

קדחת קיקיונית קדחת שלושת הימים BEFV

היבטים כלכליים, התמודדות וטיפול



Bovine Ephemeral Fever (BEF)

- Bovine ephemeral fever virus (BEFV) (family *Rhabdoviridae* of the genus *Ephemerovirus*).
- Three-day sickness.
- Symptoms: anorexia, depression, ocular and nasal discharge, salivation, muscle stiffness, lameness, rumenal stasis, and other inflammatory responses.



התפרציות קדחת שלושת הימים בישראל

- 1990-1991
- 1999-2001
- 2004
- 2008-2010
- 2014-2015
- 2017-2018
- 2021-2022
- 2023

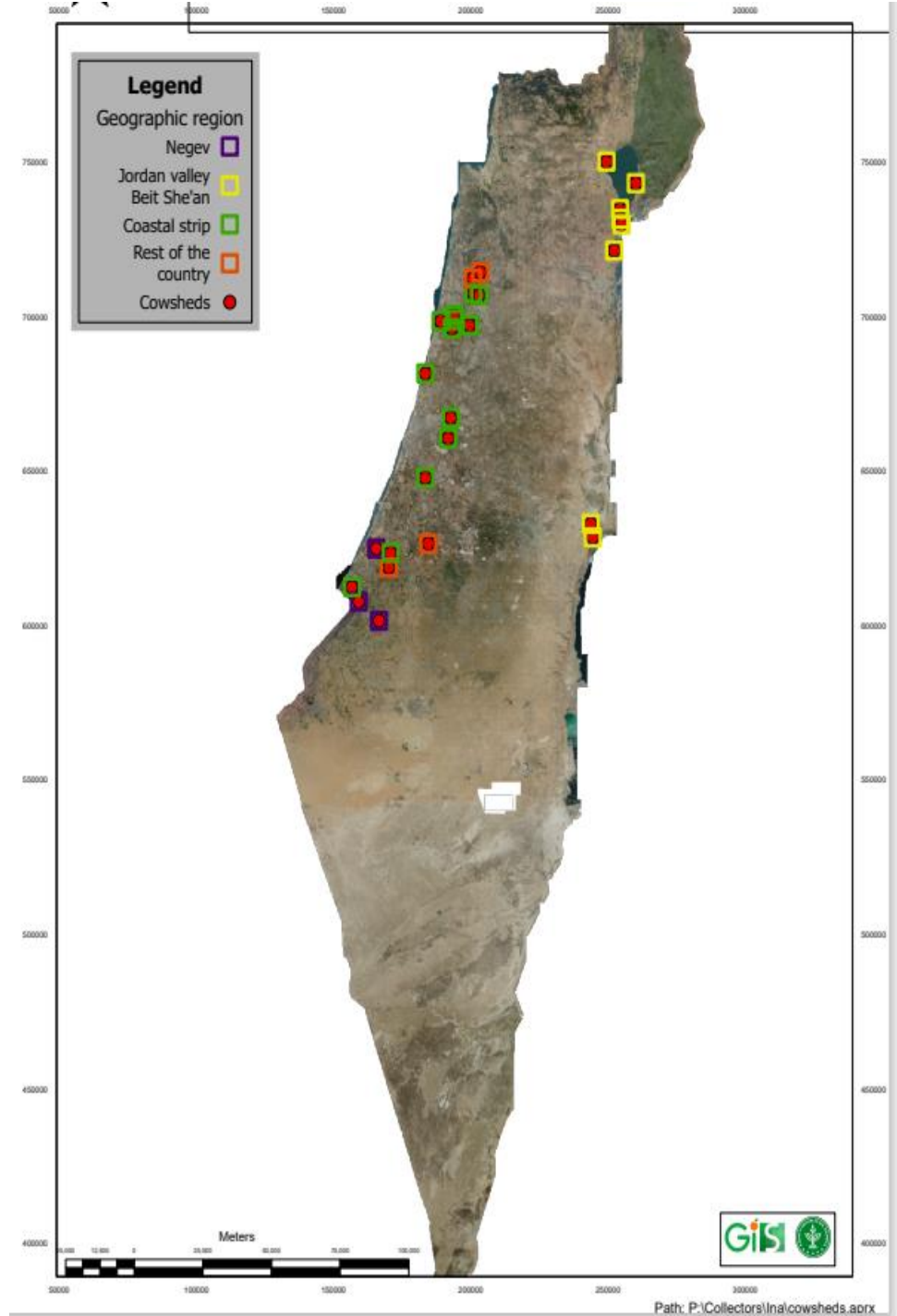


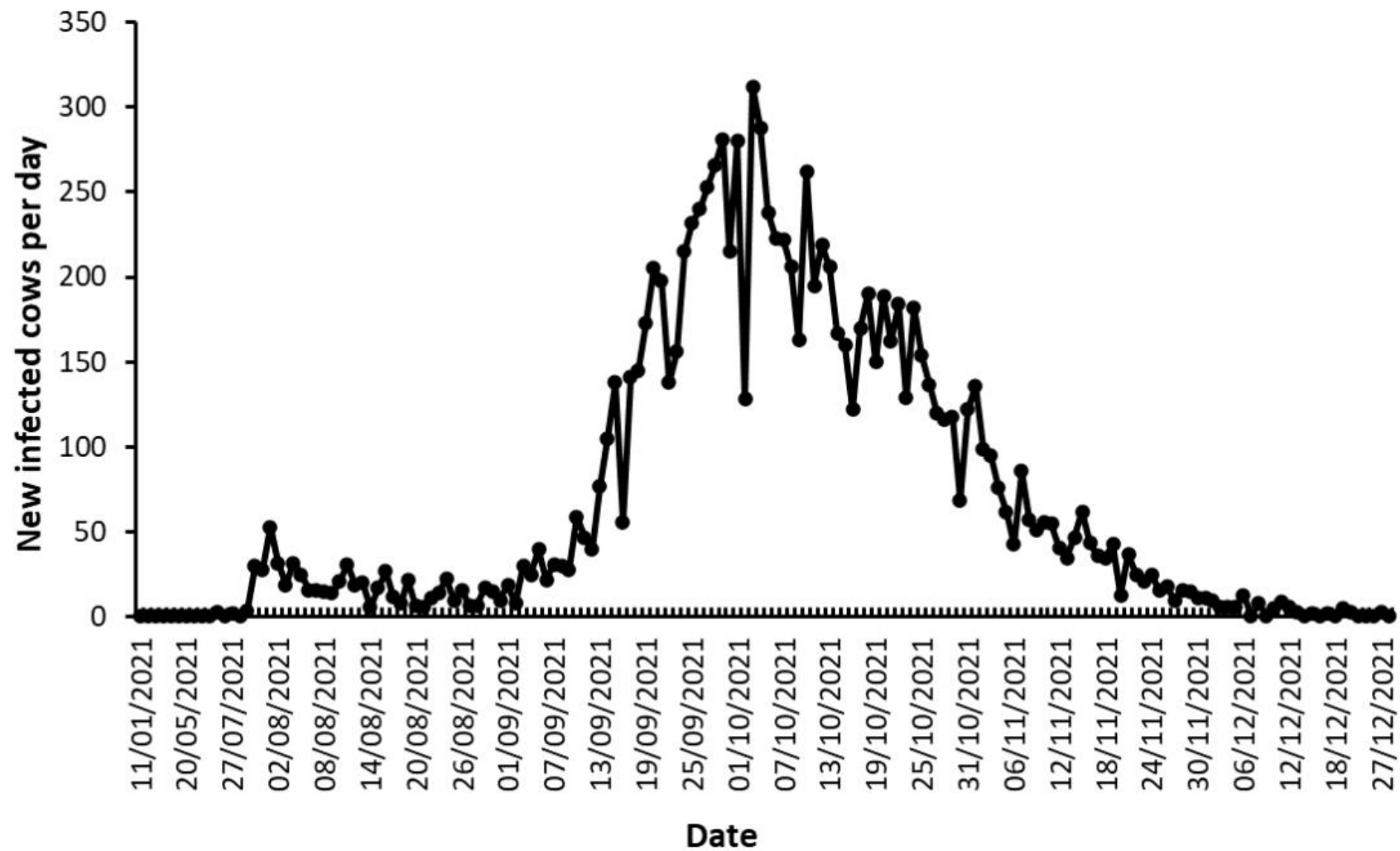
BEF outbreak, Israel 2021

מפה המתארת את הפיזור הגאוגרפי של הרפתות הנגועות אשר שימשו במחקר

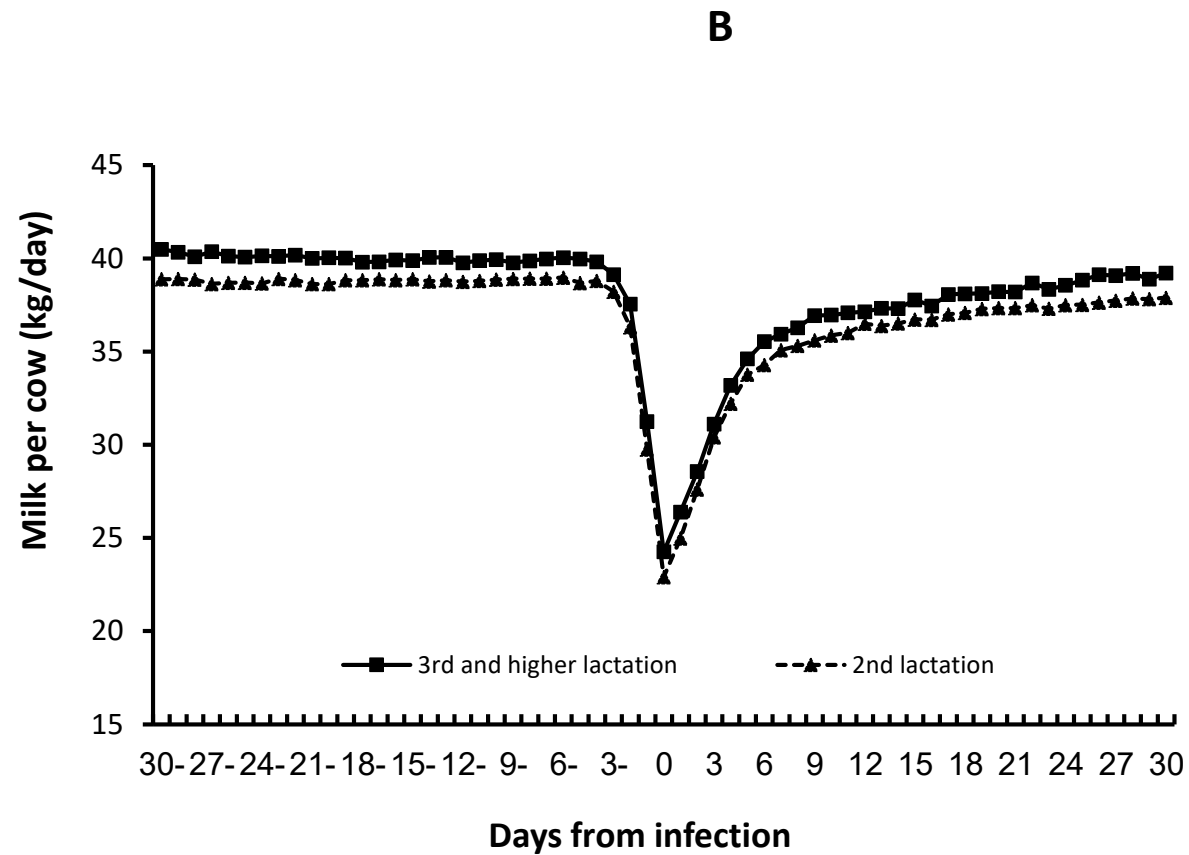
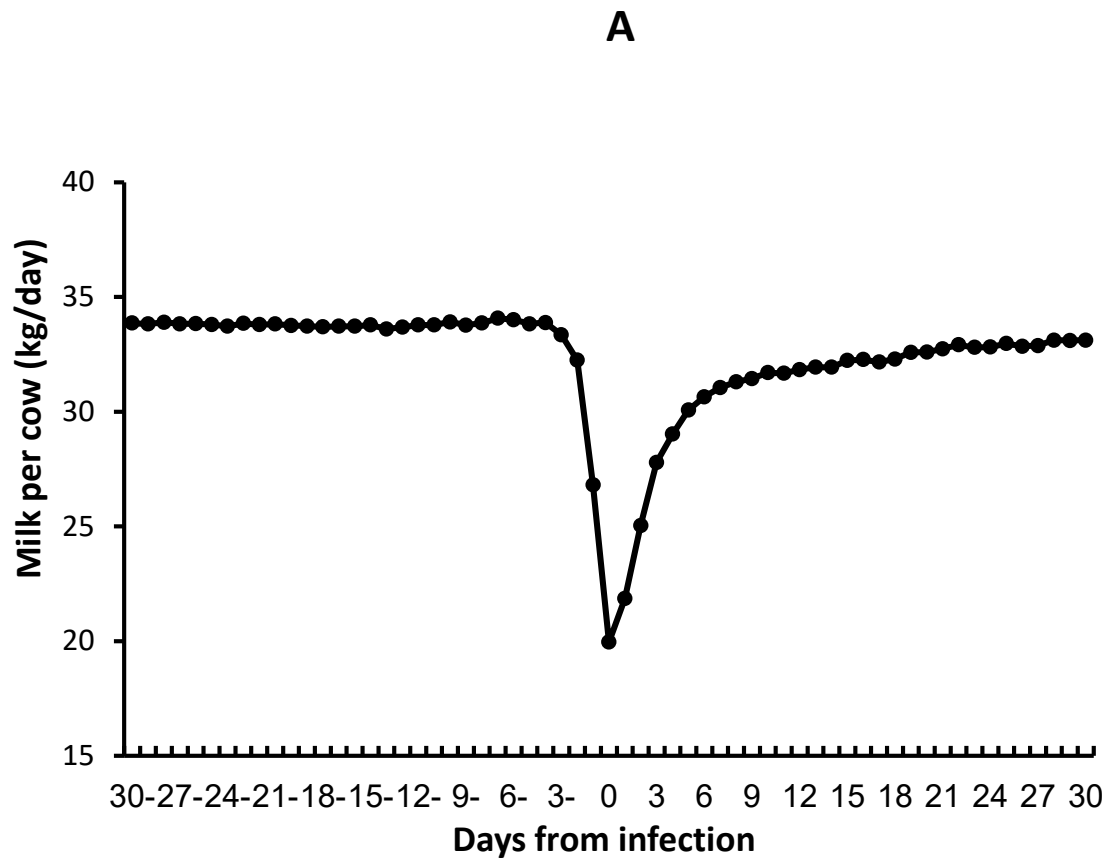
Lavon et al.2023

