 2022. We also conduct a rapid convenience survey (RCA) in the neighbourhood of the index cases with children under five years old. Throat swab samples were taken from suspects, and five close contacts were then sent for further examination.

Results

The index case was 3,5 years old girl who matched with suspect definition. Close contact includes three females and seven males from one month - to 54 years old and all asymptomatic. The RCA was conducted in 16 neighbourhoods of the index cases, with 87.5% completing the DPT-HB-Hib (pentavalent) immunisation. The main reason for the incomplete vaccination happened because the parents were afraid to bring their children to get vaccinated due to the COVID-19 pandemic. The swab examination result was negative. Treatment to case and chemoprofilaksis to close contact was done as a follow-up for investigation.

Conclusions

There was a diphtheria outbreak in Piyungan Bantul, supported by clinical symptoms. Monitor the chemoprofilaksis treatment for close contact to increase adherence, complete the pentavalent vaccination for under five children, and educate the community to prevent diphtheria transmission by Piyungan PHC, and Bantul DHO were recommended.

Diphtheria Investigation in Puskesmas Udanawu, Blitar District, East Java Province, Indonesia in May 2022

Ms. Wahyu Wulandari [1], Mr. Antonius Ratgono [2], Mr. P. Atmodjo [3]

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Background

Report from Blitar District Health Office on May 3, 2022, said that a suspect in a Diphtheria case was found in Udanawu Puskesmas, Mangunan Village, Udanawu subdistrict. The aims of the investigation are to confirm the reported cases, provide an adequate response, trace contacts, and obtain epidemiologic information to prevent and control potential diphtheria outbreaks.

Methods

A descriptive study was conducted. A standard form used to interview the cases and contacts, the analysis usedis to determine the factors according to cases of diphtheria.

Results

Suspect case is a 4 year 9 months old male, in Dusun Ploso Chair RT 01 RW 01 Mangunan Village, Udanawu District. His immunization status was 5 times (age 1 year 3x, Batuta 1x and ORI 1x). Patient symptoms were fever, cough, runny nose, pseudo membrane, bullneck, and shortness of breath. Laboratory tests for throat and nose swabs were negative. Death occured on May 11, 2022 from myocarditis.

Contact tracing was conducted on 62 people (family: 3, playmate: 1, close neighbors: 15, school friends: 45). The mother was examined with with negative results, the others were not examined because the results of the interviews did not show any symptoms and budget constraints. Immunization data from close contacts shows two people did not get Diphtheria immunization.

Conclusions

Management of the suspected case are per the procedures and recommendations by the expert team. However, the throat and nose swabs were alleged to be non-representative. They gave rise to a "False Negative" result because the swab was taken after getting ADS and medication. The management of close contacts was not per the 2018 diphtheria surveillance guidelines. Therefore, capacity building for managing diphtheria outbreaks is necessary for health staff, and proper contact procedures should be maintained. Supplementary Immunization Activity is recommended, and high immunization status should be reached to prevent the outbreak.

Outbreak Investigation of Rubella at an Islamic Boarding School, Sleman Regency, Special Region of Yogyakarta Province, Indonesia 2022

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1. FETP Gadjah Mada University, 2. Dinkes Kabupaten Sleman

Background

On January 27, 2022, a positive laboratory-confirmed case of rubella in a 9-year-old child who lived and studied in an islamic boarding school from Sleman regency was reported by the sub-district primary health care. The investigation was aimed to identify positive rubella cases and control transmission of rubella infections.

Methods

A descriptive epidemiological investigation using an active case finding was conducted to describe the spread of rubella transmission in the boarding school. Primary data was obtained by interview and observation following the Ministry of Health Guidelines for the Rubella Measles Outbreak. A suspect case was a person who had a history of fever or cough, runny nose or rash, or one of them and had contact or went to the same class with the positive rubella patient from January 19 to March 10, 2022. Blood samples were collected and examined using IgM ELISA serology.

Results

There were 76 populations at risk due to close contact or attended the same classes with the positive cases. All of them were female. Eight of the 24 suspected cases, confirmed by laboratory tests were symptomatic. The most common symptoms were cough 20/24 (83%), runny nose 19/24 (79%), fever 14/24 (58%), and rash 6/24 (25%). Attack Rate (AR) at age 12 (5/10=50%), 13 (6/17=35.29%), 14 (3/9=33.33%), 9 (3/11=27.27%) and 8 (7/26=26.92%). AR at the elementary school 11/38 (28.94%) and junior high school 14/38 (36.84%), no cases were found in other age groups due to limited investigation permits.

Conclusions

Rubella outbreak was confirmed in the Islamic boarding school and has a close-contact history with the index case with ARs range between 27% to 50%. Preventive and curative measures such as supervision in schools, provision of vitamin A and cross-sectoral coordination must be the concern of all parties to reduce the rate of transmission.

Evaluation of the Surveillance System for Measles Rubella in Bali Province 2022

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1. FETP PS Masters in Public Health, Faculty of Medicine, Udayana University, 2. Department of Health Bali Province, Indonesia, 3. University Udayana

Background

Indonesia is committed to achieve measles-rubella elimination by year 2023. Measles cases in year 2021 increased 3 times from the previous year in Bali. Some community health centers (CHC) found suspected measles - rubella cases below the target. This evaluation aims to determine implementation issues and make plans to improve the surveillance system

Methods

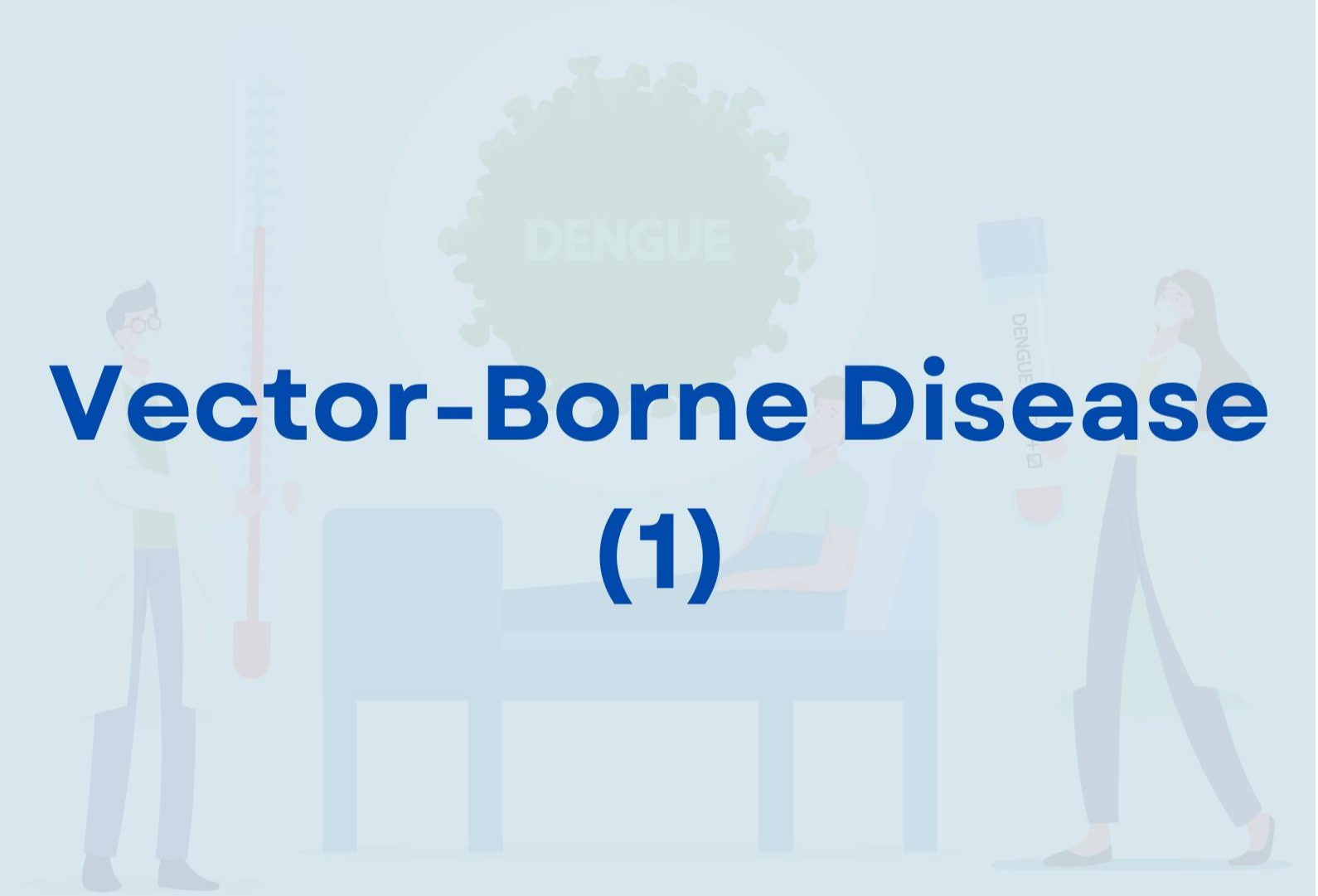
The evaluation activity was conducted from February to May 2022, used the concept of input, process and output as well as surveillance attributes. We collected data from 1 provincial surveillance staff and 64 surveillance officers from 5 districts and CHCs, using three means (online questionnaires, observation forms and direct interviews). CHCs were selected base on criteria to reached or not to reach the target. Data was presented in the form of tables, graphs and narrative

Results

Many findings related to the inputs of surveillance. Provincial surveillance officer already has good skills in data collection and analysis, however, at the district and CHCs we found 81,3% staff had never attended surveillance training. 29,7% did not understand how to fill out the record forms lead to different style in filling out the refort forms, and 30,0% staff did not understand how to analyze the data. In addition, 43,8% staff reported multiple tasking. In follow up suspect, not all staff carry out risk factor investigations. Hospital never reported cases. Currently, blood samples of suspects have to be sent to other province due to lack capacity for measles/rubella examination in Bali. These causes the surveillance system attributes such as representativeness, acceptability, data quality and timeliness to be inadequate

Conclusions

The implementation of the surveillance system is less than optimal in referring to the measles-rubella guidelines 2020. Sosialization and training needs to be given to surveillance staff in CHCs and hospitals to increase the detection of measles-rubella suspects



Vector-Borne Disease (1)

Risk Factors of Increased Events of Chikungunya in Banjar BD, West Denpasar in 2022

Ms. Ni Made Reyningrum Karang [1], Dr. Anak Agung Ngurah Gede Dharmayuda [2], Dr. I Wayan Gede Artawan Eka Putra [3], Mrs. Cokorda Istri Sri Dharma Astiti [4], Mrs. A.A.A Indah Adnya Pratiwi [1], Mr. *Samuel Pramadisa [1], Mrs. I Gusti Ayu Janadewi [1]*

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Background

At the end of 2021, there has been an increase in rainfall in the Province of Bali. On November 30, it was reported that one resident was sick with complaints of fever, joint pain and a rash leading to Chikungunya in an area in the Padangsambian Village, Denpasar.

Methods

Further investigation was conducted to determine the risk factors that influence the incidence of chikungunya. This investigation uses an unmatching case control design with a total sample of 36 people. Cases, namely 18 residents with symptoms of high fever, joint pain and skin rashes were paired with 18 controls, namely residents and neighbors around the house who did not experience symptoms. The chikungunya prevention behavior and environmental conditions around the case's residence were obtained through interviews using a questionnaire. Data were analyzed bivariably using Chi-Square.

Results

Based on the field examination, the results showed that all cases complained of fever and joint pain. In the case of chikungunya by sex dominated by men (55.6%) and most occurred at the age of 15-44 years (55.6%). The behavior of eradicating mosquito nests (OR=7;1,59-30,8), and hanging clothes in the room and walls (OR=5,5;95% CI 1,2-23.6) has the potential to increase the incidence of Chikungunya transmission.

Conclusions

It can be concluded that there has been an increase in Chikungunya cases related to inadequate mosquito population prevention behavior. Intensive and sustainable education about eradicating mosquito nests needs tobe carried out in the community in order to minimize the increase in chikungunya cases.

An overview of Chikungunya outbreak in Desa Block of Depok Village, Depok Subdistrict, Cirebon, March 1 – April 28, 2022

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1. FETP University Indonesia, 2. Cirebon Health Office, 3. Department of Epidemiology University Indonesia

Background

Chikungunya is a vector-borne disease that still often causes outbreak in Cirebon. On April 8, the Health Office received information there was an increase chikungunya cases in Depok Village, Cirebon. The investigation was conducted to provide an epidemiological description, an overview of the risk factors possessed by the case and recommendations for prevention.

Methods

The study used a descriptive cross sectional. Cases are residents who live in Desa Block of Depok Village with symptoms of joint pain and one of fever, rash, headache or itching in the period of March 1 – April 28. Primary data collection was carried out through interview with residents regarding any symptoms, when symptoms occurred and daily behavior related to risk factors. Observations were made on the water container and the use of mosquito wire. Laboratory examinations were carried out on cases using the rapid diagnostic test.

