

Impact of the pandemic on people: learning for future pandemics and emergency preparedness.

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Urban is a broad definition & many factors influence urbanization patterns

- ***The Diversity of Urban***
 - *Large urban centres*
 - *Large urban centres resulting from conurbations,*
 - *Smaller urban centres*
 - *Large villages and small towns*
 - *Rural areas*
- In designing Health interventions “one size fits all” doesn’t work
- It is not only large cities that have low-income, vulnerable communities
- Climate and Conflict are exacerbating natural trends of urbanisation GLOBALLY



Our World is Changing Fast...



**EXTREME CLIMATE
EVENTS**

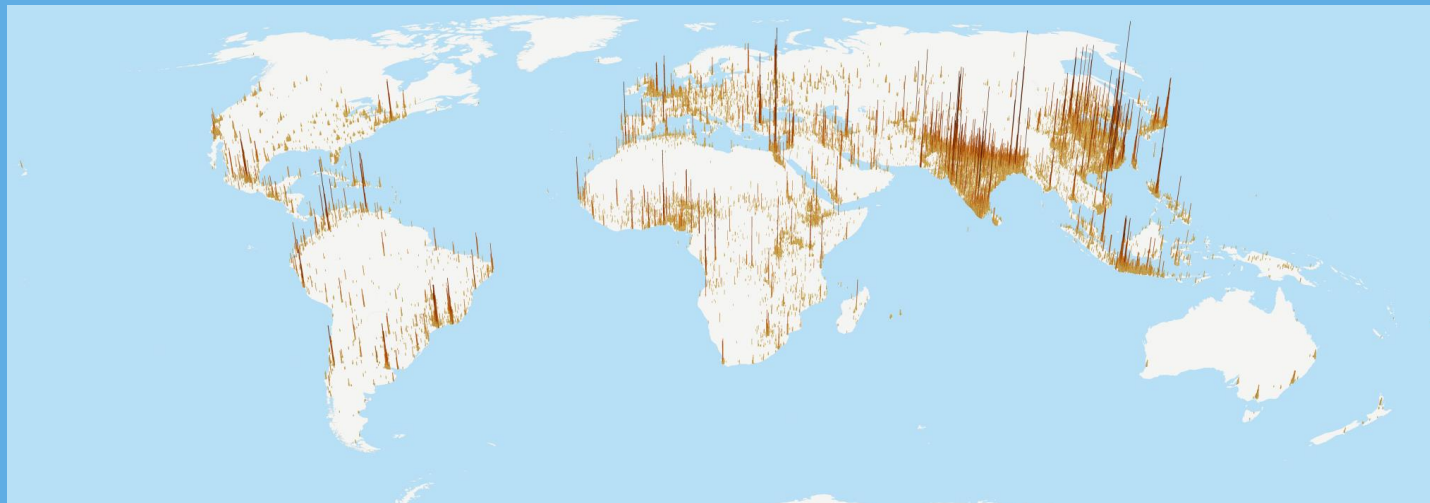
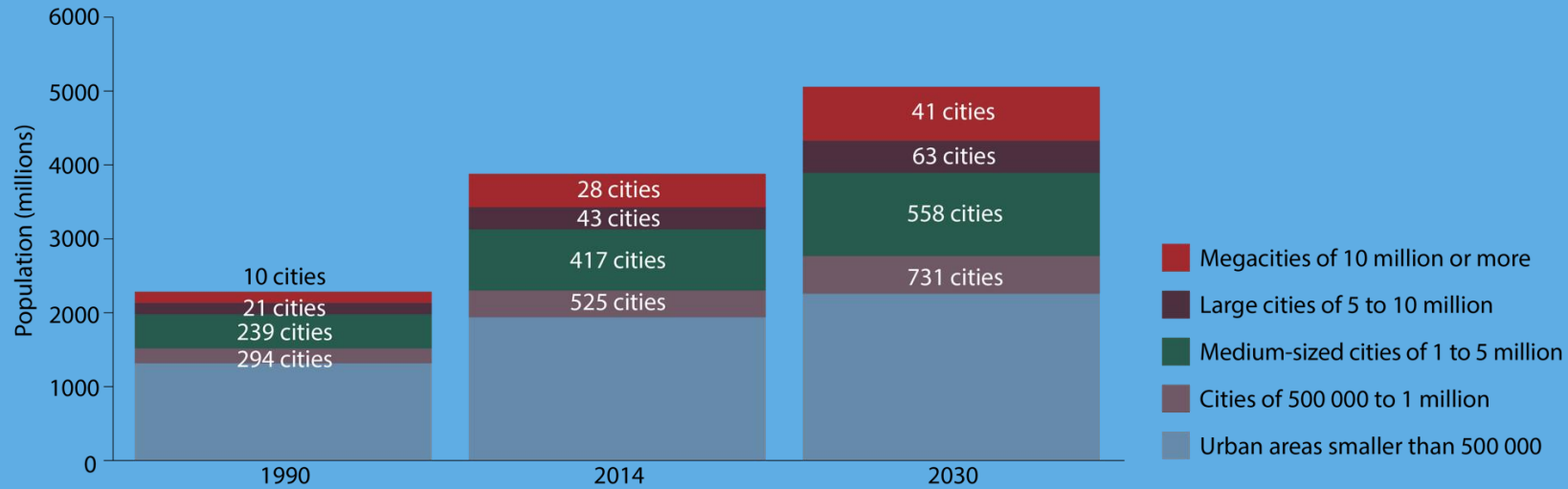