לבון וחובריו – משק הבקר והחלב 428

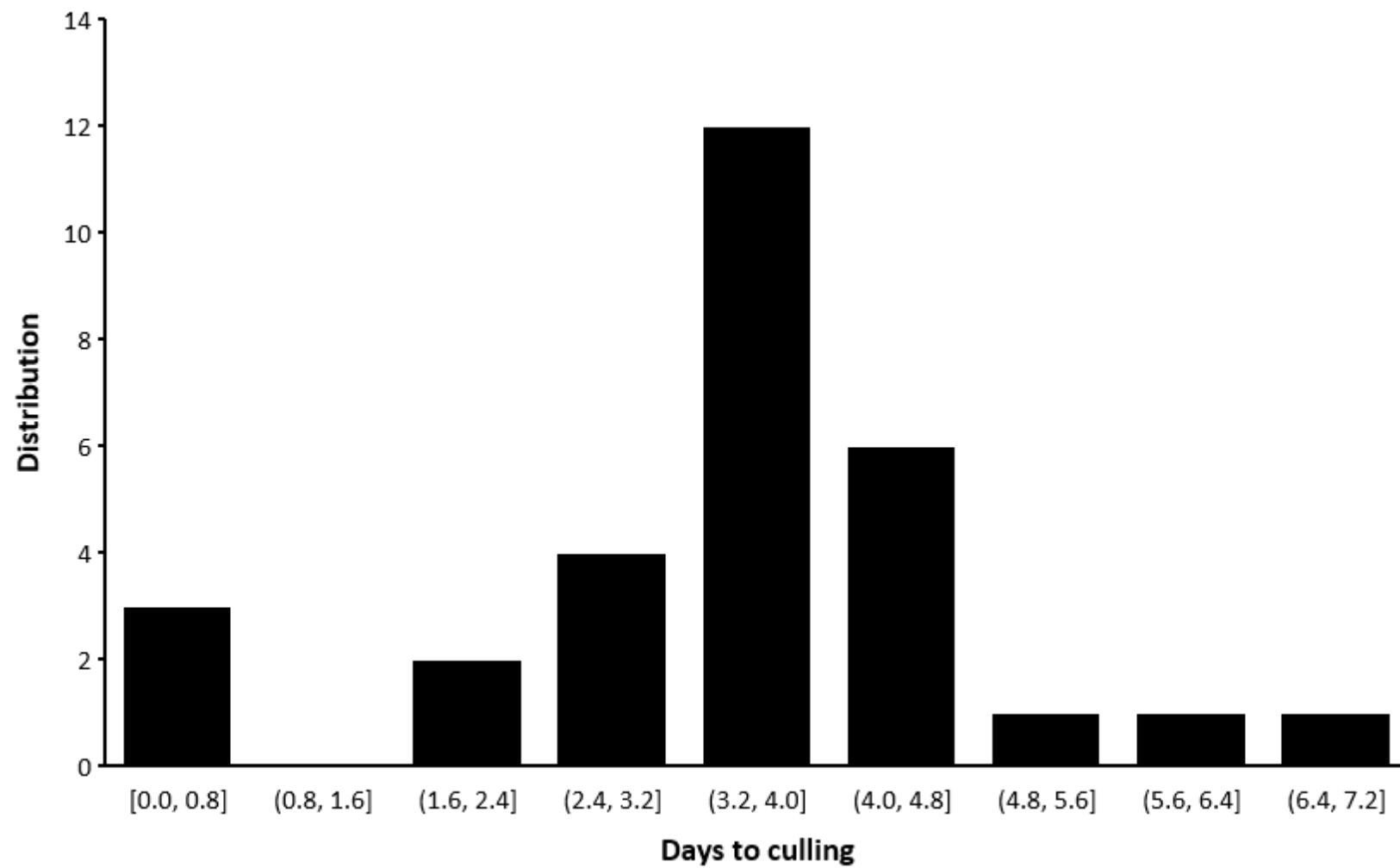




משך ההתפרצות ומספר המקרים החדשים לכל יום במהלך ההתפרצות



(B) שינוי בתנובת חלב יומית המהלך