Results

Patients found of 25 cases, from 12 (48%) cases examined, 8 (66.7%) positive IgM. Cases start at week 9th and peaked at week 13th. All cases had joint pain, 24(96%) fever, 22(88%) rash, 6(24%) itching and 3(12%) headache. 18(72%) were female. 17(68%) cases had daily activities at home, 14(56%) cases used mosquito repellent but only used it at night, 23(92%) did not use mosquito nets. The observations showed that 17(68%) did not use mosquito wire and 22(88%) hung clothes that had been used, 8(32%) cases had water container with larvae.

Conclusions

There has been an outbreak of Chikungunya in Desa Block of Depok village in the period of March 1 – April 28. We recommended to open health post during the outbreak, eradicate mosquito nests, carry out fogging focus and health education to the community.

Outbreak Investigation of Malaria at Samigaluh District, Kulon Progo Regency, D.I Yogyakarta, 2022

Mr. Muhammad Fadhil [1], Mr. Musabir Musabir [1], Mrs. Citra Indriani [1], Mr. Arief Musthofa [2], Mrs. Baning Rahayujati [2], Mr. Sugiarto Sugiarto [2]

1. FETP Gadjah Mada University, 2. Kulon Progo District Health Office

Background

Kulon Progo had just received a malaria-elimination certificate in March 2022. In April 2022, Samigaluh 1 Health Care reported one imported malaria cases from Jati village to the district health, followed by a report of 12 indigenous malaria cases from its neighboring village, Tlogo, in May 2022. We initiated an investigation to confirm the outbreak, describe the extent, and develop recommendations to stop the transmission.

Methods

We followed steps of outbreak investigation from the US CDC and Ministry of Health (MoH) guidelines on malaria control. We conducted an entomological assessment, environmental risk and evaluated malaria program implementation. Data were analyzed descriptively.

Results

The outbreak occurred from April 12th to July 2nd, 2022. We identified total 52 cases, with the majority cases were male (57.69%). Most of them work as a farmer (36.54%), private sector and retirees (17.31%). The main symptoms were fever (59.61%), dizziness (50%) and chills (41.18%). The index case was an imported case live in Jati Village. The cases spread in nine villages: Jati, Tlogo, and Ngaliyan Gn. A, Ngaliyan Gn. B, Ngaliyan, Nguntuk-nguntuk, Kayugede, Sumbo and Jetis. The majority cases reported in Jati with Attack Rate of 10.64%, Tlogo 8.03% and Ngaliyan Gn. B 3.96%. We discovered 23 potential breedingplace for malaria.

Conclusions

There was an malaria outbreak at the Samigaluh 1 Health Center in 9 villages: Tlogo, Jati, Ngaliyan Gn. A, Ngaliyan Gn. B, Ngaliyan, Sumbo, Jetis, Kayugede and Nguntuk-nguntuk. Contributed factor for this outbreak were high night activities, weak migration surveillance and risky sleep behaviour. The outbreak was successfully done by good coordination in cross sector and program for conducting control measures.

Problem Analysis of Increasing DHF (Dengue Hemorrhagic Fever) Death Rate in Magetan Regency 2022

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Background

Health problems play an important role in the development of a country, the balance of policy, environment, implementation, and participation affect the health sector. Dengue Hemorrhagic Fever (DHF) is one of the Health problems in Magetan and has increased CFR significantly from 0% in 2020 to 1,4% in 2021. The implementation of control involvement from various sectors, but still not optimally implemented. This study aims to analyze and provide interventions for DHF health problems at the Magetan District Health Office in 2021.

Methods

This study is an observational descriptive study conducted in January-February 2022 with 16 respondents from the Head and the Coordinator of the Division at the Magetan Health Office. The method used in determining the priority of the problem uses Basic Priority Rating System (BPRS) and PEARL and for analyzing the causes of the problem using the Problem Analysis Diagram method.

Results

The results of the priority problem using BPRS and PEARL with a score of 8633.52 obtained that the DHF mortality rate is still high. The DHF mortality rate in Magetan Regency reached 1.4%, which is still far from the target of <1%. Based on the results, there are still many mosquito breeding sites that directly cause the problem.

Conclusions

So it is important to make a work plan and budget to provide the community with the Eradication of Mosquito Nests (PSN) and increase early awareness of dengue symptoms by the Village Responsible Person, this can be assessed and monitored through the number of dengue cases and the ABJ value.

Food or Wateborne Disease

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Staphylococcus aureus, Bacillus aureus, and Vibrio cholera Bacteria Contamination of Food Poisoning Outbreak Investigation in Bontoa Village, Minasate'ne District, Pangkajene Dan Kepulauan Regency in 2022

Mrs. Andi Cendra Pertiwi [1], Mrs. Sugita Patta [2], Mrs. Maryam Maryam [3], Mr. Tubianto Anang Zulfikar [4], Prof. Arsunan Arsin [2]

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Background

Thirty-eight (38) people had food poisoning after eating buffet (rice, shredded chicken, tofu, soup, meat sauce and pickles) at a wedding in Bontoa Village, Pangkep Regency on 16 May 2022. Investigation was carried out by the Pangkep Health Office and FETP UNHAS aimed to assess the description and risk factors of the incident.

Methods

The study used a case-control design. Data was collected by interview and laboratory test of food samples. Cases were 38 people who have eaten and had one or more symptoms of vomiting, pain, abdominal pain, cold sweats, head, shortness of breath, nausea, dizziness, and fever. Controls were 18 people who had no symptoms after eating. Confirmation of diagnosis comparing the results of interviews and laboratory tests.

Results

26 women (AR: 68%) and the age group 20-44 years (AR: 32%) had the most symptoms of poisoning, vomiting (95%) and abdominal pain (66%). Incubation period 1-6 hours which 21 cases (58%) had symptoms 3 hours after eating. The Laboratory results showed shredded chicken contained Vibrio cholera and Staphylococcus aureus, tofu contained Vibrio cholera, Bacillus cereus and Staphylococcus aures, meat sauce contain ed Bacillus cereus, rice, soup, and pickles contained Eschericia coli. The bivariate test showed that all types of food had risk factors of outbreaks, but tofu was significant as a risk factor with the highest OR (OR 17.0, CI: 2.13-746.90) showed that who consumed tofu has 17 times greater to be poisoned than who do not eat.

Conclusions

Risk factor of this outbreak is tofu. Recommended to training for all food service providers about sanitation hygiene, processing and handling, selection and storage of materials based on standards and regulations.

A Case Control Study of Acute Diarrhea Disease Following an Outbreak Investigation - Kebumen, Central Java, Indonesia, 2022

Mrs. Tutik Inayah Susilaningsih [1], Mr. Yusrizal - [1], Mr. Ibin Akhmad [2], Mrs. Citra Indriani [1], Mr. bayu satria wiratama [3]

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Background

An epidemiological investigation was initiated on January 21, 2022, after one infant death with Acute Diarrhea Disease (ADD) was reported from Karangtanjung village, Kebumen district, Central Java. This was a follow up study to confirm the risk factors and provide recommendation of the diarrhea outbreak investigation.

Methods

A 1:4 unmatched case-control study was conducted. Cases were defined as person who had three or more loose watery stools per day in Karangtanjung between January 16 and 29, 2022. Controls were people who had no diarrhea symptoms. The risk factors and environmental data were obtained through interviews and observation using standardized questionnaires. The data was analyzed using logistic regression for multivariate analysis.

Results

There were a total of 100 participants, 20 cases and 80 controls. Most of the cases (55%) were female, three children hospitalized (15%), and one infant death. The median age was four years old (range 6 months to 59 years). While in control groups, 55% were male, the median age was 36,5 years old (range 2 years-66 years). Bivariate analysis showed that the age category, education level, source of drinking water, and washing hands with soap before eating were related to ADD. From multivariate analysis with logistic regression, only the 0–5 years age category (OR 14,33; 95% CI: 1,14–179,71) was significantly related to ADD.

Conclusions

This study concluded that 0-5 years age category was a significant risk factor of ADD. Several protective measures could be prepared for those who have toddlers, such as promoting hygiene and sanitation practices, promoting exclusive breastfeeding, recognizing early symptoms of diarrhea, and implementing a zinc mineral compliance program.

Food Poisoning Outbreak Investigation in Islamic Girl's Boarding School, Pallangga District, Gowa Regency, 2022

Mrs. Sugita Patta [1], Mrs. Andi Cendra Pertiwi [1], Prof. Andi Arsunan Arsin [1], Mr. Tubianto Anang Zulfikar [2]

1. FETP UNIVERSITAS HASANUDDIN, 2. KKP Kelas 1 Makassar

Background

On 7th February 2022 at 20:30 pm, FETP UNHAS got information that there was suspected food poisoning and had confirmed by Province's Health Officer, 43 students hospitalized after consuming food from a regular donator and school's canteen on Friday, 4th February 2022. The investigations conducted to confirm the outbreak, identify risk factor and recommend control dan preventive measure.

Methods

A retrospective cohort study. Active case finding by interviewing using structured questionnaire. Both environment observation in the kitchen and interview the food handler were also carried out. Population were 123 students who ate suspected food causing poisoning. The cases were people who got diarrhea followed by at least one of these symptom: abdominal pain, nausea with/without vomiting, weakness dan headache on 5 th-6th February 2022, after eating food served at dinner time. No food samples to confirm due late reporting. Data analysis was used chi-square test with STATA software.

Results

There were 101 students with dominant symptoms being abdominal pain (80.49%), diarrhea (73.17%), headache (32.58%) and nausea (24.39%). All cases were female and the highest was 12 years old (AR 95.83%). Incubation period range was 60 minutes to 16 hours 45 minutes. Shredded chicken showed a significant relationship as an outbreak risk factor (AR= 98,21% RR=18,27;95% CI=2.710525 -123.1366; p-value=0,00). *Bacillus aureus* and *staphylococcus aureus* were suspected as causative agent that contaminated shredded chicken.

Conclusions

There has been an outbreak of food poisoning in Islamic Girl's Boarding school in Gowa Regency in February 2022. Possible risk factor of contamination was due the length of time between cooking and eating time with poor storage. We recommend to form supervisory team who will check food safety before serving, and intensively education for food handler.

Food Poisoning at Prospective Hajj pilgrims festivity in Tarunajaya Village, Tasikmalaya District, West Java, Indonesia2022

Ms. Rina Parina [1], Mr. A. Salim [2], Mr. Rusli - [3]

1. Intermediate FETP Participant, Tasikmalaya District Health Office, West Java, 2. Intermediate FETP Mentor, West Java Provincial Health Office, 3. West Java PAEI (Perhimpunan Ahli Epidemiologi Indonesia)

Background

Food poisoning is a public health problem in West Java. In 2020 it was reported that there were 25 cases of food poisoning. On May 29, 2022, Sukaraja Health Center, Tasikmalaya Regency, said that 247 people had food poisoning at prospective Hajj pilgrims' festivity. The study aim is to point out the causes of food poisoning at the event.

Methods

The study is a Case-Control study. Cases are people who eat dishes and experience clinical symptoms of food poisoning, and controls are people who did not experience symptoms after consuming the food. All respondents who consumed food were interviewed.

Results

Among 291 people who consumed food, 247 experienced symptoms. The clinical symptoms were diarrhea (66%), dizziness (62%), and fever (56%). The shortest incubation period is 2 hours, and the longest is 85 hours. The highest attack rate for the type of food was tempe bacem (93.05%), while the highest attributable risk was tempe bacem (86.10%). Statistical analysis showed that the risk factors associated with food poisoning outbreaks were eating rice (OR: 3.3, p=0.014), egg pindang (OR: 3.15, p=0.003), and tempe bacem (OR: 2.86, p=0.010).

Conclusions

The cause of poisoning comes from rice, egg pindang, and tempe bacem and is suspected to be contaminated by Bacillus Cereus and Salmonella. In addition to paying attention to food processing and handling cleanliness, Health Center should collect and examine every food poisoning incident in the laboratory to determine the cause.

COVID-19 (1)

THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

Risk Factor of COVID-19 Infection Among Health Care Workers Post Vaccination - DKI Jakarta, 2021

Mr. Rahmat Saputra [1], Prof. Nurhayati Prihartono [2], Prof. Mondastri Korib Sudaryo [2]

1. Alumny FETP Universitas Indonesia, 2021, 2. Department of Epidemiology University Indonesia

Background

There are 120,490 health workers who have been vaccinated with a full dose. However, the number of health workers infected after being vaccinated until June 6, 2021 was 724 people. Therefore, this study was conducted to find out what factors are at risk of COVID-19 infection in post-vaccination health workers in DKI Jakarta

Methods

A cross-sectional study has been carried out to observe the risk factors for Covid-19 infection in 464 health workers in DKI Jakarta after being vaccinated using secondary and primary data using total sampling techniques. Data were analyzed using the Chi Square test and the Cox Regression test

Results

Health workers who were not infected with COVID-19 after vaccination were 57.75%, aged ≤37 years 63.38%, women 78.35% and had no previous history of COVID-19 infection 70.25%. Health workers aged >37 years are at 0.81 times less risk of being infected with COVID-19 post-vaccination, have no previous history of COVID-19 infection at 2.18 times greater risk, have a history of diabetes mellitus at 1.57 times greater risk, have a history of hypertension at 1.47 times greater risk, have a history of coronary heart disease at 0.47 times lower risk, have a history of chronic obstructive pulmonary disease at 0.88 times lower risk, face-to-face with patients at 1.58 times greater risk of becoming infected with COVID-19 post-vaccination. Multivariate results show that health workers with a history of COVID-19 infection are at 2.16 times greater risk of being infected with COVID-19 post-vaccination than health workers who do not have a history of COVID-19 infection.

