and residential instability are generated using census and location data.

Results: As of June 14, 2021, over 58,000 residents of BC had participated in the survey of which 31,007 survey responses were eligible for analysis. Of the eligible participants, about 60% provided consent for monthly follow up and about 26% provided their personal health numbers for linkage with other healthcare utilization databases. Approximately 51% were females 39% were 55 years or older, 63% identified as white or not a visible minority and 48% had at least a university degree.

Conclusion: The pandemic response is best informed by surveillance systems capable of timely assessment of behaviour patterns. BC-Mix survey respondents represented a large cohort of British Columbians providing near real-time information on behavioural and contact patterns in BC. Data from the BC-Mix survey continues to inform provincial COVID-19-related control measures.

PS04.20 (145)

Democracy and Pandemic: Evaluating Health Protocol Compliance in Regional Election Using Integrated Monitoring System

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Purpose: Indonesia decided to hold simultaneous local elections on December 9, 2020, along with 270 regionals including provincial, regency, and city election although concerns arise that it will have an impact to the number of Covid-19 cases in the country. The aim of this study is to describe the health protocol compliance during simultaneous regional elections in the midst of the Covid-19 pandemic in Indonesia using an integrated monitoring system.

Methods & Materials: The data has been collected from the Indonesia National Task Force for the Acceleration of COVID-19 Mitigation by using the Bersatu Lawan COVID-19 (BLC) digital monitoring app. The monitoring system was reported in real-time by Indonesian front-line public order forces (such as police and military) at regional election places. Individual and polling stations compliance were monitored in order to minimize the potential of COVID-19 transmission during the election process.

Results: A total of 309,236 voters' behaviours were monitored in 272 districts/cities across 32 provinces in Indonesia. The overall figures show 95.96% compliance of wearing masks and 90.77% of people kept a social distance during the election day. However, the results have shown variation of compliance rate among districts and cities. Out of 272 districts/cities observed, 16 (5.88%) had wearing mask compliance rate <75% and 44 (16.18%) had distance compliance rate <75%.

A total of 4,065 polling stations were observed with 92.82% of them had high compliance to the implementation of health protocol with details a follow. 91.55% provided hand washing facilities; 90.71% provided hand sanitizers; 89.52% had temperature check; 87.29% had health protocol compliance supervisors; 75.23% performed disinfection; 91.66% provided plastic gloves for voters;

92.91% election committee wore face shield; 88.98% provided ink drops; and 77.80% provided special chamber for voters with 37.3°C.

Conclusion: In general, using the application of digital health, Indonesia as the 4th most populous country in the world enable to monitor the compliance rate of health protocol implementation during simultaneous regional elections in 2020. This represents the first time in which an app implemented nationally can produce data to be analysed on real-time basis and using an integrated approach to inform policy makers.

PS04.21 (580)

Harmonized Scenario-Based Laboratory Coding System to Guide Real-Time Public Health Actions in Quebec Province, Canada

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Purpose: Effective public health (PH) response to emerging pathogens requires effective information systems integrating surveillance data from multiple sources. For laboratories, data entry of multiple variables both at pre-analytical steps and again in laboratory information systems (LIS) is time-consuming and difficult to implement in a resource-limited setting and negatively affects the timeliness of the surveillance system. We set up a simple harmonized laboratory query that summarized 22 public-health relevant scenarios and variables, reduced to a two-digit code.

Methods & Materials: Information data specialists were mobilized to integrate data from the 108 different LIS using the harmonized query, which provided timely access to COVID-19 testing indications, volumes, and positivity rates stratified by age, health region, clinical settings, outbreak context or Health-Care worker status. The information system allowed to develop multiple indicators for a better understanding of the pandemic and the COVID-19 transmission in population subgroups.

Results: Dashboards were available for public health and infection prevention and control officers in their location. Multiple stakeholders were able to interpret real-time data for more than 40 000 different qPCR tests every day. The data allowed to adjust prescription practice and promote optimal usage and plan contingencies within Quebec's qPCR lab capacities. It also served as the basis to monitor community transmission through test positivity rate in various settings. The coding system also allowed labs to

easily implement sample triage, which reduced turnaround time to less than 24h for most samples. Starting May 2021, public health authorities add monitoring of the positive predictive value of rapid antigen test used at the community level to support evidence-based public health decisions about the best possible use of those assays.