**INCREASED INTERACTIONS AT
THE HUMAN-ANIMAL-
ENVIRONMENTAL INTERFACE**



An urbanizing world & growth of cities

More Cities of All Scales & Population Density (1km² grid cell)



Many of the Cities of 2050 have yet to be built!

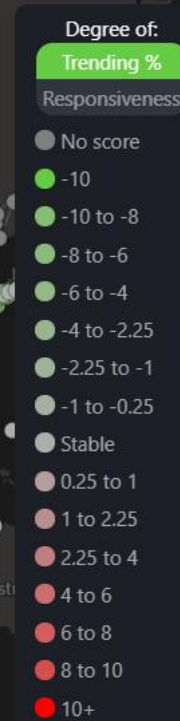
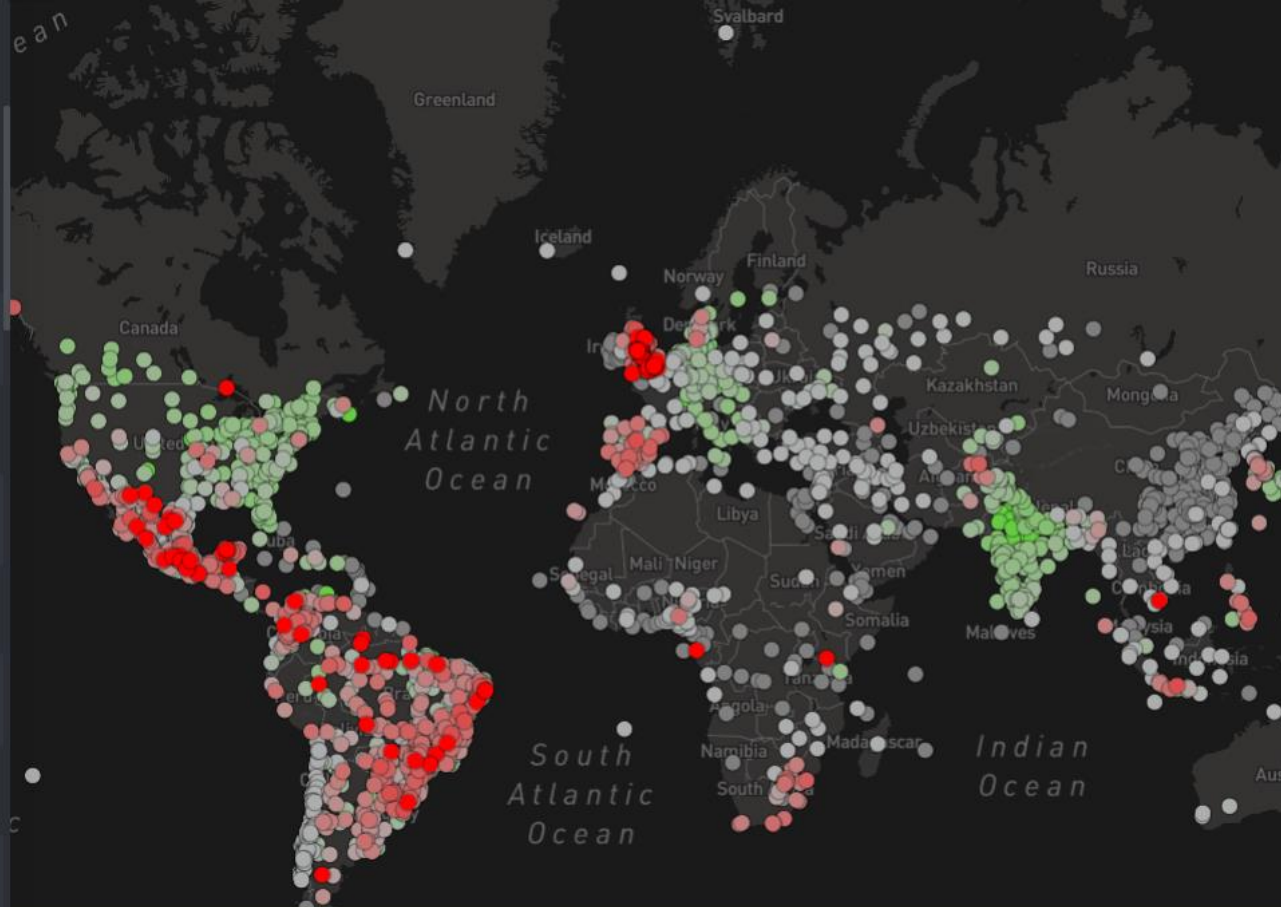
As we plan for future
pandemics, why is
understanding urban form and
function so important?