Conclusions

Health workers age >37 years, have a history of diabetes mellitus, a history of hypertension, a history of COVID-19 infection, face to face with patients, and use level 1 PPE in their daily work are prioritized get booster vaccinations to strengthen immunity levels and extend the protection period

Evaluation of COVID-19 Surveillance System in Denpasar City 2022

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Background

Surveillance has an important role in finding cases of COVID-19. Case identification is the basis for planning and implementing pandemic prevention interventions. This evaluation aims to determine the implementation and analyze problems and provide appropriate recommendations to overcome problems in the implementation of the surveillance system.

Methods

Descriptive evaluation research was conducted in February-May 2022 with 15 research subjects consisting of a surveillance team from the Health Service and Puskesmas in Denpasar City. Collecting data using interview techniques and observation using a questionnaire. Evaluation of the surveillance system uses the concepts of input, process and output as well as surveillance attributes. Data is presented in the form of tables, graphs, and narratives.

Results

Evaluations at the city and Puskesmas levels found that no epidemiologist was available. 73.3% have never attended any COVID-19 surveillance training. 73.3%% have double workload. Contact tracing is hampered because the patient is closed to providing information. Document observations showed that there was substance in the report form that was not filled out by officers and the number of close contacts was far below the set target. Interviews show that reports from the Puskesmas to the health office are often delayed due to time constraints and a large workload. This causes the surveillance system attributes such as representativeness, data quality and timeliness to be inadequate.

Conclusions

Contact tracing is not in accordance with the achievement indicators and targets in the COVID-19 surveillance implementation guidelines 2021. Small group discussions need to be held to find solutions to improve contact tracing so as to find cases early and break the chain of transmission.

COVID-19 Early Detection Based on the EWARS Report of Suspected Pneumonia and Influenza-like Illness (ILI) in Bantul District 2020-2021

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Background

EWARS is an outbreak weekly report system developed by the Indonesian Ministry of Health as one of the early warning measures for the outbreak. This study aims to describe the quality reporting and trends of suspected pneumonia and Influenza-Like Illness (ILI) at Public Health Centers (PHCs) in Bantul as one of the tools to detect COVID-19 early based on the completeness performance of EWARS reporting.

Methods

This is an observational analytic study. Suspected pneumonia and ILI data were taken from the EWARS application from the Bantul Health Office from 2020 to 2021. COVID-19 data was taken from the All Record TC-19 application. The correlation between COVID-19 trends and reporting of suspected pneumonia and ILI was analyzed using the Pearson correlation test.

Results

From the results of the descriptive analysis, there are different trend patterns between COVID-19, suspected pneumonia, and ILI from 2020 to 2021, and from the results of the Pearson correlation test, there is no significant association ($p>0.05$) between the COVID-19 trends and suspected pneumonia and ILI.

Conclusions

In the current condition, EWARS has not been able to detect COVID-19 early. The improvement of EWARS implementation was needed to provide more representative information on potential disease outbreaks so that it can be used as an effective early warning system. Increasing the quality and quantity of the EWARS reporting must be part of the monitoring and evaluation.

Distribution of Death related to Covid-19 Cases in Sulawesi Tenggara from 2021 to 2022

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Background

Distribution cases and death related Covid-19 in South East Sulawesi vary considerably across 17 district. First confirmation case reported in Kota Kendari and first death case reported in Kota Kendari on 14 April 2020 with case fatality rate (CFR) 6,25%.

Methods

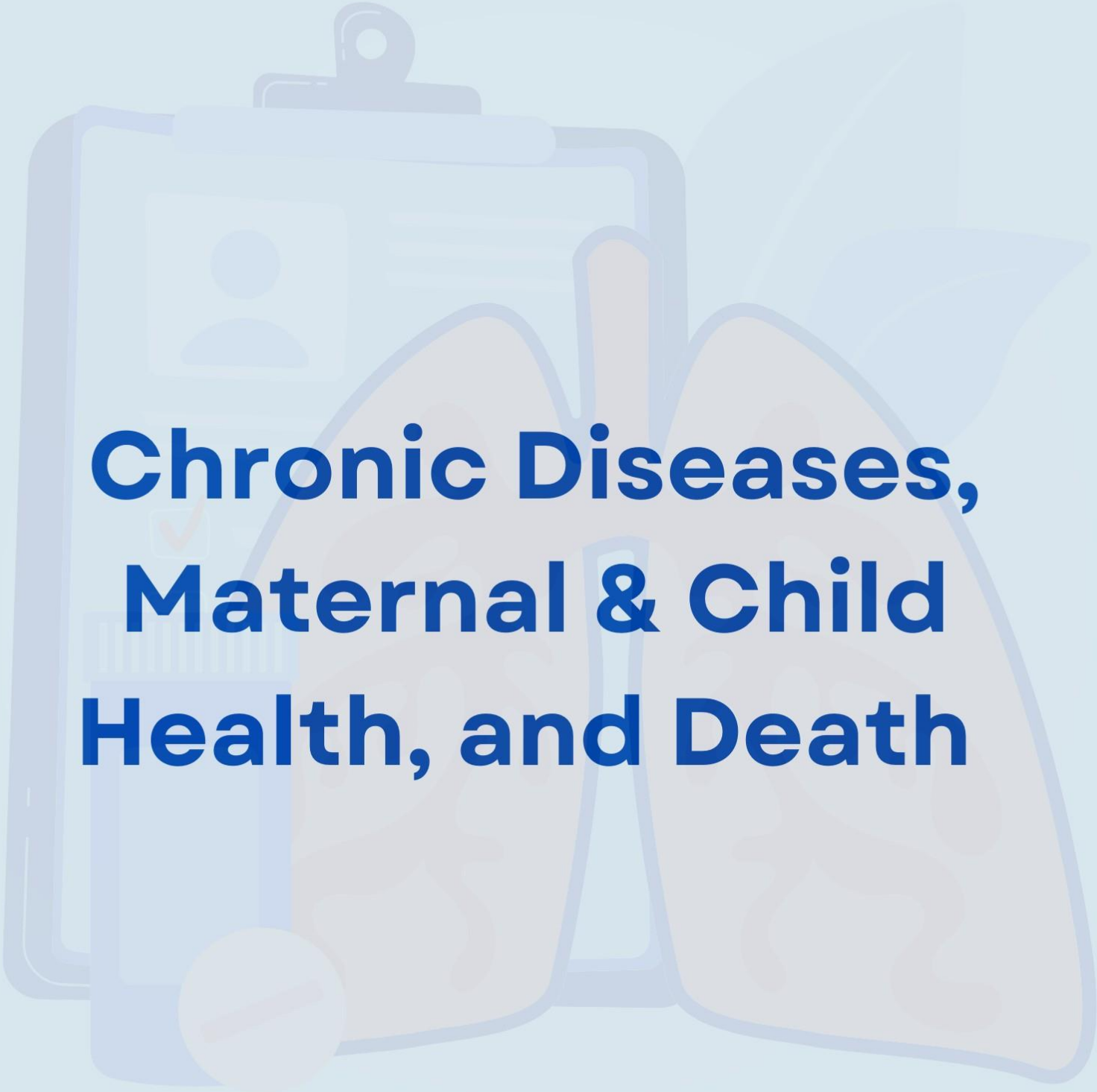
Descriptive analysis on 20.173 data of confirmation case Covid-19 reported on NAR-TC19 South East Sulawesi province period 2020 – 2021. The data presented in table, diagram and grafik to show trend, distribution, mortality rate and case fatality rate.

Results

Death related Covid-19 in South East Sulawesi in 2020 were 147 cases and increased in 2021 were 381 cases. Around 75% death case occured on 50 years old or more. Mortality rate in 2020 were 5,6 per 100.000 population and increased more than third in 2021 were 14,5 per 100.000 population. Eight district showed higher mortality rate than province mortality rate in 2021. Three districts with Covid-19 cases less than 1.000 cases showed mortality rate more than 20 per 100.000 population. In 2020 province provinsi were 1,9% increased to 3,1% in 2021. Nine district showed higher CFR than province CFR. The most death case reported in Kota Kendari but highest CFR showed in Buton Utara district (16.2% in 2020 and 9.8% in 2021). Higher CFR directly proportional with lower testing capacity, distance, and limited number of covid-19 referral hospital.

Conclusions

During 2020 – 2021, death related Covid-19 distributed in 17 district with mortality rate ranged 0 - 25,7 per population. Meanwhile variation CFR ranged 0–16,2%



Chronic Diseases, Maternal & Child Health, and Death

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Determinant of Coronary Heart Disease among Indonesian Hajj Pillgrims were Hospitalized at Saudi Arabia in 2019

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Background

Cardiovascular diseases (CVDs) are the main cause of death worldwide, including for the Hajj pilgrims. Coronary Heart Disease (CHD) is the most common CVDs in Indonesian Hajj pilgrims hospitalized at Saudi Arabia. This study aims to determine how much influence does education, blood pressure, blood sugar levels, LDL cholesterol levels, body mass index and smoking have and which factors have the greatest influence on the incidence of CHD in Indonesian pilgrims hospitalized at Saudi Arabia in 2019.

Methods

This was an analytic observational study with a case-control design using secondary data from the medical records of Hajj in siskohatkes. Cases were pilgrims hospitalized in Saudi Arabia diagnosed of CHD, about 186 people. Controls diagnosed other than CVDs. Selection of controls by matching age and sex with a ratio of 1:1. Data analysis was using the STATA program with bivariate test and multiple logistic regression.

Results

This study showed that high blood pressure, with adjusted odds ratio (OR)=2,3 (95%CI=1,5 - 3,6), high blood sugar levels, adjusted OR=1,9 (95%CI=1,1 – 3,4), high LDL cholesterol levels, adjusted OR=1,8 (95%CI=1,1 – 2,9), and excess BMI, adjusted OR=1,7 (95%CI=1,1 – 2,7) are risk factors for CHD. The probability of CHD when having those four risk factors is 85.69%. Meanwhile, education, OR=1,09 (95%CI=0,7 – 1,7) and smoking, OR=1 (95%CI=0,6 – 1,7) are not risk factors for CHD.

Conclusions

High blood pressure increases the risk of CHD more than 2 times. High blood sugar levels, high LDL cholesterol levels and excess body mass index increases the risk of CHD almost 2 times. High blood pressure is the most significance risk factor for CHD.

Evaluation of the Neonatal Health Surveillance System in Polewali Mandar District in 2021

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Background

The District Health profile indicated that the neonatal mortality rate in Polewali Mandar increased from 2018 to 2020. Through the public health surveillance system, health problems that increase the risk of neonatal death can be early identified. Therefore, the evaluation was conducted to determine the weaknesses of the implementation of the neonatal health surveillance system in the Polman District.

Methods

This research is a descriptive observational study. Data collection was carried out by direct interviews using questionnaires to 20 child surveillance officers at Polman Health Center and 1 child surveillance officer of Polman Health Office from March to April 2022. Aspects evaluated were personnel, facilities, funds, surveillance components and surveillance attributes. Univariate analysis were conducted and presented in the form of tables and narratives.

Results

The study found that 40% of officers have other responsibilities, 50% did not have assistants, 40% still use personal laptops, no transportation facilities are available (85%) and report collection was conducted manually (100%). Based on the surveillance component, the officers analyzed the data by graphical presentation (45%), the analysis was not according to guidelines (75%), and the frequency of feedback from the District Health Office was uncertain (45%). Aspects of surveillance attributes, data utilization by others (55%) and timeliness of report (65%).

Conclusions

Personnel, facilities, surveillance components and surveillance attributes were identified as the weaknesses of the neonatal health surveillance system. Distribution maternal and child health surveillance guidelines for officers of Polman Health Centers need to be conducted, in addition feedback from the district health office to the public health centers should be conducted in regular basis to improve the implementation of the surveillance system.

Diarrhea In Children: Trends And Predictions Of Outbreak At Katobengke Health Center, Baubau Town In 2022

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Background

According to the United Nations Children's Fund (UNICEF), a child has died from diarrhea every 30 seconds. As stated by to Baubau Health Office case distribution data in 2021, the Katobengke Health Center is one of the health centers that provided the most Diarrhea cases (112 cases). The research aims to discover two things. First, analyze the trends in Diarrhea incidence and the procedures required to prepare for Outbreak of Diarrhea in children. The second step is to locate the Outbreak Diarrhea alerts at Katobengke Health Center's working area.

Methods

This research utilizes descriptive observational research methods and was conducted at the Katobengke Health Center from January to May 2022. The entire sample strategy was used to collect research data from prescriptions and medical records of Diarrhea patients aged 0-60 months.

Results

The incidence of diarrhea in under five children at Katobengke Health Center, Betoambari Subdistrict, was 8 cases out of a total of 14 cases in January, 3 cases out of a total of 4 cases in February, 11 cases out of a total of 17 cases in March, and 9 cases out of a total of 4 cases in April. The average age for underfive children who have Diarrhea was 23 months, with a minimum of 4 months and a maximum of 60 months. There are 20 male children (53%) and 18 female children (47%). In March, there had been an outbreak alert for 11 cases.