תקופת הנגיעות במחלת קדחת שלושת הימים במבכירות (A) ובפרות בוגרות



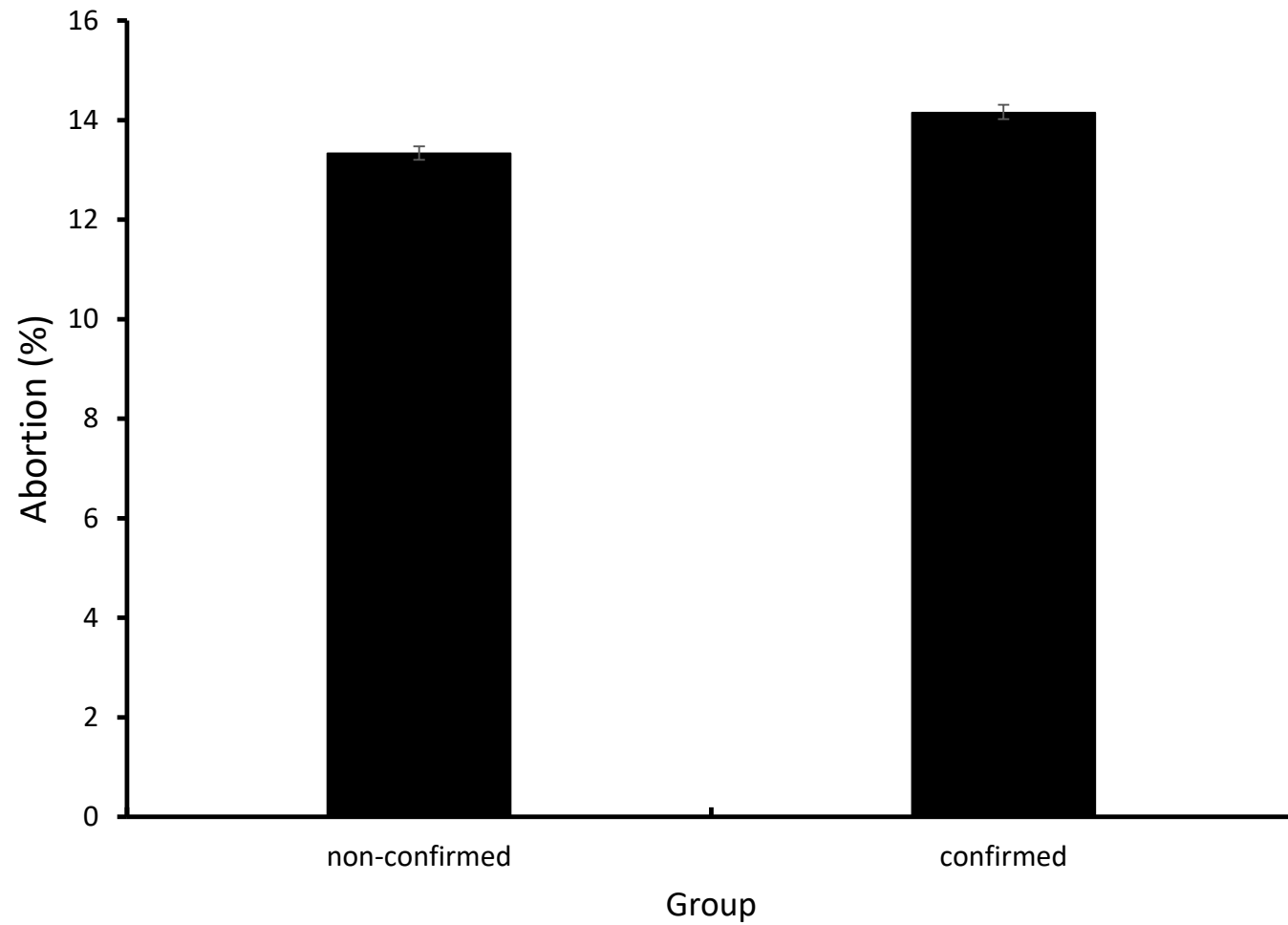
התפלגות של הימים ממועד הנגיעות במחלה ועד תאריך היציאה מהרפת