Covid-19 impacts on cities & their response

- The Covid-19 pandemic was like an X-ray. It has shown the many EXISTING inequities and divisions in urban settings
- The impacts have been governed by:
 - Overcrowding NOT density
 - Co-morbidities (Global South= communicable diseases Global North= non-communicable disease)
 - Treatment-seeking behaviour
 - Demographics (age profile, mobility)
 - Cities' ability to respond (triage, isolating the vulnerable)
 - Socio-economic situation of the most vulnerable (slums in the global south, Migrant communities in global north)
- The “nimble” performance of city-governments in managing the pandemic is critical in support of national governments plans (earlier engagement??)
- Many of the interventions NEED spatially disaggregated local-level data, only available at city level



City Index



Trending Trend Score Distribution

All Cities

	Today	Yesterday	2 D
Less than -10%	1.39%	2.4%	3.0%
Down to -10%	40.67%	37.91%	40.1%
Stable	22.13%	22.74%	21.6%

Responsiveness

45 Los Angeles United States

Considerations	Score
Spread Response	21
Treatment Response	58
Economic Response	35
Supply Chain Response	72

Impact

	World	Country	City
Cases	173,999,576	33,245,706	1,24
Lives Lost	3,747,371	595,667	24,4
Mortality Rates	2.15%	1.79%	1.9%
Cases/100k	2235.35	10588.70	1241
Lives Lost/100k	48.14	189.72	243.

Trending Percent	Response Score	City	Country
NEW	--	Gastre	Argentina
NEW	38	Sabinas Hidalgo	Mexico
NEW	52	Villa Union	Mexico
>10	47	Oriximina	Brazil
>10	50	Novo Airao	Brazil
>10	36	Alenquer	Brazil
>10	69	Libreville	Gabon
>10	44	Pinheiro	Brazil
>10	37	Porto Alegre	Brazil
>10	42	Olinda	Brazil

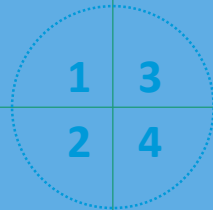
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CitiIQ COVID-19 City Readiness and Response Tracker

Cities and pandemics report 2021: The broader picture

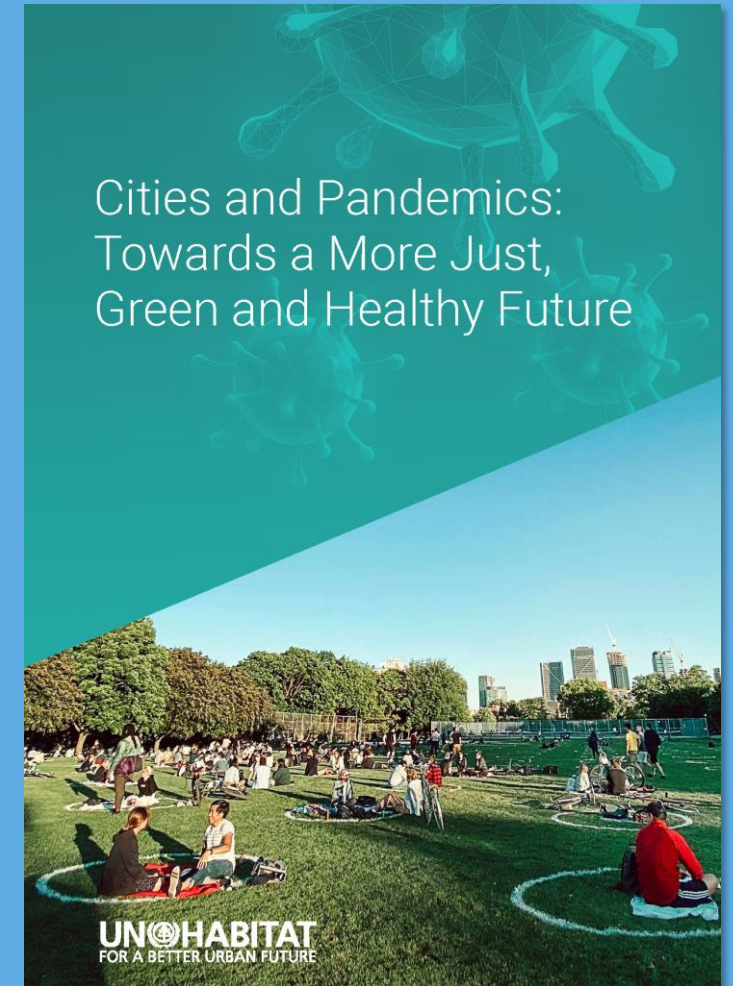
**Rethinking the form
and function of the city**