Conclusions

The incidence of Diarrhea in children under five is quite high in the Katobengke Health Center; therefore, the head of the Katobengke Health Center is advised to make efforts to control cases and identify the determinants of Diarrheal disease in children as early as possible, particularly in Lipu and Katobengke villages, to anticipate the possibility of diarrhea outbreaks by engaging all relevant stakeholders.

Evaluation of the Death Surveillance System of the Barru District Health Office in 2022 South Sulawesi Province

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Background

Mortality data in Barru Regency is still limited to maternal and infant mortality. However, it does not cover the pattern of population mortality. Death surveillance has been carried out since 2018 to obtain population mortality data. This study aims to evaluate the components, attributes, and weaknesses of the mortality surveillance system.

Methods

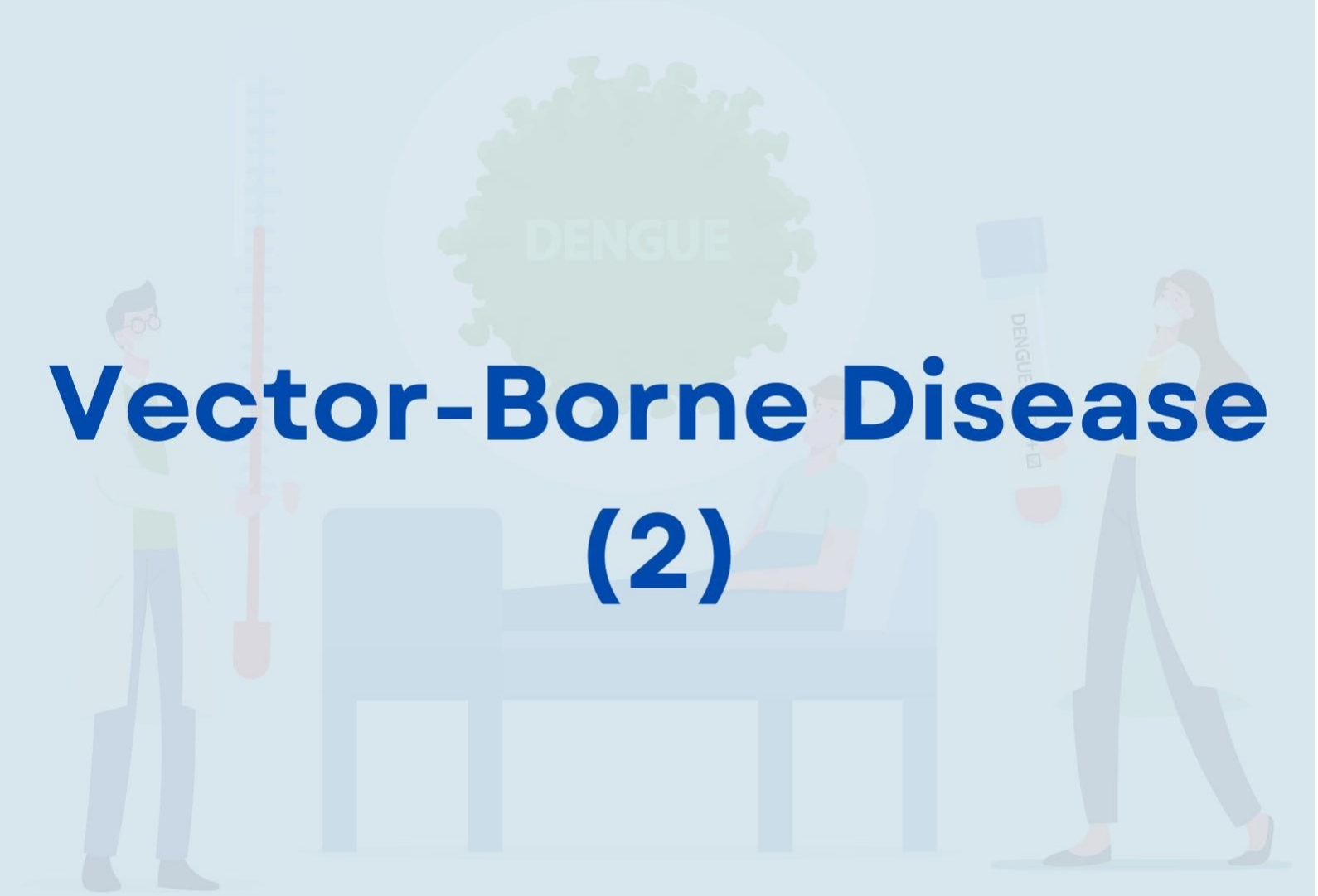
This descriptive study was conducted from March - April 2022. Primary data were collected through interviews using a structured questionnaire to surveillance officer in 12 health center, 1 district health office, and 1 hospital medical record officer. Secondary data for 2020-2021 was collected from reports K1 (verbal autopsy) and K2 (routine reports).

Results

The frequency of deaths by sex in 2020 for men and women was 50% respectively, in 2021 49% for men and 51% for women. The highest causes of death in 2020-2021 are hypertension (15%), stroke (10%), and diabetes mellitus (9%). The crude death rate in 2021 was 7.3 deaths/1.000 populations, while the coverage of death registration are 1,736 (130.6%). Completeness of data, CoD 91%, code CoD 66%, gender, and age of death is 99%. Surveillance attributes for convenience, flexibility, representative, and data quality >80%. While the acceptability was 76.92%, 64.10% sensitivity and punctuality 46.15%. Surveillance team and verbal autopsy of death trained <50% (doctors 50%, nurses/midwives 25% and surveillance officer 23%). Another challenges is the family who provides inaccurate information and refused autopsies during the Covid-19 pandemic.

Conclusions

Coverage of mortality data is good, however completeness, data quality CoD, timeliness, the accuracy of reports, analysis and utilization of death data remains a major concern in mortality surveillance. it is necessary to improve the competence of surveillance officers.



Vector-Borne Disease (2)

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Evaluation of Dengue Hemorrhagic Fever Surveillance Systems in Barru District South Sulawesi Province, 2021

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Background

The IR of DHF in 2021 in Indonesia reached 26 cases per 100.000 population, with a CFR reach 0,97%. In South Sulawesi was reported 81 DHF cases in 2021, where 37 cases were found in the Barru District. This study aimed to describe surveillance attributes of DHF epidemiological surveillance system implemented in Barru District as one of the most important strategies to improve early precautions against outbreak.

Methods

Descriptive study were conducted in February to June 2022 involved 14 person in charge of DHF Program at health facilities. Data were collected through in-depth interviews and observations. Respondents statements were recorded and compared with the operational definitions of the surveillance attributes under study to obtain a conclusion.

Results

In terms of simplicity, 21,4% officers could't manage DHF data, 42,8% didn't conduct data analysis and dissemination, 42,8% officers weren't familiar with the exixting DHF registry. In terms of timeliness, 21,4% officers didn't send a weekly (W1) and EWARS reports, 28,6% officers didn't routinely conduct local DHF cases monitoring and didn't report the results of the epidemiologic investigation and periodic mosquito larva monitoring. Furthermore, 50% officers didn't report the outcome of DHF surveillance activiti es. In addition 50% of the person in charge and surveillance officers were not received training on DHF and mostly are not epidemiologist.

Conclusions

The implementation of the DHF surveillance system in the Barru District weren't optimal. The main problems identified were related to the competence of officers in managing DHF data. There are needs to improve the implementation of the DHF epidemiological surveillance system in Barru District through data management training, investigations, monitoring vectors and the environment related to DHF.

Problem Analysis of Dengue Hemorrhagic Fever in Blitar City East Java Province

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Background

The larva-free index of Blitar City in 2019-2021 has not yet reached the target of ≥95%. It may cause Dengue Hemorrhagic Fever (DHF) transmission, outbreak even death. This study aims to analyze the problem of DHF in Blitar City in 2019-2021.

Methods

This study is a descriptive observational with a case study design using secondary data. Problems identification using a system approach. Problems prioritization using CARL (Capability, Accessibility, Readiness, and Leverage) method. The root cause of the prioritized problem was identified with fishbone diagram.

Results

Problems identification found the non-optimal implementation of G1R1J, irregular larva checking, and inadequate risk factors control at the household level, public places and institutional places. The non-optimal implementation of G1R1J is the prioritized problem with the highest score. The root cause identification using fishbone diagram showed that the causes of the Man factor can be identified by limitations in human resources, lack of knowledge, attitudes, and practice about G1R1J. The Money factor can be identified by the insufficient fund for G1R1J implementation. The Material factor can be identified by limitations in health promotion media, jumantik kits, and larva monitoring cards. The Method factor can be identified by the lack of massive socialization of G1R1J and the lack of assistance in implementing G1R1J. The Machine factor can be identified by the absence of the larva-free index reporting application.

Conclusions

It is necessary to advocate and socialize G1R1J, strengthen multi-sectoral roles, increase community empowerment by establishing a larva-free village, and improve the recording and reporting system.

Evaluation of Dengue Hemorrhagic Fever Surveillance System in Palopo City, South Sulawesi Province, 2022.

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Background

Dengue Hemorrhagic Fever (DHF) is an infectious disease that can cause death, and it is still a public health concern in Indonesia. In 2020, 24 cases of DHF were recorded in Palopo city, increasing to 287 cases with three deaths in 2021. Various efforts have been made to overcome the increase in dengue cases. One of the efforts is implementing an epidemiological surveillance system to monitor the trends of DHF in the area. This study aimed to evaluate the implementation of the DHF surveillance system in Palopo City

Methods

This evaluation was carried out in April-July 2022, using descriptive observation methods, Primary data collected through interviews using a structured questionnaire and secondary data collected from DHF disease reports. The respondents of this study were 12 DHF program officers at the Public Health Centers (PHC)

Results

Most of the DHF surveillance officers in Palopo City have more than four programs (91%), and the majority (91%) never attended DHF surveillance training. This study found that there are no assistants available in 58% of PHCs, officers who used personal laptops and transportation were 58% and 41%, respectively. We observed that 25% PHCs presented their data with graphs and 16% with diagrams. In terms of feedback, only 58% PHCs received any feedback from the Palopo city health office. NS1 antigen was unavailable at 66% of PHCs. All officers conducted data collection and reporting manually (100%).

Conclusions

There are major shortcomings in surveillance components, including data collection, reporting, data visualization and presentation, facilities and personnel. An immediate improvement in the capacity of surveillance officers through relevant training and the availability of supporting facilities for DHF surveillance activities at the PHCs is required.

Risk Factors of Filariasis Occurrence in Kanyurang Village of Liukang Kalmas Subdistrict, Pangkajene Kepulauan District, Indonesia 2021

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Background

Filariasis a neglected tropical disease is still a major public health problem in several countries, includes Indone - sia. While several preventive measures have been implemented, this diseases is still reported to be an endemic in several areas in Indonesia. This study aims to identify and identify risk factors for filariasis transmission in remote islands in Pangkep District.

Methods

This study used a case-control study design and was carried out two remote island; Doang-Doangan Caddi Island and Bangko-Bangkoan Island, Pangkep District. A total of 23 filariasis cases and 46 controls were selected. Cases are people who are positive for microfilariae based on the results of the Filariasis Finger Blood Survey. Control were people who were negative for microfilariae based on the results of the Filariasis Finger Blood Survey. Data were analyzed by using Stata 15.

Results

This study found that there was a significant association between the adherence to filariasis medicine administered (OR= 11.64; 95%CI= 3.134-45.58), and the presence of breeding places (OR= 13,45; 95%CI= 3,388-62,7125) and filariasis occurrences. There were no significant association type of work, economic status, and distance less than 100 meters of the respondent's houses from cattle pens and filariasis. Multivariate analysis with logistic regression analysis showed that adherence to filariasis medicine and the presence of breeding places were the most risk factors for the incidence of filariasis (OR= 19.27; 95%CI= 3.69-100.55 and OR=21.97; 95%CI). = 4.02-120.16).

Conclusions

Adherence to taking filariasis medication and the presence of breeding sites are risk factors for the incidence of filariasis. Ensuring access and adherence to filariasis medicine which annually administered are important strategies to eliminate filariasis in those two remote islands in Indonesia.

COVID-19 (2)

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COVID-19 Cluster at Weddings Events in Rural Area, Kulon Progo District, 2022

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Background

In January 2022, a wedding in Karangsari Village, Kulon Progo District led to a cluster of coronavirus disease (COVID-19). Epidemiological investigation conducted to determine the extent, contributing factors of cluster occurrence and make a recommendation for future preventive measures.

Methods

This investigation used a case control study design with a ratio of 1: 1. Case defined as a person who had a positive test on SARS-Cov2 antigen or PCR and participated in the wedding preparation and the ceremony on January 28, 2022. Control defined as close contact of a case that had a negative test for COVID-19. We observed ventilation, duration, distance, mask wearing and washing hand habits. Structure questionnaire used for data collection. Logistic regression was used for identifying risk factors at CI = 95%, significance level (α = 0.05).

