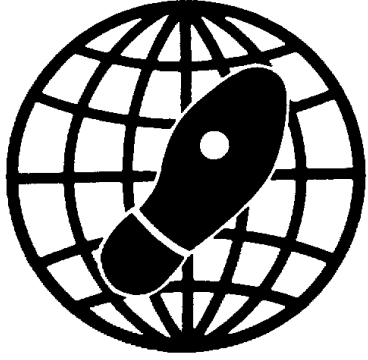


# EPIDEMIOLOGI LANJUTAN

FRANS YOSEP SITEPU



# Penerapan Konsep Dasar & Pendekatan Epidemiologi

COVID-19 Pandemic

# New Study Suggests COVID-19 Outbreak Began in Wuhan Earlier Than Reported

By VOA News

June 09, 2020 09:00 AM



CHINA - A medical worker takes a nasal sample from a resident to be tested for the COVID-19 coronavirus in Wuhan.

**Infection Rates Soar in College Towns as Students Return**

**WHO: Globally, One in Seven COVID-19 Infections Among Health Care Workers**

**Britain Begins Strict Regional COVID-19 Lockdown**

**'COVID first': Thai PM Warns Protesters Against Raising Virus Risks**

NEWS > NATIONAL

# Indonesia's latest official COVID-19 figures

News Desk

The Jakarta Post

Jakarta / Thu, September 17, 2020 / 04:30 pm





Merdeka &gt; Dunia

## Saat Negara Lain Hadapi Gelombang Kedua Epidemi Covid-19, Wuhan Buka Semua Sekolah

Selasa, 1 September 2020 18:47

Reporter : [Iqbal Fadil](#)



# Prevalensi dan Determinan Sindrom Metabolik pada Kelompok Eksekutif di Jakarta dan Sekitarnya

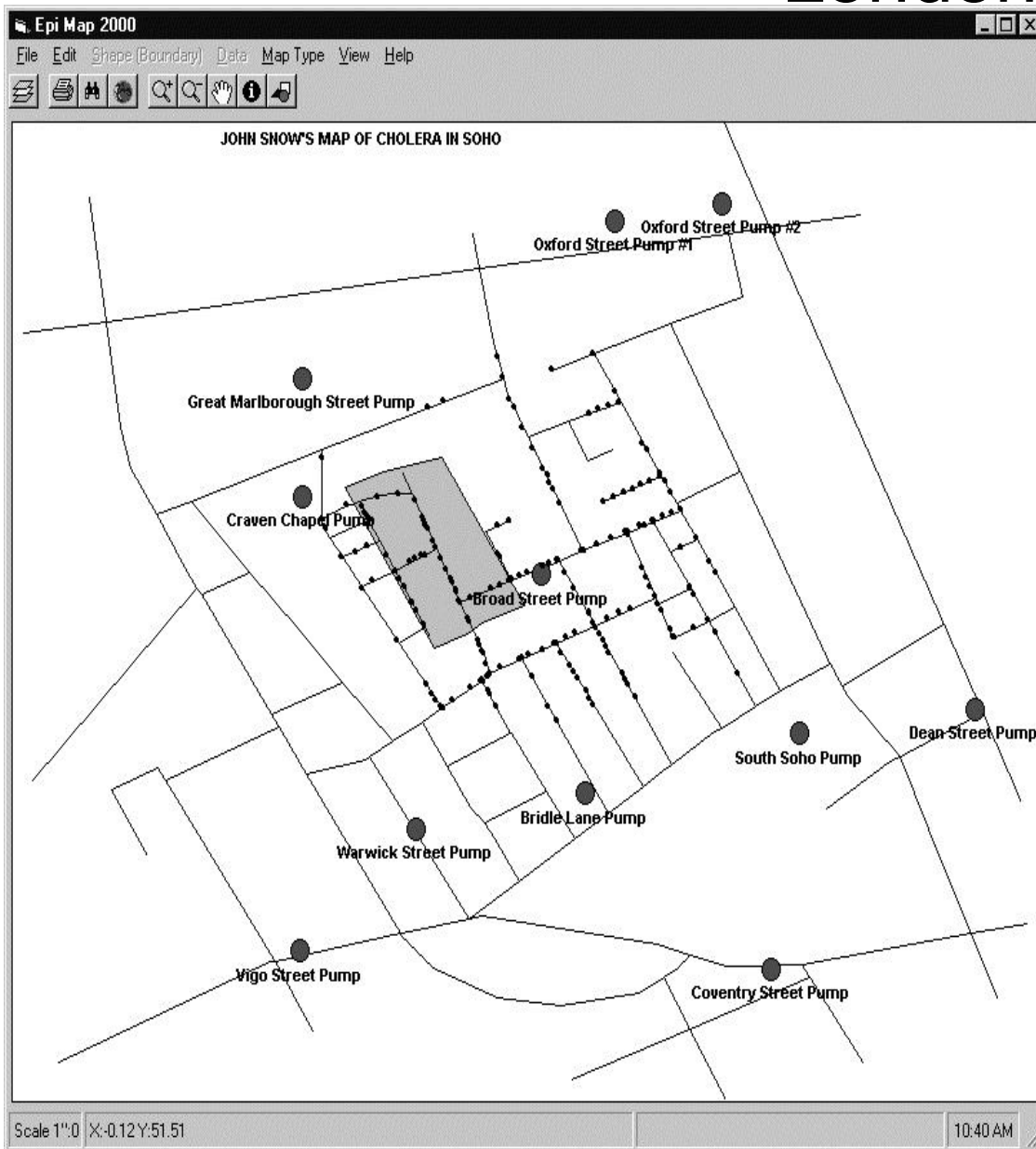
## Prevalency and Determinant Metabolic Syndrome on Executive Group in Jakarta and Nearby Areas