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ימים ממוצעים מאבחנה ליציאה	ז יציאה מתוך אובחנו	מספר יוצאות במהלך 10 ימים מהדיווח	אחוז מדווחות	מספר פרות נגועות במהלך התקופה	פרות בעדר 1/07/2021-31/12/2021	רפת
3.8	15.9%	11	10.0%	69	687	1
3.0	4.5%	2	13.4%	44	329	2
4.7	3.0%	3	13.5%	99	735	3
0.0	0.0%	0	13.8%	49	354	4
3.6	13.3%	8	14.2%	60	422	5
4.3	5.5%	3	15.6%	55	353	6
0.0	0.0%	0	17.3%	51	295	7
3.3	7.7%	6	18.9%	78	412	8
2.3	10.4%	8	25.5%	77	302	9
4.0	4.6%	4	27.1%	87	321	10
3.0	2.4%	2	27.6%	85	308	11
4.0	9.0%	8	27.6%	89	322	12
4.0	5.7%	7	29.9%	123	411	13
4.8	5.9%	13	32.6%	221	678	14
2.2	3.8%	5	32.8%	133	406	15
3.0	1.6%	1	36.4%	64	176	16
3.3	2.0%	3	36.4%	148	407	17
4.0	2.5%	3	37.8%	121	320	18
3.1	5.6%	8	39.6%	144	364	19
4.1	4.5%	11	41.8%	245	586	20
3.5	5.0%	22	46.7%	444	950	21
7.0	1.2%	2	47.2%	168	356	22
3.7	1.7%	3	52.9%	180	340	23
5.7	1.3%	3	53.7%	223	415	24
0.7	5.1%	3	59.0%	59	100	25
3.4	5.0%	20	64.1%	401	626	26
3.3	8.3%	52	66.5%	627	943	27
4.2	4.1%	11	79.6%	266	334	28
4.6	3.4%	25	82.1%	746	909	29
5.5	1.9%	4	90.7%	215	237	30

הפסדים במהלך חודש לאחר ההדבקה (דולר לפרה)	הפסדים במהלך 9 ימי הירידה בחלב (דולר לפרה)	מספר תחלובה
300	90	ראשונה
334	100	שנייה
311	93	שלישית ומעלה

ההפסד הכלכלי של פרה אחת עקב יציאתה מהעדר היה, בזמן ההתפרצות, ע"פ מועצת החלב כ-2300 דולר לפרה. כך, בעדר קטן של 300 פרות, למשל, עם אחוז יציאה ממוצע ההפסד הכלכלי הוערך בכ-33,120 דולר, ובעדר של 1000 פרות, ההפסד הכלכלי הוערך ב-110,400 דולר.