Results

We identified 28 cases from contact tracing, among these cases 96.4% had received a full dose of vaccination, 64% were female and 46,4 % were in the age group of 46-60 years, 34% and 36% were the bride's family and neighbor who helped with wedding preparation. Ventilation (AOR = 8.30, CI = 1.525 – 45.240, p = 0.014) and duration (AOR = 9.88, CI = 1.326 – 73.652, p = 0.025) contributes to the occurrence of COVID-19 clusters.

Conclusions

There was a COVID-19 cluster in Karangsari Village in January 2022. Poor ventilation and long duration of contact were the contributing factors of cluster occurrence. Strong implementation of health protocol in all activities related to the wedding events will prevent the occurrence of COVID-19 cluster

COVID-19 Cases in Bumbulang Public Health Center, Garut Regency, from January to April 2022

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Background

As a COVID-19 variant of concern by WHO, Omicron has spread rapidly in Indonesia and Bumbulang Public Health Center Garut Regency. The study aims to provide an epidemiological description of COVID-19 cases, influence factors, and recommendations for effective prevention.

Methods

Descriptive study through interviews with COVID-19 suspects from January – April 2022. The variables collected and analyzed are the number of cases per week, symptoms, gender, location, age, travel history, vaccination history, and contact with confirmed cases of COVID-19.

Results

From January to April 2022, there was 82 COVID-19 suspect with three deaths (CFR=3.7%). 82(100%) positive based on antigen examination. The increase in cases started at week 6 with 1(1.2%) cases and peaked at week 8 with 26(31.7%) cases. 30(22%) had a fever, 45(33%) had a cough and 16(12%) had a runny nose. Only a tiny proportion (< 10%) had a sore throat, shortness of breath, and diarrhea. 52(63%) were female, and 23(28.1%) were located in Bungbulang village, which is the location of the public health center. The highest attack rate and mortality rate were at age < 1 year (AR=0.3%CFR 33.3%) with 67(81.7%) aged 15 – 64 years. Based on risk factors, 73(89%) had no travel history, 58(71%) had no contact history, 11(13%) were not vaccinated, and 39(48%) hadbeen second doses.

Conclusions

Rapid Increase of COVID-19 cases featured mild symptoms, low mortality rate, and productive age. We recom- mend accelerating the vaccination, especially for the elderly and people of productive age.

Evaluation of the Covid-19 Vaccination Surveillance System in Soppeng Regency, South Sulawesi Province in 2022

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Background

The Covid-19 vaccination is an effective way to reduce the transmission of Covid-19. Data on the coverage of Covid-19 vaccinations in Soppeng Regency in March 2022 show that people who received the first dose of vaccine were 93.18%, 68.75% for dose two, and 5.28% for booster vaccination. The coverage of dose 2 and booster vaccination has not reached the target (target 70 – 90%). This study aimed to evaluate the implementation, components, attributes, and weaknesses of the Covid-19 vaccination surveillance system in Soppeng Regency

Methods

This study was carried out from March - April 2022 using a descriptive observational design. Data were collected through interviews using structured questionnaires and document observations. Respondents included a surveillance officer at the district health office, 17 Puskesmas officers, 1 Media Center officer, and 1 Polres Clinic officer.

Results

A total of 71.43% of officers have dual duties,14.29% of officers were not received training and 71.43% of officers had a bachelor's degree in health education. The collection, processing, and presentation of data are in accordance with the guidelines, the challenges found in the input proses through the P-Care application such as writing the NIK and cell phone numbers. The accuracy and completeness of the report were> 98% and information dissemination was only presented at the program meeting and cross-sectoral meeting (100%)

Conclusions

Implementation of the Covid-19 vaccination surveillance system in Soppeng Regency has been running well, however, there needs to improve the accuracy and completeness of reports, processing, presenting data, and providing optimal information. It is necessary to conduct training related to improving the quality of surveillance components for officers, especially in aspects, of processing, analyzing, and presenting data.

Characteristics of COVID-19 Patients in Isolation Room RSUD Dr. Haryoto Lumajang, From March 2020 to June 2022

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Background

RSUD Dr. Haryoto is one of the COVID-19 referral hospitals for the Lumajang and surrounding areas based on the Decree of the Governor of East Java Number 188/218/KPTS/013/2020. From March 2020 to June 2022, RSUD dr. Haryoto Lumajang has treated 4,612 COVID-19 patients, consisting of 4,517 (98%) inpatients and 95 (2%) outpatients. The purpose of this study was to describe the characteristics of COVID-19 patients in the Isolation Room of RSUD Dr. Haryoto Lumajang.

Methods

This study is a descriptive study using secondary data from SIMRS and medical record data of COVID-19 pa-tients.

Results

The results showed that the proportion of male cases was 45.68% and 54.32% for female patients. The age 51-60 (26.6%) was dominant and 87.53% cases are non-medical staff. The average length of stay of patients in the isolation room is 3-10 days. Most cases live in Lumajang District (16.73%). COVID-19 patients with comorbidity is 65.02% and primarily type II Diabetes Mellitus (11.14%). Death rate among confirmed COVID-19 cases was 22% and 13.88% for suspect COVID-19 cases. For those comorbid cases, death rate 13.76% among 327 COVID-19 cases with Type II Diabetes Mellitus, followed by 12.69 % among 252 COVID-19 cases with cardiac comorbid and
13.72 % among 102 COVID-19 cases with chronic kidney failure.

Conclusions

The proportion of Diabetes Mellitus Type II comorbidity is relatively high and leads to a high case fatality rate. Diabetic patients should comply with the health protocols and maintain their blood sugar to prevent COVID-19.

Respiratory Disease

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Evaluation of the Tuberculosis Surveillance System in Bogor District 2021

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Background

Bogor District is the main priority area for TB control in Indonesia with the number of cases TB was 200/100,000 population in 2021 and CDR hasn't reach ≥85% . TB surveillance is one of the TB control strategies. This study aims to describe the problem of TB surveillance system based on the system and attributes and provide an alternative solution.

Methods

This study was a descriptive study with evaluation study design conducted in Bogor District from September 2021 until January 2022. Data were collected through interviews with TB officer in 38 PHC, 6 Hospitals and 1 Bogor District Health Office using questionnaires by WHO Guideline for Evaluating Communicable Disease Surveillance. TB report data from TW 1 until TW 3 2021 also analyzed.

Results

Majority of TB officers didn't know about TB surveillance and legal aspects, only 50% have networked. 68% have active and passive cases finding, 69% have confirmed cases using TCM, 97% of DOTS health facilities have reported TB cases, the majority of them didn't analyze the data. Majority of TB officer holding >2 programs , only 9 TCM tools exist in Bogor District. 57% consider that TB surveillance is simple, 88% consider it flexible, the completeness was 90%, lack of timeliness (52%), usefullnes only 57%, the sensitivity was 71%, PPV only 21%, the TB surveillance is quite representative and acceptable.

Conclusions

The problem of TB surveillance system in Bogor District contained in the system and attributes. It is hoped that the bogor district health office can increase capacity for health facilities regarding surveillance, SITB and DPPM and always conduct monitoring and evaluation of TB surveillance.

Health Problems Analysis Of Prevention and Control Program Of Tuberculosis In Tulungagung District, East Java Province

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Background

Tuberculosis is one of the unresolved health problems in Tulungagung District. In the last three years (2019-2021) there has been a decrease in Tuberculosis case finding, but this is not supported by the achievement of the findings of suspected Tuberculosis cases that did not meet the target and even tended to decrease significantly in the same time period. The purpose of this study was to analyze health problems in the Tuberculosis Prevention and Control Program.

Methods

This research is an observational descriptive study, which was conducted in February 2022. The informants in the study consisted of 1 Tuberculosis program manager at the Dsitrict Health Office and 7 Tuberculosis program managers at the Primary Health Center which were determined by purposive sampling technique. Problem identification was carried out using brainstorming techniques and then determining problem priorities using the CARL (Capability, Accessability, Readiness, and Leverage) method. Furthermore, identification of the causes of priority problems with fish bone diagrams using a process approach.

Results

The results of the problem identification show that there are 13 problems in the Tuberculosis program and the priority problem is the low number of suspected Tuberculosis findings with a CARL score of 810,000. The low number of suspected Tuberculosis findings is caused by non-optimal discovery activities, limited resources and lack of social support.

Conclusions

The low number of suspected Tuberculosis is a problem in the Tuberculosis program in Tulungagung Regency which is urgent and needs to be addressed immediately. It is necessary to optimize the integrated active screening of at-risk populations and contact investigations supported by competent officers, the availability of adequate budgets and the cooperation of the Public Private Mix network.

Analysis of Tuberculosis Suspect Finding in Sidoarjo District, East Java, 2022

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Background

Sidoarjo is the third contributor to tuberculosis cases in East Java. However, the tuberculosis case detection rate (CDR) in Sidoarjo has not reached the target and tends to decrease for 2 years. The Case Detection Rate in 2021 was 47,2%. The low achievement of CDR is correlated to the finding of TB suspects. In the year 2021, the percentage of tuberculosis suspects who received services according to standards in the Sidoarjo District was 43%. The objectives of this study were to analyze the problem of finding tuberculosis suspects in the Sidoarjo district.

Methods

This was a descriptive study. Collecting data was conducted from January 21st-February 25th, 2022 at the Sidoarjo District Health Office through in-depth interviews with programmers and observing secondary data. We used the USG method to find the problem priority and fishbone analysis to find the specific cause.

Results

The achievement of tuberculosis suspect services according to the standard, 43%, didn't reach the target of minimum service standards. It was a priority problem in the tuberculosis program based on the USG method. The causes of the problem were the double duty burden on most TB officers, the lack of cadre participation in tuberculosis suspect finding, and low of public awareness of tuberculosis screening. The COVID-19 pandemic has impacted efforts to find tuberculosis suspects.

Conclusions

The main cause of the low number of suspected tuberculosis findings is a lack of cadre participation. It suggests increasing the capacity of cadres in finding tuberculosis suspects, monitoring & evaluating performance achievements per month, and creating a rewards program.

Analysis of Priorities and Causes of Health Problems in Magetan District Year 2022

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Background

Health development is inseparable from the problem of limited resources such as Human Resources, Facilities and Funds. Therefore, it is necessary to prioritize to find out what health problems or diseases need to be prioritized or prioritized in health programs. The purpose of the study was to determine the priority of public health problems in Magetan District.

Methods

This research is an observational descriptive study conducted during January-February 2022. Determining the priority of the problem using the Basic Priority Rating System (BPRS) and PEARL method and then identifying the cause of the problem using a path analysis diagram with sixteen respondents.

Results

The results of determining the priority of the problem obtained that tuberculosis is the main priority. Based on SITB (System Information of tuberculosis) data in 2021, it is known that tuberculosis has decreased in the number of cases from 472 in 2020 to 434 in 2021 but does not describe the actual condition. The identification of the tuberculosis problem was carried out through a path analysis diagram, it was found that the early detection in special places is low, screening in risk groups is not optimal, recording and reporting in hospitals and suspects do not return sputum are the causes of low tuberculosis findings.

Conclusions

To overcome these problems, it is necessary to educate the public about tuberculosis, cross-program and cross-sectoral collaboration to conduct screening and early detection, as well as conduct training related to SITB in hospitals.

Zoonotic Diseases and Animal Health

THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

Case-Control Study: Anthrax Incidence Analysis - Gunungkidul District, Yogyakarta Special Region, Indonesia 2022

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Background

On January 27th, 2022, four people with clinical symptoms of anthrax were reported by Gedangsari-1 Public Health Center. They participated in Brandu, the local practice of slaughtering sick cattle, activities on January 19th, 2022 in the Gedangsari Sub-district. An outbreak investigation was carried out to confirm, stop and find risk factors.

Methods

This investigation used 1:4 case-control study to determine risk factors. The case group is the community associated with sick cattle in Brandu's activities showed clinical symptoms of anthrax (fever, reddened skin, itching, bullae, necrotic tissue, diarrhea, nausea, shortness of breath) from January 19th 2022- February 9th, 2022. The control group is the community associated with sick cattle in Brandu's activities in healthy conditions. Data were collected through interviews using a standardized questionnaire and environmental observation and data analysis using logistic regression.

Results

From 277 people interviewed, there were 39 cases: 20 men (51.28%), 19 women (48.72%) and most cases in the age group >45 years (35.90%). The main symptoms were fever (74.36%), diarrhea (30.77%), itching (23.08%), reddened skin (20,51%), bullae (15,38%). The incubation period from one to thirteen days with median three days. Bivariate analysis showed that the significant variable is slaughtering (p-value 0.0003), processing meat (p-value 0.0001), cooking meat (p-value 0.0143) and Brandu activity (p-value 0.0001). Multivariate analysis showed that Brandu activity was the main risk factor (OR 5.66; 95% CI 1.73-18.53).

Conclusions

There has been an anthrax outbreak in Gedangsari Sub-district after Brandu's activity. Brandu activities are not recommended for sick animals and the public must receive education about anthrax disease.