Sudijanto Kamso\* Purwentyastuti\*\* Dharmayati Utoyo Lubis\*\*\* Ratna Juwita\* Yull Kurnia Robbi\*\* Besral\*

\*Kantor Kesehatan Pelabuhan Tarakan Kalimantan Utara, \*\*Departemen  
Perilaku Fakultas Kesehatan Masyarakat Universitas Indonesia



# Pompa Air Broad Street – Cholera London



- Kematian cholera digambarkan sebagai titik-titik hitam.
- Lingkaran-lingkaran hitam adalah pompa air.
- Pompa air Broad Street di bagian tengah peta diduga menjadi sumber kontaminasi.
- Kotak abu-abu adalah makam penderita sampar.



# Snow's finding:

TABLE 1-2 ☐ Deaths from Cholera per

| Water Supply               | No. of H |
|----------------------------|----------|
| Southwark and Vauxhall Co. | 40,0     |
| Lambeth Co.                | 26,1     |
| Other districts in London  | 256,4    |

Data adapted from Snow J: On the mode of comm  
New York, The Commonwealth Fund, 1936.



Supply, London, 1854

Deaths per 10,000 Houses

315

38

56

Print of Two Papers by John Snow, M.D.

# Epidemiologi

Epidemiology is the study of how **disease** is **distributed** in the populations and the factors what **influence** or **determine** this distribution.

Epidemiology is the study of the **distribution** and **determinants** of the **health** related states or **events** in specified populations and the application of this study to **control of health problems**.

(A Dictionary of Epidemiology, ed2. New York, Oxford University Press, 1988)

# WHO

The study of the **distribution** and **determinants** of **health and disease** in human populations to enable health services to be **planned rationally**, disease **surveillance** to be carried out, and **preventive and control** programs to be **implemented** and **evaluated**.

# Variabel Epidemiologi

- Orang (person)
- Tempat (place)
- Waktu (time)