שעורי ההפלות בפרות שאובחנו עם BEF לעומת פרות שלא אובחנו עם BEF
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THIS IS Ann..

*Her full name is Anopheles Mosquito
and she's dying to meet you!*

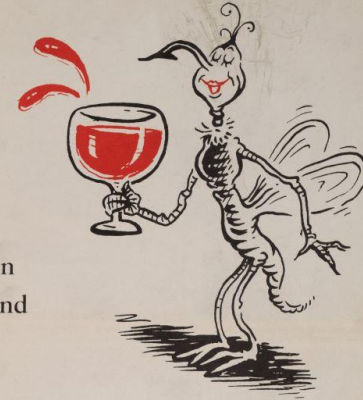
Her trade is dishing out
MALARIA! If you'll take a
look at the map below you can
see where she hangs out.



... *she drinks blood!*

She can knock you flat
so you're no good to
your country, your outfit
or yourself. You've
got the dope, the nets
and stuff to lick her
if you will USE IT.

Use a little
horse sense and you can
lick Ann. Get sloppy and
careless about her and
she'll bat you down
just as surely as a bomb,
a bullet or a shell.



מניעת הווצרות בתי גידול

=

ממשק

- קילטור- גם מתחת לשקתות
- יבוש המדרך
- להפוך את הפרש פעמיים בשבוע.
- לרסס את הפרש בחומרים מעכבי התפתחות (למשל Cyromazine) כנגד הזחלים.
- ללא גרוטיאדה!

יוריד תחלואה- לא ימנע תחלואה

סביבה - צפיפות

Measuring the effects of COVID-19-related disruption on dengue transmission in southeast Asia and Latin America: a statistical modelling study



Yuyang Chen*, Naizhe Li*, José Lourenço, Lin Wang, Bernard Cazelles, Lu Dong, Bingying Li, Yang Liu, Mark Jit, Nikos I Bosse, Sam Abbott, Raman Velayudhan, Annelies Wilder-Smith, Huaiyu Tian†, Oliver J Brady†, on behalf of the CMMID COVID-19 Working Group‡



Summary

Background The COVID-19 pandemic has resulted in unprecedented disruption to society, which indirectly affects infectious disease dynamics. We aimed to assess the effects of COVID-19-related disruption on dengue, a major expanding acute public health threat, in southeast Asia and Latin America.

Lancet Infect Dis 2022
Published Online
March 2, 2022

Research in context

Evidence before this study

Previous studies have shown that human movement, heterogeneity in environmental risk, and mosquito control practices all strongly influence the transmission of dengue virus. Restrictions put in place in response to the COVID-19 pandemic led to substantial changes in how people move, where they spend time, and the continuity of disease control programmes, but the net effect on dengue remains unclear. We searched PubMed for studies published between database inception and April 4, 2021, without language restrictions, using the search terms "(COVID-19 OR coronavirus OR SARS-CoV-2) AND (lockdown OR interventions OR restriction OR human mobility) AND (dengue* OR DENV*)". We also searched WHO Weekly Report and government websites for dengue case data reported for countries in Latin America and southeast Asia. Although 15 studies warned about the risk of COVID-19 exacerbating dengue transmission and the subsequent pressure on intensive care resources, only three studies analysed dengue and COVID-19 data from 2020. Among the three studies that have looked for associations between COVID-19 restrictions and dengue, findings have been mixed—with protective effects, enhancing effects, and no significant effects seen in different countries. Assessing the effect of the COVID-19 pandemic on dengue is challenging due to the high immunity levels against

dengue caused by an unusually large global dengue outbreak in 2019 and previously incomplete dengue datasets from 2020.

Added value of this study

To our knowledge, this study is the first to analyse dengue data throughout 2020 from 23 countries spanning the main dengue endemic regions of Latin America and southeast Asia. Our findings show that there is a consistent association between various measures of COVID-19-related disruption and reduced dengue transmission that cannot be explained by seasonal or extra-seasonal dengue cycles or underreporting. Although attributing change to specific restrictions or behaviours was restricted by collinearity, we present evidence that suggests specific roles for schools and other commonly visited non-residential venues.