Investigation of Rabies Outbreak in East Flores District 2022

Ms. Maria Antonia Loti Kelen [1], Mr. Y. B. Bebengu [2], Ms. A. Tanusaputra [2], Ms. J. Ngongo [3], Mr. H.Hoyano [3]

1. Intermediate FETP Participant, Provincial Health Office East Nusatenggara, 2. Intermediate FETP Mentor, Kupang District Health Office, 3. Intermediate FETP Mentor, Timor Tengah Utara District Health Office

Background

In East Flores Regency until May 2022, 569 rabies cases were reported with 3 deaths. There was a significant increase in cases with an incidence rate of 57.3 per 100,000 population (total 180 cases), and a case fatality rate of 1.7%. An outbreak investigation was conducted to identify additional cases, risk factors, describe the incidence of rabies and provide advice on outbreak control measures.

Methods

This investigation was carried out in Bama Village in the Demon Pagong Community Health Center, East Flo- res Regency, on June 15-18, 2022. Data was collected by observing secondary data and direct interviews with sufferers/families who have rabid animals. Data analysis was carried out descriptively using EpiInfo.

Results

Rabies cases were reported from January to May 2022, spread across 20 of 21 health centers in East Flores Regency. The chronology of the case in Bama Village found that the case was bitten on the left calf by a dog in January 2022, the date is not remembered. The case experienced continuous fever for 3 days. On June 7, 2022, the case was brought to the community health center, in a conscious condition and was observed and given fluids. The case began to delirium, so he was referred to the Hendrikus Fernandez Hospital Larantuka. At 14.30 WITA the patient began to show symptoms of anxiety, fear of water, fear of light, hyper saliva and began to scratch. On June 8, 2022 at 05.30, in the morning the patient was declared dead.

Conclusions

Cases of bites from rabies-transmitting animals in East Flores Regency are still high. People still keep rabies-transmitting animals such as dogs, cats and monkeys. It is necessary to reactivate advocacy and socialization of local government regulations regarding the handling of rabies. Cross-sectoral participation is needed to help increase public awareness and care about the health of their pets.

Case Study of Leptospirosis Incidence in Lumajang Regency, East Java, March 2021

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Background

In March 2021, two leptospirosis cases were reported in Lumajang Regency (CFR=100%). The study was conducted to describe the epidemiology of cases and environmental risk factors to provide recommendations for future prevention.

Methods

This research was a descriptive with a case-study approach. The data used in this study was secondary data from The Technical Centre for Environmental Health and Disease Control, Surabaya office. The data consist of leptospirosis cases reports, rat survey and laboratory test result.

Results

Cases came from suburb (case A) and rural (case B) areas which had different area characteristics. All of them (100%) were male and aged >50 years. Case A worked as an employee but a week before the incident, he cleaned the drains after flooding in his neighborhood. Case B worked as a farmer. Both were exposed to contamination from their activities without protecting the wounds on their feet. The rats survey in location A found 20% success traps with dominant species including *Rattus norvegicus, Bandicota indica, and Suncus murinus*. At location B, the success trap was 24% with the dominant species including *Rattus tanezumi* and *Rattus exculans*. There was a 4,3% positive specimen of leptospira bacteria in *Bandicota indica* species which was found at case A's house. The MAT test found six types of pathogenic serovars, one of which was *Icterohaemorragie*.

Conclusions

Leptospirosis incidence in Lumajang Regency was related to three main factors, including the pathogenicity of agent, personal hygiene of host and rat population density as an environmental factor. Therefore, the use of PPE is very important in the implementation of clean and healthy living habits to prevent the transmission. It's also necessary to control the rat population by improving environmental hygiene.

African Swine Fever (ASF) First Outbreak Investigation inKapuas Hulu Regency of West Kalimantan 2021

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1. Plantation and Livestock Services of West Kalimantan Province, 2. Food and Agriculture Services of Kapuas Hulu District, West Kalimantan

Background

African swine fever (ASF) is a serious disease in pigs and can cause high economic losses with mortality up to 100%. ASF in Indonesia first appeared in North Sumatra in September 2019. In September 2021, it was reported that 13 pigs died in Datah Diaan Village, Putussibau Selatan District, Kapuas Hulu Regency. The purpose of this study was to describe the causes of death in pigs and the associated risk factors.

Methods

The investigation was carried out by tracing, sampling and laboratory testing, as well as descriptive analysis together with the local officer of Betung Kerihun National Park. Investigations are followed by in-depth inter- views with pig owners or local villagers to identify risk factors and possible sources of the outbreak.

Results

It seems that the pigs died after being fed leftover food from the wild boar hunt. Three dead wild boars were also found in Sungai Matik and Sungai Sibu, Kapuas Hulu Regency, based on information from Betung Kerihun National Park officials. The sudden death of the pig was followed by bleeding from the nostrils, mouth, and spleen. Found many pigs dumped in the local river. Organ samples and river water were tested by PCR and the results were positive for ASF. It is known that the reported areas are still in line with the deaths of pigs that occurred in Sabah-Malaysia, North Kalimantan, and East Kalimantan. Risk factors that may influence are the existence of collectors or wild boar sellers who go around selling wild boar meat to the community and weak biosecurity factors.

Conclusions

Pig deaths are caused by ASF. The source of the outbreak is from Sabah-Malaysia wild boar through North Kalimantan. We recommend to manage biosecurity, use serum convalencent in pigs to reduce mortality, and optimize public education to prevent more farmer losses.

Infectious Diseases, Immunization, and Other

THE 9TH NATIONAL SCIENTIFIC CONFERENCE ON EPIDEMIOLOGY

Situation Analysis of Health Problems Transmitted Diseases in Bengkulu City, Bengkulu Province in 2020

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Background

Health problems that still dominate in the world of health are infectious diseases. In Indonesia, infectious diseases remain a problem and the priority is still on HIV/AIDS. tuberculosis. Malaria. DHF, Diarrhea, Respiratory Tract Infections, PD3I, Rabies and public emergency diseases (COVID-19). This activity aims to identify existing infectious diseases, describe the major health problems of infectious diseases, and determine the priority infectious diseases in Bengkulu City.

Methods

The method used in this situation analysis activity is an assessment whose results will be presented descriptively with quantitative and qualitative approaches. Determining the priority of problems using the PAHO Adopted Hanlon method by means of focus group discussions and depth interviews with parties involved in the prevention and control of infectious diseases, namely environmental structural officials at the Bengkulu City Health Office, Puskesmas and related cross-sectors.

Results

There are 10 infectious diseases that have been identified as the most common health problems in recent years, namely: TB (1132, CDR 15.1%), AIDS (CFR 21%), Diarrhea (19,5/1000), Pneumonia, DHF (81 ,6/100,000), GHPR (141 cases), Hepatitis B, COVID-19 (1843 cases, CFR 3.93%). The results of determining the priority of problems using the Adopted Hanlon are Covid-19: 46.1, DHF: 21, HIV/AIDS: 23.6. TB : 21, GHPR : 18.73, Pneumonia 16.9.assessment score PAHO Adopted Hanlon is 46.1.

Conclusions

Covid -19 is an infectious disease that is a priority in the assessment using the PAHO Adopted Hanlon method. It is hoped that by strengthening the management of responsive COVID-19 prevention programs starting from the Health Service, Hospitals, Primary and Private Health Facilities and empowering the community to be able to carry out early detection of COVID-19 cases based on symptoms, prevention and control of COVID-19 in households and the surrounding environment. , can reduce the morbidity and mortality of COVID-19.

Analysis of Complete Basic Immunization Problems in Blitar City, East Java, 2022

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Background

Complete basic immunization coverage in Blitar City during the period 2019-2021 has not reached the UCI target, especially after the COVID-19 pandemic. Failure to achieve UCI has an impact on increasing morbidity, mortality, and disability due to diseases prevented by immunization. The research purpose is to prioritize and find the problem related to the low immunization coverage in Blitar City, to be a basis for providing recommendations for improvement in achieving UCI in Blitar City.

Methods

This is a descriptive observational study conducted at the Health Office of Blitar City from January to February 2022. The informants are the Head of P2P, Surveillance and Immunization, Maternal and Child Health, and Holders of Immunization Programs. The problem was identified by analyzing secondary data on basic immunization coverage based on the Blitar City health profile, the annual report of the surveillance and immunization division in 2021. Data collection was carried out using the interview method then analyzing priority of problems using the USG method and analyzing the problem using the Fishbone method.

Results

UCI Coverage per Puskesmas in Blitar City is Sananwetan Health Center by 91%, Sukorejo Health Center by 97%, and Kepanjenkidul Health Center by 77% in 2021. Kepanjenkidul Public Health Center is still below the target, both national and district targets. The complete basic immunization problem in the work area of the Blitar City Health Office is that the records and reporting of cadres, and health workers, are still not optimal; the implementation of immunization is less active during the COVID-19 pandemic.

Conclusions

The low immunization coverage in the Kepanjenkidul Public Health Center area is a priority problem for the complete basic immunization program in the Blitar City Health Office during the COVID-19 pandemic to optimize the integration of immunization by reactivation of health education programs on immunization, both online and offline promotions.

Investigation of Rabies Outbreak in East Flores District 2022

Ms. Maria Antonia Loti Kelen [1], Mr. Y. B. Bebengu [2], Ms. A. Tanusaputra [2], Ms. J. Ngongo [3], Mr. H.Hoyano [3]

2. Intermediate FETP Participant, Provincial Health Office East Nusatenggara, 2. Intermediate FETP Mentor, Kupang District Health Office, 3. Intermediate FETP Mentor, Timor Tengah Utara District Health Office

Background

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Methods

This investigation was carried out in Bama Village in the Demon Pagong Community Health Center, East Flores Regency, on June 15-18, 2022. Data was collected by observing secondary data and direct interviews withsufferers/families who have rabid animals. Data analysis was carried out descriptively using EpiInfo.

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Rabies cases were reported from January to May 2022, spread across 20 of 21 health centers in East Flores Regency. The chronology of the case in Bama Village found that the case was bitten on the left calf by a dog in January 2022, the date is not remembered. The case experienced continuous fever for 3 days. On June 7, 2022, the case was brought to the community health center, in a conscious condition and was observed and given fluids. The case began to delirium, so he was referred to the Hendrikus Fernandez Hospital Larantuka. At 14.30 WITA the patient began to show symptoms of anxiety, fear of water, fear of light, hyper saliva and began toscratch. On June 8, 2022 at 05.30, in the morning the patient was declared dead.

Conclusions

Cases of bites from rabies-transmitting animals in East Flores Regency are still high. People still keep rabies- transmitting animals such as dogs, cats and monkeys. It is necessary to reactivate advocacy and socialization of local government regulations regarding the handling of rabies. Cross-sectoral participation is needed to help increase public awareness and care about the health of their pets.

Financial Capital of Household Resilience in Coping Flood of Bengawan Solo River Watershed in Kanor Subdistrict-Bojonegoro Regency in 2019

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Background

There were total of 16,584 natural disasters that resulted in a loss of $4.3 trillion of worldwide and 80% were hydrometeorological disasters during 1980-2016. In 2017, floods dominated hydrometeorological disasters and there were 78% (11.648) of hydrometeorology disaster occurred during 2005 - 2015 in Indonesia. During 2015 - 2019, 63% of total population of Bojonegoro was affected of flood. This study aimed to analyze the financial capital that supports household resilience in coping flood of Bengawan Solo River watershed.

Methods

We conducted a descriptive study with primary data collection in October-November 2019 in Bengawan Solo River watershed in Kanor Subdistrict with sample were households who live in dike-protected area (50 households) and households who live in dike-unprotected area (50 households). The financial capital analyzed using Community Disaster Resilience Index-1. Financial capital includes 6 indicators. The household resilience index was categorized into five criteria: very low (0.00-0.20), low (0.21-0.40), moderate (0.41-0.60), high (0.61-0.80) and very high (0.81-1.00).

Results

The average number of household member was 4 people. Most household had lived in research site for >20 years. Most household heads are man (96.0%), in 35-44 years age group (29.8%), and graduated from elementary school (42.0%). The financial capital resilience scores in households who live in dike-protected area compared to households who live in dike-unprotected area; the average income of household per month (0.27<0.32), source of income of household (0.29<0.37), debt burden of household (0.87>0.79), saving (0.21<0.30), and dependency on other financial assistance (0.59<0.77), financial management (0.39<0.47), the financial capital index score showed a score of 0.39<0.47.

Conclusions

Financial capital of household resilience score index in coping floods showed a lower index score in flood-prone area (in dike-unprotected area). Local governance should be opening new local jobs, educate about awareness of saving practices and managing financial of household in research site.

Poster Presentations

Maintaining the Coverage of the Measles-Rubella School-Based Immunization Program During the COVID-19 Pandemic in Kulon Progo District 2020

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Background

The COVID-19 pandemic resulted in the disruption of essential health services such as routine immunizations. The measles-rubella (MR) vaccination has been included in Indonesia's elementary school-based immunization program since 2017. The low coverage of MR vaccination will induce MR outbreak. Coverage of measles rubella immunization in Kulon Progo before the pandemic 2019 (99.1%) and during the pandemic 2020 (98.0%). The study aims to assess the implementation of the MR school-based immunization program before and during the pandemic COVID-19 in Kulon Progo as a lesson learned in terms of maintaining coverage.