Conclusion: This simple scenario-based coding system allowed timely PH and management of both sampling and processing priorities which proved most useful during surge periods. Quebec Public Health Authorities were better able to target preventive actions and to plan outreach screening activities in subpopulations, neighbourhoods, and communities, while modulating clinical criteria to get access to testing and allowing laboratories to better triage samples.

PS04.22 (877)

Accelerating COVID-19 Contact Tracing Capacity through Multi-Sectoral Collaboration Training in Indonesia

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Purpose: Contact tracing is a pivotal component for containing an outbreak to stop the spread of COVID-19. As the 4th most populous country in the world, contact tracing in Indonesia is resource intensive. There was an insufficient human resources to undertake the reporting task with surveillance staff already overburdened with sample and data collection. Participation of various stakeholders is critical in providing an effective capacity surge in tracing. This paper describes how multi-sectoral collaboration training can contribute to accelerate contact tracing capacity in Indonesia.

Methods & Materials: A series of contact tracing training program in Indonesia was held through the various stakeholder collaboration, including the Ministry of Health, COVID-19 National Task Force, Ministry of Education and Culture, Universities, and international partners. Not only primary healthcare officers, the training engaged community volunteers, young professional, and university students to enable them performing COVID-19 contact tracing and data management across Indonesia. Descriptive statistics and paired t-test analysis were taken to measure the effectiveness of the pre- and post-test training, and evaluation questionnaires to improve participants' knowledge.

Results: A total of 2,513 community volunteers and young professional from 10 provinces and 2,005 university students from 268 universities across Indonesia have been trained from January - July 2021. 4 batches of trainings have produced 64 data managers in all 34 provinces. At the beginning of the training, only 33% of participants reached satisfactory score. Post-training scores increased significantly to 66% participants reached satisfactory score with p-value = 0.000 (CI: 95%). 82% participants rated the effectiveness of training as good, and 90% stated that the training responded to their needs. The training has successfully increased the number of tracers in Indonesia as and improved the national tracing data collection. Surveillance data showed that from January to July 2021, the national tracing data has increased from 261,482 to 785.711 COVID-19 close contact traced.

Conclusion: Multi-sectoral participation and collaborative contact tracing training has helped the Government of Indonesia to increase human resource numbers and capacity in providing an effective capacity surge of tracing for the country. This will enable to support COVID-19 mitigation and intervention program and policy.

PS04.23 (372)

Serosurvey of SARS-CoV-2 in dogs and cats from Portugal

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Purpose: Severe acute respiratory syndrome–coronavirus 2 (SARS-CoV-2) causes COVID-19, which was first reported in humans in 2019, in Wuhan, China. This RNA virus has highly efficient transmission. Sporadic cases of infection in pets have been described. Human to animal transmission seems to occur, however, the epidemiologic role of pets remains unclear. This study aimed to screen dogs and cats from the North and Centre regions of Portugal for the exposure to SARS-CoV-2, during the peak of SARS-CoV-2 human infection in Portugal, which occurred between October 2020 and March 2021.

Methods & Materials: A cross-sectional study was conducted in dogs and cats presented to veterinary medical centres from Portugal between October 2020 and March 2021, that required blood sampling as part of their diagnostic plan. Only surplus sera or plasma samples were used in this research. Sera or plasma were tested for the presence of specific antibodies anti-SARS-CoV-2 using a commercial ELISA adapted for multi-species detection (ID Screen SARS-CoV-2Double Antigen Multispecies®, IDVet). Laboratory results were expressed in S/P values and samples with an S/P% $\geq$ 60% were classified as positive.

Results: A total of 107 animals were sampled (dogs n=60; cats n=47). The canine population was composed by 25 purebred and 35 crossbreed dogs, with ages ranging from 5 months to 15 years of age. Cats were mainly of the domestic short-hair breed (n=45), with ages ranging between 6 months and 9 years old. The estimated rate of exposure was of 5.0% (95% CI: 1.71-13.7%) in dogs (n=3) and 2.13% (95% CI: 1.18-14.26%) in cats (n=1). A doubtful result (50$\geq$S/P%<60%) was obtained in 6.7% (95% CI: 2.6-15.9%) of dogs (n=4) and in 4.26% (95% CI: 2.6-15.9%) of cats (n=3).

Conclusion: To our best knowledge, this is the first serosurvey conducted in pets in Portugal. An exposure to the agent has been evidenced in dogs and in cats. Further studies must clarify the impact of the exposure in animal health and the role of the pets in spreading the virus.