Implications of all the available evidence

This combined evidence base emphasises the importance of high-traffic, high-mixing venues for dengue transmission and could lead to new interventions and targeting strategies. Although we are unlikely to ever see 2020-like restrictions used to control dengue outbreaks, targeted testing and mosquito control based on patient-reported recent movements could offer new approaches for a disease that continues to evade control by existing approaches.

חיסונים

Ultravac BEF Vaccine®



Dosage and Administration

Dose Rate

- 2 mL dose by subcutaneous injection.

USE ALL RECONSTITUTED PRODUCT IMMEDIATELY.

Primary vaccination: Cattle require an initial 2 ml dose subcutaneously. The second 2 ml subcutaneous dose can be effectively administered any time from 2 weeks up to 6 months later.

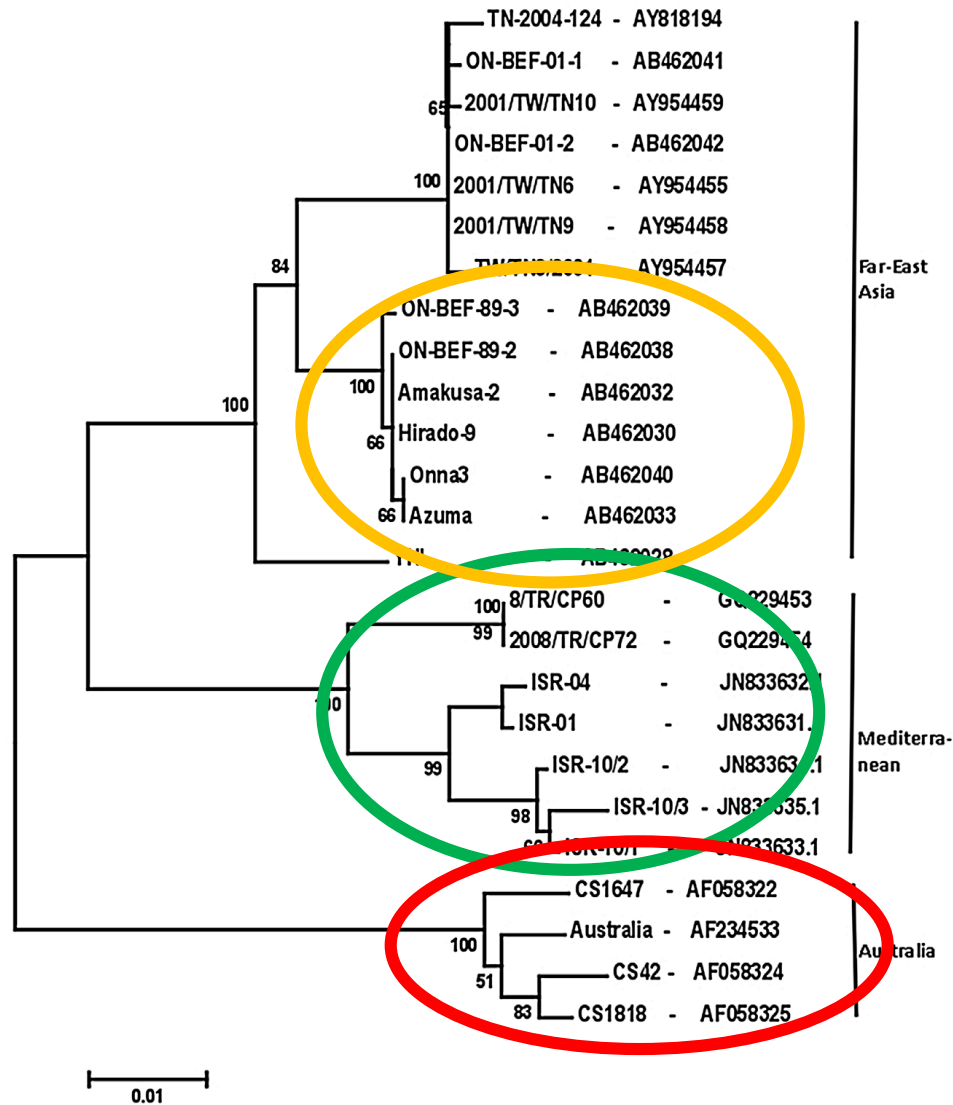
Cattle can be vaccinated from 6 months of age. Two doses of vaccine are required to produce long lasting immunity.

Booster vaccination: 2 ml annual booster dose is required for all cattle.

Thank you



חיסונים



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