Methods

The study used a descriptive qualitative design with in-depth interviews, immunization implementation observations and a review of the routine immunization report for 2019-2020. The study was carried out from October-December 2021. Twelve respondents were selected using purposive sampling techniques covering three subjects (health centre officers, teachers & parents) in the Kokap, Pengasih and Temon Subdistrict Kulon Progo. The covered variables include behavioural, environmental, and health care factors

Results

There was no difference in MR vaccination coverage in 2019 and 2020 (> 98%) at the district level. However, at the health centre level, the coverage performance was varied. During the pandemic, the implementation time was delayed than the previous year's period (August into September-October), and the health protocol was adapted. During the pandemic, the cross-sector collaboration between parents, schools, health centres and the COVID-19 task force, such as the army and police, becomes a key to maintaining the coverage of the school-based vaccination program.

Conclusions

The cross-sector collaboration is a primary activity to maintain the high coverage of the school-based MR immunization program in Kulon Progo. It is recommended to expand the same factor to implement other routine immunization programs in children to prevent infectious disease outbreaks.

Analysis of COVID-19 Tracing Ratio in Sidoarjo Regency, East Java 2022 (Study During the Covid-19 Pandemic)

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1. University of Airlangga, 2. Department of Epidemiology, Biostatistics, Population Studies, and Health Promotion, Faculty of Public Health, Universitas Airlangga, 3. Sidoarjo District Health Office

Background

Covid-19 pandemic attacked Indonesia since May 2, 2020 poses various challenges, as well for Sidoarjo District Health Office which the 2nd highest contributor to Covid-19 cases in East Java. The most dominant problem was insufficient number of Covid-19 tracing ratios, with a value of 13.08% of 02/24/2022. This aimed to analyze the risk factors for the problem inadequate Covid-19 tracing ratio numbers at Sidoarjo District Health Office 2022.

Methods

Descriptive observational with a qualitative approach by analyzing health problems using fishbone diagrams at Sidoarjo District Health Office on January 21, 2022 - February 25, 2022. The qualitative approach was carried out by in-depth interviews with 2 sources, namely; holder of Covid-19 surveillance program, Covid-19 administrative staff at Sidoarjo District Health Office.

Results

Analysis of risk factors found because the problem from the aspect of human resources, named limitations officers, many officers concurrently with other tasks, less proficient in using applications and high workloads. The method aspect was the filling patient data by health facilities that incomplete and there was domicile data outside Sidoarjo Regency so tracing couldn't be carried out. The funding aspect was limited allowance and budget for additional human resources. Infrastructure aspect hasn't been facilitated by 2-way reporting application that centrally integrated between health facilities and Sidoarjo District Health Office. The environmental aspect there was still a stigma in some villages didn't support.

Conclusions

Aspects of human resources and infrastructure were the main because the problem of insufficient Covid-19 tracing ratio at Sidoarjo District Health Office 2022.

Analysis of Health Problems in The Field of Disease prevention and Control Health Departement of Kediri District 2022

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Background

This research is an analytical study in determining the priority of health problems in the Kediri District Health Office's Disease Prevention and Control, the Covid-19 pandemic has resulted in many programs in the Kediri District Health Office's Disease Prevention and Control sector experiencing a decline in program achievement, the purpose of this research is to determine the priority of public health problems in Kediri Regency.

Methods

This research is a descriptive observational study conducted at the Kediri District Health Office from January 25 to February 25, 2022. Priority health problems using the Hanlon (PEARL) method. Priority problems found identified the cause of the problem with a problem analysis diagram. Finding the root cause of the problems found in priority using the fishbone method and making alternative solutions to problems.

Results

The results of the priority problems obtained by programs that do not meet the achievements in 2021 are TB, Pneumonia, HIV, Leprosy, Covid-19, DHF, Hypertension, DM, and Immunization. Programs that did not reach the target were affected due to the COVID-19 pandemic which became an obstacle in carrying out the program. The priority of the leading causes of COVID-19, which was redefined based on the results obtained, the main problem is the occurrence of a significant increase in cases or the occurrence of the peak of the second wave which analyzes the spread and faster spread due to the presence of new variants. So it is necessary to carry out comprehensive control and prevention efforts of everything in the COVID-19 program.

Conclusions

The results carried out with the fishbone method obtained community compliance in an independent application so that the alternative solution given was the formation of cadres to help supervise the community in implementing independent isolation.

Low Coverage of Tuberculosis Case Finding as The Main Health Problem Priority in North Sumatera Province 2022

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Background

Indonesia has triple burden disease that need to be solved but the resources was limited. An analysis of health problems was conducted to find out the description and set the priority. Decisions must be made regarding which public health problems to undertake. This study aims to determine the main priority of health problems in North Sumatera Province and identify the cause of the problem priority and give an alternative

Methods

This was a descriptive observational study conducted at Provincial Health Office of North Sumatera in January-February 2022. The types of data collected were demographic characteristics, health status, morbidity and mortality data obtained from the North Sumatera Health Profile (2019-2021), surveillance reports and interview with program managers. To determine the main priority of health problems, the Basic Priority Rating System (BPRS) method was implemented employed based on the size and seriousness of the problem and effectiveness of intervention criteria. There are 10 program managers were asked to fill the questionnaire. All the answers would be calculated using BPRS score

Results

The BPRS score of low coverage of case finding of TB was 120, selected as the main health problem priority in North Sumatera. Treatment coverage TB was only 34.48% (lower than national target of 80%). The causes of the problem were the TB officers low motivation, low support from other stakeholders, low of public aware ness to check their health status, and this situation also exacerbated by the COVID-19 pandemic.

Conclusions

Based on BPRS analysis, TB was chosen as the main priority health problems in North Sumatra. By using health problem analysis, major health from TB is low percentage of coverage case finding TB. It is suggested to establish TB-Team for district, giving reward for the officer, and also optimalization of *DOU* Strategy (from, by and for society).

Evaluation of the COVID-19 Case Tracking Reporting System at Bangli Regency, Bali in 2022

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Background

Covid-19 is a new phenomenon, and limited mobilization in case tracking encourages the use of information technology in managing Covid-19 close contact data through Silacak. Silacak is a new application and requires adjustments in its implementation. This evaluation aims to determine the implementation and analyze problems and provide appropriate recommendations to overcome problem in the implementation of the Covid-19 case tracking reporting system.

Methods

A descriptive evaluation approach was conducted in March 2022 with 24 research subjects consisting of a public health center (PHC) surveillance officer and PHC tracer coordinator in Bangli regency. Data was obtained by inverview and observation via questionnaire. Evaluation of the covid-19 case tracking reporting system uses the concepts of input, process and output as well as surveillance attributes. Data is presented in the form of tables, graphs and narratives.

Results

The completeness of the close contact data entered in the Silacak application reached 33.11%, still below the set target (100%). The majority of Covid-19 surveillance and tracer officers have a double workload, 50% of PHC surveillance officers have not attended Silacak training and 75% of PHC have not entered complete data. Incomplete data, limited input time, internet network disturbances and interference with the Silacak application are the causes of the low input of close contact data. This causes the surveillance system attributes such as data quality, sensitivity, acceptability, representativeness and timeliness to be inadequate.

Conclusions

Close contacts entered in the Silacak application have not reached the target set in the guidelines for implementing Covid-19 surveillance. Focus group discussions need to be carried out to find solutions to improve the reporting of Covid-19 cases based on the Silacak application.

Investigation Report on the Extraordinary Incident of Cikungunya in Meliling Village, Kerambitan District, Tabanan Regency

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Background
The Tabanan District Health Office reported an increase in chikungunya cases in Meliling Village, Kerambitan District, as many as 32 patients. In 2021 (December 15 2021 until January 1 2022 sporadically. The purpose of this study is to provide an overview of factors that are thought to be associated with the onset of chikungunya disease, and determine whether the event is an outbreak or not an outbreak.

Methods
The research design is a two-proportion test, descriptive analytic assessing the relationship of risk factors The incidence of disease will be analyzed using the Chi Square test with a 2 x 2 table. With a case control study design. The research instrument uses a questionnaire for sample interview media. The research location is in Meliling Village, Kerambitan District, Tabanan Regency. The total number of 32 samples consisted of 32 case samples as controls.

Results
The results of the Chi Square test showed the presence of mosquito larvae with the incidence of chikungunya (p value > 0.05). Chikungunya was strengthened by laboratory data from the puskesmas as an indication of the occurrence of outbreaks.

Conclusions
The incidence of Chikungunya cases became an Extraordinary Event (KLB) so that it is necessary to maintain environmental health and behavior that can avoid mosquito bites.

Evaluation of the 2019 Coronavirus Disease Surveillance System (COVID-19) at Soppeng District Health Department Year 2022

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Background

Since 2019 Covid- 19 occurred and spread pandemic globally, nationally and spread with fast. In 2022 the number Covid-19 cases in Indonesia were 5,900,124 cases (*CFR* 2.5%). At Soppeng District, in 2021 there were 2,248 cases (*CFR* 3.3%). *CFR* in the District Soppeng higher than national's so there need to conduct valuation to have description of Covid-19 surveillance system in Soppeng District.

Methods

Evaluation conducted in March to June 2022, used observational descriptive through Interview using questionnaire and observation document on Covid-19 surveillance officer in 17 health centers, 1 Hospital and District Health Office.

Results

47.36% officer education's background were not epidemiologist, 73.68% in charge for others program and 42.11% were not received. All surveillance officer already conduct processing, analysis and disseminate information, however application based data processing affect the process of data input especially when the case increased and internet connection were not stable.

data -based processing application make data entry becomes slow if occur enhancement case and not can conducted smuggling if network no stable. No Covid -19 patient data entry appropriate timeon. Data Covid-19 patients were not inputted in timely manner.

Conclusions

Implementation of Covid-19 surveillance system in Soppeng District were quite good in the aspect of accuracy and completeness reports, data processing were conduct optimally however Covid -19 patient data entry often late. There are need to conduct training for offline apps such as KoboToolbox to make data entry easier for epidemiological investigation.

Investigation Cases of Coronavirus Disease-19 KM Lambelu Ship Cluster at Soekarno-Hatta Port, Makassar

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Background

On April 8, 2020, in the Soekarno-Hatta Port, Makassar, South Sulawesi Province KM. Lambelu Three reactive crews members were tested positive for covid-19 rapid diagnostic tests. From April 9 to 15, 2020, an epidemiological investigation was carried out in KM. Lambelu. This study aimed to describe Covid 19 outbreak at KM Lambelu

Methods

This was descriptive study. Covid case was define as those who are positif RT-PCR swabs of the nose and throat. A total of 150 people were examined, both were passengers and crew members.

Results

The results of laboratory examinations using the RT-PCR method found that 84 people were positive for Covid-19 (attack Rate: 56%). However, about 83% of KM. Lambelu crew experienced without any symptoms (asymptomatic), as many as 37% of the Covid cases age group of 40-49 years. A total of 145 of passenger were male (AR: 55%) Of all Covid 19 cases, 30% of them were further refered to hospital for further treatments. None of death cases has been reported The ship was under quarantine for five weeks.

Conclusions

There has been transmission of Covid-19 in KM. Lambelu, although most cases were asymptomatic. The ship was under quanrantine to ensure there was no further transmission.

Investigation of Diphtery Explanation in Bulukumba District

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Background

One clinical compatible case reported at week 44 and one case diphtheria at week 47 in Gantarang Sub-District in 2021, based on surveillance officer reports, there was 1 suspected case of diphtheria at week 9 in 2022. An investigation was conducted to get an overview of the causes of diphtheria outbreaks at the Gattareng Sub-district.

Methods

The study was conducted in March – April 2022 using descriptive research by conducting interviews using questionnaires and laboratory tests of nasopharyngeal swab samples in 1 person with symptoms of fever, painful swallowing, shortness of breath, pseudomembrane, and grayish tonsillitis and close contact with 5 people.

Results

Suspect of diphtheria in Gattareng Village is 8 years old with, 18 months advanced DPT/Hb-Hib incomplete and complete history of Dt immunization in school. Sample was taken 3 days after the patient took antibiotics and examination of the specimen was carried out > 48 hours. The results of the laboratory examination of the suspect and close contact with diphtheria were negative. Diphtheria outbreak cases in November 2021 in the same sub-district as clinically compatible cases in February 2022. The coverage of DPT/Hb-Hb immunization, follow-up immunizations for DPT/HB/Hib and BIAS Dt Td in 2014 to 2017 in Gatttareng Village is below 95%.

Conclusions

Incomplete immunization history and immunization coverage below 95% are risk factors for diphtheria. It is necessary to increase the coverage of Complete Basic Immunization (IDL) and follow-up immunization to prevent diphtheria, Outbreak Response Immunization (ORI) should be carried out immediately if an outbreak occurs, handling suspected cases and close contacts according to standards needs to be done to prevent transmission. Sampling and examination of specimens need to be carried out according to standards.

Evaluation of Mental Health Surveillance System in Sinjai District 2021

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Background

Recently, mental health becomes public health problem globally and nationally. Around one billion people live with mental disorders. In Indonesia, approximately 6.1% of people >15 years old experienced depression and 5.7% suffered from *Schizophrenia*. This study who aim to evaluate the implementation of mental health surveillance system in the Sinjai District.