**Table 1**

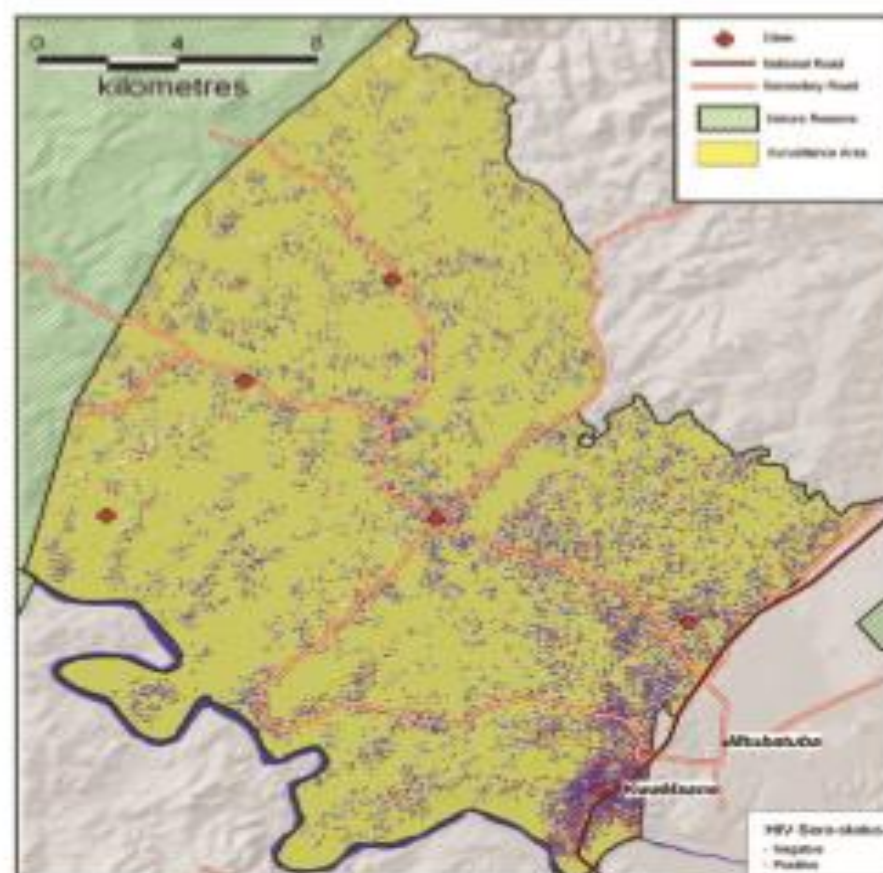
Number of cases and deaths, attack rates, and case fatality rates of chikungunya outbreak in Sukadana Subdistrict, North Kayong District, West Kalimantan, Indonesia, 12 December 2009–10 January 2010 (n = 65).

| Variable         | Population at risk (n = 375) | Number of case (n = 65) | Number of death | Attack rate (%) | Case fatality rate (%) |
|------------------|------------------------------|-------------------------|-----------------|-----------------|------------------------|
| Age group (year) |                              |                         |                 |                 |                        |
| 0–4              | 56                           | 3                       | 0               | 5.4             | 0                      |
| 5–14             | 80                           | 11                      | 0               | 13.8            | 0                      |
| 15–24            | 61                           | 11                      | 0               | 18.0            | 0                      |
| 25–34            | 45                           | 4                       | 0               | 8.9             | 0                      |
| 35–44            | 40                           | 15                      | 0               | 37.5            | 0                      |
| 45–54            | 38                           | 14                      | 0               | 36.8            | 0                      |
| 55–64            | 35                           | 5                       | 0               | 14.3            | 0                      |
| > 65             | 20                           | 2                       | 0               | 10.0            | 0                      |
| Gender           |                              |                         |                 |                 |                        |
| Male             | 180                          | 35                      | 0               | 19.4            | 0                      |
| Female           | 195                          | 30                      | 0               | 15.4            | 0                      |