Methods

Data collection was conducted from March to April 2022. Respondent of this study was 1 surveillance officer at District Health Office and 16 surveillance officers at the public health center. Data was collected using a structured questionnaire and document observation, data were analyzed using descriptive statistics.

Results

Early detection and case finding of mental health survivals follow the standards and established guidelines, however, the program activity is limited to achieving the coverage of early detection. In 2021, the case detection rates of emotional disorders were only 2.82%, depression at 5.09%. Additionally, around 50% of officers did not have to skills to detect the cases. A total of 100% of surveillance officers have other tasks at public health centers. Only 50% of officers who able to analyze data according to the guidelines. Lack of dissemination activity, the information is only shared in program and stakeholder meetings.

Conclusions

Case findings through early detection on mental health surveillance systems have not been able to detect and to respond all cases in society due to a lack of trained officers on mental health issue. Therefore, mental health training for the officer is urgently needed.

An additional recommendation was using an application for the data collection process such as KoboToolbox.

Evaluation of Pneumonia Under Five Case Findings in Polewali Mandar District 2021

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Background

Pneumonia is one of the main causes of early childhood death, even though it is preventable. Data from Polewali Mandar District Health Office shows that the finding case in 2021 was 9.37% (235 case), below the national target which 65% (2.551 case). The purpose of this study is to evaluate Pneumonia case finding activities among under five years old in Polewali Mandar District.

Methods

This evaluation was conducted from March to April 2022 using a descriptive observational study. Primary data were collected by interviewed 20 people in charge of Pneumonia program in Puskesmas and 1 person of District Health Office using structured questionnaire. Secondary were collected through registers and monthly reports from puskesmas and district health office. Data were analyzed univariately displayed through tables and narratives.

Results

Most of the respondents were responsible for more than 1 program (90%), officers received pneumonia program training (60%), staff knowledge regarding program indicator and fast breathing frequency standards were 60%, Puskemas staff did not conduct breath count for every coughing toddler (85%), MTBS activities were not actively implemented (85%). Nevertheless achievement of case management reported at the end of the year exceeded national target (69,9%).

Conclusions

The implementation of pneumonia early detection activities (breath count) shows that the achievements were not optimal due to the lack knowledge of the officer in charge regarding ISPA program and MTBS activity were not active. It is suggested to strengthen coordination across program, capacity building for officers about management ispa, technical guidance and regular feedback to the puskesmas.

Investigation of COVID-19 Among Islamic Boarding School South Sulawesi

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1. FETP UNIVERSITAS HASANUDDIN

Background

On April 16 and 18, 2020, a total of 425 students from Pesantren Al Fatah Temboro, Magetan, East Java arrived at Soekarno Hatta Airport. Most of students (90.35%) from South Sulawesi and outside South Sulawesi as much as 9.65%. On May 12th, 2020, there were 222 positive cases of Covid-19 in South Sulawesi, to prevent the transmission of Covid-19, a Covid-19 examination was carried out on all students who arrived at the Airport before being repatriated to each of them.

Methods

The research design used in this activity is descriptive study. The examination of students was carried out using a Covid-19 rapid test conducted by the TGC of the South Sulawesi Provincial Health Office and KKP Makassar, based on the results of the reactive rapid test followed by the RT-PCR to confirm the Covid 19 cases.

Results

From the rapid antigen results of 384 students from South Sulawesi, 4.17% reactive and 95.83% non-reactive, the follow-up RT-PCR examination, showed 68.75% positive and 31.25% negative results.

During monitoring in their respective districts by the Health Office and PHC, a total of 63 students with non-reactive with serological test were later found to be positive with RT-PCR test. The Attack Rate of Covid-19 is 19.27%. AR among males was slightly higher (22.50%) that of females (10.58%). Age group of 16 - 20 years has been found to have the highest AR (55.41%). 98.65% (73 people) had no symptoms and 1.35% had symptoms of cough and flu.

Isolation of Covid-19 positive students was carried out centrally in Makassar by 63.51%, isolation in regency hospitals by 12.16% and self-isolation under the monitoring of the PHC by 24.32%.

Conclusions

The return of students to their home areas is one of the risk factors for transmission. Monitoring and isolation are carried out on positive cases of Covid-19 to prevent transmission.

Evaluation of Dengue Vector Surveillance at Public HealthCenter in Palopo 2021

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Background

In 2021, a total of 287 DHF (Dengue Hemorrhagic Fever) cases in Palopo has been reported with 3 deaths . In dengue vector surveillance, vector density is an important indicator of the effectiveness of prevention and control of disease. This study aimed to evaluate all attributes of dengue vector surveillance system in Palopo.

Methods

This descriptive study were conducted in April 2022. Primary data were collected through interview used struc- tured questionaire with 12 respondens and follow-up with in-depth interview with 16 key informants consisting of 12 main vector surveillance officers, 3 assistants and 1 head of the public health center. Secondary data were obatained from the health office case reports in the last 10 years and dengue vector surveillance data entry in SILANTOR 2019-2021.

Results

This study found that 50% of dengue vector surveillance staff were also responsible for >5 programs. All surveil - lance staff never received spesific training for dengue vector surveillance.The vector data collection does not include variables to calculate vector density indicators (HI, CI, BI). Vector density index and potential transmis- sion risk were not included in the analysis; 58% respondents said that their vector survey target was determined by themselves and vector surveillance data did not represent vector conditions in their area, however 67% said their vector surveillance was able to detect vector density.

Conclusions

The data collection of dengue vector surveillance in Palopo was not in accordance with the entomological survey guidelines, therefore the output of this program was not able to answer the criteria of good vector surveillance based on indications of the user level. It is necessary to improve the capacity of surveillance officers regarding implementation of dengue vector surveillance.

Data Analysis of COVID-19 Lumajang districts 2020 – 2022

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Background

WHO designated the novel coronavirus (Covid-19) as a Public Health Emergency of International Concern on January 30, 2020. The first case was reported in Indonesia on March 2, 2020, with the risk factor of exposure from a foreign citizen (WNA). The first case was in Lumajang Regency, reported on 27 March 2020, with the risk factor of traveling abroad (umrah pilgrims).

Methods

This Covid-19 surveillance data analysis was compiled with the aim of describing the distribution of case frequency based on epidemiological characteristics, and risk factors for elderly age (over 60 years). The data source is from the daily reports of health facilities and Covid-19 reference laboratories. The cut off data used is from the first case on March 27, 2020 to March 12, 2022.

Results

Women is the majority of cases (54.07%), men 45.93%. However, the proportion of cases that died was more male (51.2%) than female (48.8%). The highest age specific incidence rate at the age of 26-35 and 56-55. Based on weekly cases, the downward trend in cases in 2020 occurred after 17 weeks, 2021:13 weeks, 2022: 5 weeks. Most cases (81.9%) were less than 60 years old, while the elderly were 18.1%. Based on the relationship between the age of the elderly and the place of care, in 2020 the elderly have almost 6 times the risk of becoming seriously ill compared to non-elderly. The risk will decrease by 70% in 2021 (OR 1.7). The death rate in the elderly is 3 times compared to non-elderly.

Conclusions

Based on weekly cases in 2020, 2021, 2022, the fastest decreasing trend of cases occurs in 2022. Based on the relationship between elderly age and CFR, in 2020 the elderly have 4 times more risk of dying than non-elderly. The risk will decrease by 21% in 2021 (OR 3.3).

Dengue Hemorrhagic Fever in Gorontalo District (2020-2021)

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Background

Dengue Hemorrhagic Fever (DHF), one of the health problems in Indonesia, tends to increase and spread more widely. The Aedes mosquito transmits the dengue virus. Between 2018 and 2019, the Incidence rate and case fatality rate were increased in Gorontalo Province and a similar situation in the Gorontalo district.

Methods

A descriptive study quantitative approach (reviewing reports) and evaluate the magnitudes of problems by person (age and gender), time, and place.

Results

Women are more vulnerable than men, whose cases were 201 (57.4%) and 149 (42.6%) respectively in 2020. On the contrary, the number of cases in men was 90 (57.7%), and women were 66 (42,3 %) on 2021. The age group with highest cases was between 11-15 years (47 cases) and the lowest is 36-40 and 41-45 years with 20 cases (2020) and the most age group was 6-10 years (41 cases) and the least was 41-45 year which were only 2 cases (2021). The highest areas were in western Limboto (81 cases in 2020, 68 cases in 2021). No cases found in Asparaga (2020) and on several subdistrict in 2021 (Tolangohula, Pulubala, Batudaa coast and Biluhu). The highest cases are in February (124 in 2020) and April (30 Cases in 2021). The lowest cases are October (No Cases in 2020) and September (1 Case in 2021).

Conclusions

Dengue Hemorrhagic Fever (DHF) occurs in all age groups, male/female, in tropical climates with dense populations. It is recommended to improve periodic larva monitoring, routine removal of standing water where mosquitoes could lay eggs, and a clean healthy lifestyle (CHLS).

Malaria Characteristics in Keerom District, Papua Province, from 2018 – 2021

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Background

Malaria in Papua is still a severe problem where the incidence of malaria is still high. Keerom District is categorized as a level three endemicity area and contributes to the malaria morbidity rate in Papua Province. This study aims to describe the characteristics of malaria cases in the Keerom District in 2018-2021.

Methods

The study is descriptive with a survey method. The study will be located at Keerom District Health Office in 2022. The secondary data come from the malaria surveillance information system application (e-sismal) from 2018 to 2021. The sampling technique is total sampling. The variables studied were age, sex, type of *plasmodium*, annual blood examination rate (ABER), slide positive rate (SPR), and annual parasite incidence (API).

Results

Malaria cases were based on the highest age group 15-64 years at 57.76% in 2018 and the lowest age 0-11 at 0.6% in 2019, the highest gender was male at 55.7% in 2019, and the lowest was female. 44.3% in 2019, and the *plasmodium* was falciparum at 63% in 2018. The lowest was *plasmodium ovale, plasmodium knowlesi* was at 0% in 2018, the highest ABER in 2019 was 130.77%, and the lowest in 2020 was 80.87%, SPR the highest in 2018 was 44.86, and the lowest in 2019 was 28.93%, the highest API in 2018 was 407.35 and the lowest in 2020 was 359.79.

Conclusions

Malaria cases were common in the productive and male age groups. *Plasmodium falciparum* dominated the malaria cases, and the slide positivity rate (SPR) was more than 5%, with ABER being more than 10%. The API from 2018 to 2021 shows high endemicity (>100 per 1000 population).

Influenza Like Illness Cases in Cipanas Health Center, Garut Regency, Indonesia from 7th to 13th Week 2022

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Background

During the Covid-19 pandemic, the increase of ILI (Influenza Like Illness) is an early warning of the rise of COVID-19 cases in the community. Since the 8th week, there has been an increase in ILI seeking treatment at the Cipanas Health Center Garut Regency. This study aims to provide an epidemiological description of the rise of ILI, the factors that influence it, and recommendations for effective prevention.

Methods

Descriptive study through interviews with ILI cases patients from week 7 to 13 in 2022. The variables collected and analyzed are the number of cases per week, symptoms, gender, location, age, travel history, vaccination history, and contact with confirmed cases of Covid-19.

Results

There were 57 cases of ILI (CFR=0%). 57 (100%) negative for the Covid-19 Antigen Test. The increase in cases started on week 8 with 3(5.3%) cases and peaked at week 10 with 30(52.6%). 31(25%) had a fever, 41(34%) had a cough, and 16(13%) had a runny nose. Only a tiny proportion (< 10%) had a sore throat, shortness of breath, and diarrhea. 33(58%) cases were female. The highest attack rate was at the age of 15-44 years (AR= 0.2%), with 53(92.3%) patients aged 15-64. Based on risk factors, 56(98%) had no travel history, 49(86%) had no contact history, all (100%) cases were vaccinated, and 23(40%) of them were vaccinated for second doses.

Conclusions

ILI cases show similar symptoms to Covid-19 cases but the rise in ILI cases is not followed by the increase in Covid-19 cases. However, vaccinations, no travel, and contact history could also contribute. Acceleration of Covid-19 immunization is recommended. Further study needs to be conducted to evaluate the adequacy of Covid-19 antigen tests.

Pneumonia Cases in RSUD dr. Hasri Ainun Habibie from 2017 to 2021

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Background

A significant increase in pneumonia cases in dr.Hasri Ainun Habibie Hospital was observed from 2019 to 2021. The study aims to describe the pneumonia cases at dr.Hasri Ainun Habibie Hospital from 2017 to 2021.

Methods

A descriptive analysis of monthly reports and daily hospital inpatients census by person, time, and place. Thedata is presented in tables and graphics using Microsoft excel.

Results

Among All pneumonia cases, 446 patients are male, and 318 are female. Based on age, the highest is 140 cases at 60-65. Based on their location, Gorontalo Regency reached 377 patients, and based on the time of occurrence of Pneumonia cases, there was a sharp increase in 2021 from June to August, to the point of 557 patients.

Conclusions

Based on the study results, the hospital pneumonia cases mainly occurred in male patients aged 60-69 years in the Gorontalo district. They often emerge from June to August every year.

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Organizations/Institutions Involved Include:

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FETP, Universitas Gadjah Mada
FETP, Universitas Udayana
FETP, Universitas Airlangga
FETP, Universitas Hasanuddin

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