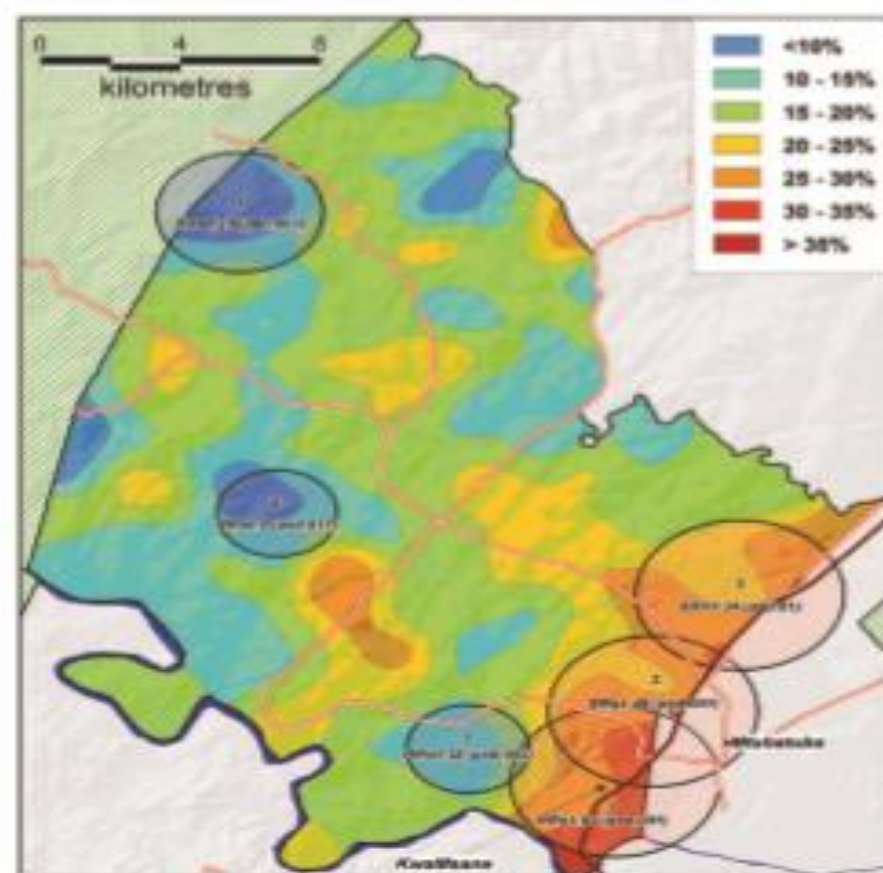
# Localized spatial clustering of HIV infections in a widely disseminated rural South African epidemic

Frank Tanser,<sup>1\*</sup> Till Bärnighausen,<sup>1,2</sup> Graham S Cooke<sup>1,3</sup> and Marie-Louise Newell<sup>1,4</sup>



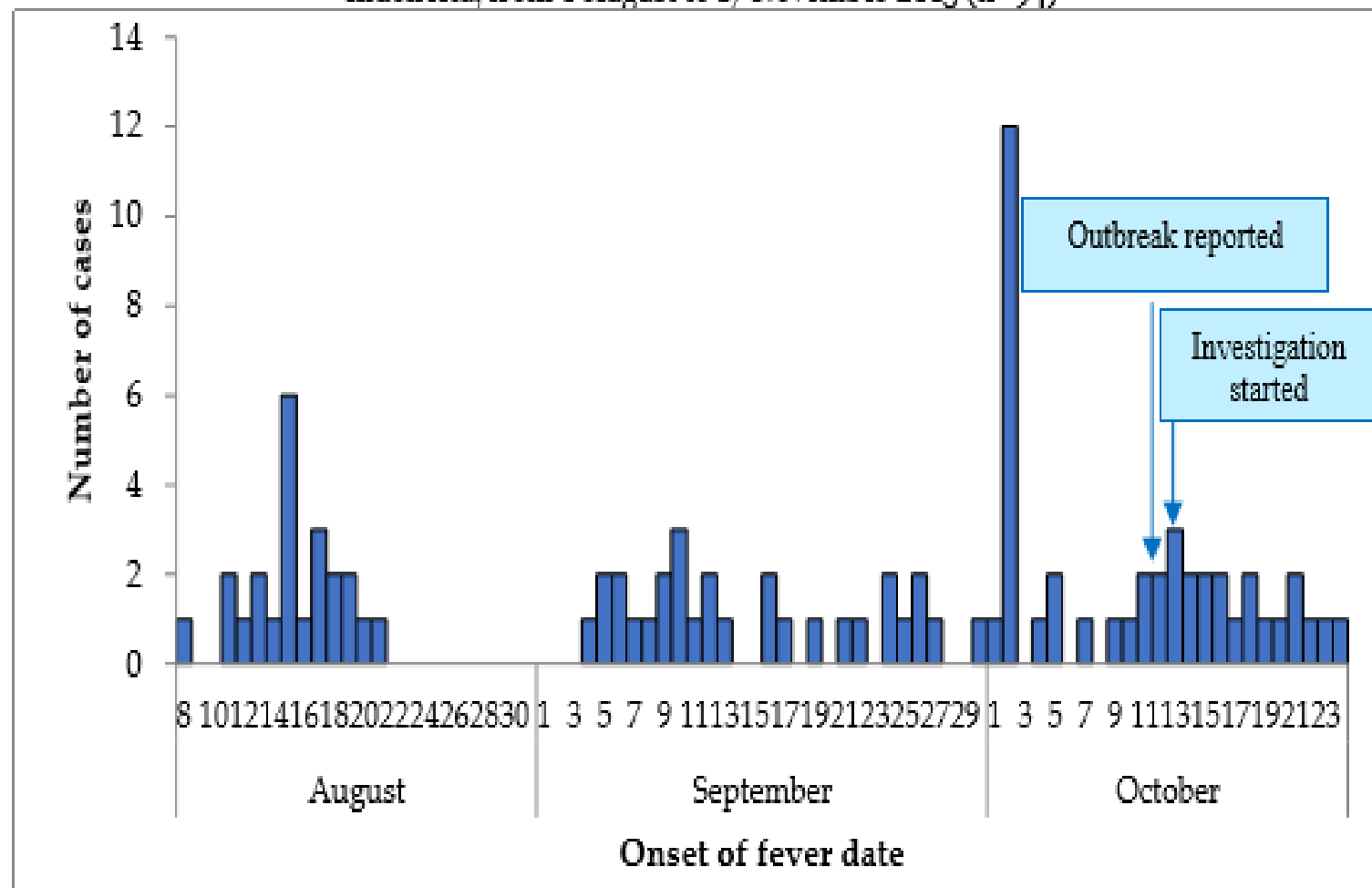
**Figure 2** Map of the study area showing the approximate location (incorporating an intentional random error) of all 12 221 participants coded by HIV status

non-resident household members ('migrants') and levels of employment.



**Figure 3** Geographical variations in HIV prevalence by 5% intervals across the surveillance area (for all women aged 15–49 years and men 15–54 years) obtained by a 3-km standard Gaussian kernel (mean = 21.7%, 95% CI 20.1–22.5). Superimposed on the map are the clusters independently identified by the Kulldorff spatial scan statistic (blue shading, low relative-risk; red, high relative-risk). The National Road can be seen next to KwaMashu Township continuing along the eastern boundary of the

**Figure 1.** Chikungunya fever cases by date of onset in Sei Suka Subdistrict, Serdang Bedagai District, North Sumatera, Indonesia, from 8 August to 17 November 2013 (n=94)





# A Survey of the Knowledge of Surveillance Officers and Outbreak Investigation Team toward COVID-19 in North Sumatera Province, Indonesia

Frans Yosep Sitepu<sup>1\*</sup>, Elpiani Depari<sup>2</sup>, Wiwit Aditama<sup>3</sup>, Rd Halim<sup>4</sup>, Adi Isworo<sup>5</sup>, Bangun Hot Pandapotan Lumbangaol<sup>1</sup>, Muhammad M Fathan<sup>1</sup>, Firman Apul Aritonang<sup>1</sup>, Elinsa Sihotang<sup>1</sup>, Dormani Peronika Napitupulu<sup>1</sup>, Arwan Nofri<sup>1</sup>

<sup>1</sup>Provincial Health Office, North Sumatera, Indonesia; <sup>2</sup>Grandmed Hospital, Deli Serdang, North Sumatera, Indonesia;

<sup>3</sup>Department of Environmental Health, Banda Aceh Polytechnic of Health, Ministry of Health, Indonesia; <sup>4</sup>Faculty of Public Health, University of Jambi; <sup>5</sup>Health Polytechnic of Semarang, Ministry of Health, Indonesia



# *The* NEW ENGLAND JOURNAL *of* MEDICINE

## Perspective

MAY 21, 2020

### Developing Covid-19 Vaccines at Pandemic Speed

Nicole Lurie, M.D., M.S.P.H., Melanie Saville, M.D., Richard Hatchett, M.D., and Jane Halton, A.O., P.S.M.

**T**he need to rapidly develop a vaccine against SARS-CoV-2 comes at a time of explosion in basic scientific understanding, including in areas such as genomics and structural biology, that

The company continued development even when the outbreak ended, and stockpiles of investigational product were available for use in the recent outbreaks in the Democratic Republic of Con-

Terima Kasih