**Rebuilding a 'new normal'
urban economy**



**Addressing systemic poverty
and inequality in cities**

**Urban legislation and
governance arrangements**



UN-Habitat response to the coronavirus disease pandemic

Ethiopia

Market re-design guidelines were prepared for local authorities, shoppers and market users in response to COVID-19.



COVID-19 awareness-raising campaigns in Addis Ababa, Hawassa and Bahir Dar on 6 and 7 March 2021

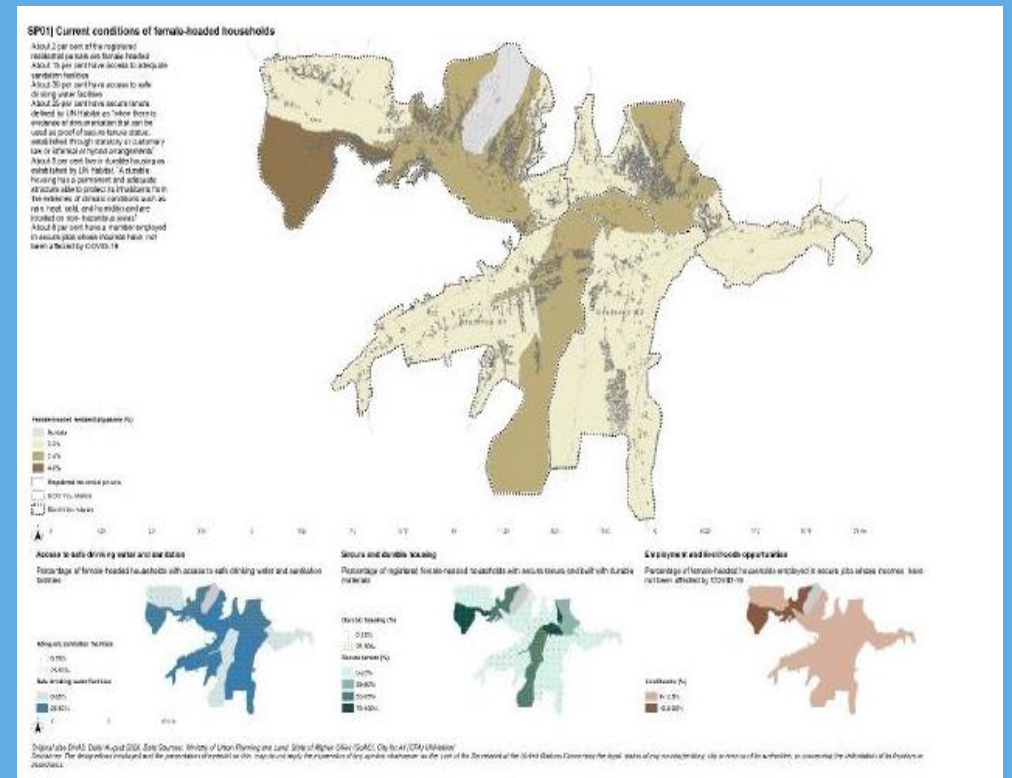


Sudan

COVID-19 preventative measures workshops conducted in Mansoura Area.



Afghanistan



Female Vulnerability Assessment (FVA) to support an Evidence-based Response to Covid-19 in Afghan Cities. Supported vulnerable women and female-headed households with the purchases of winter items and food packages.

GATHERING EVIDENCE / BUILDING A KNOWLEDGE BASE/ TOOL DEVELOPMENT

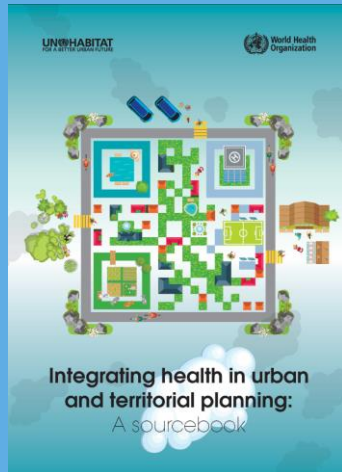


Compendium of Inspiring practices: Health Edition

- Collection and dissemination of best practices is an on-going work
- Open call for cases was done in mid-2018.
- +70 cases were submitted; 25 were selected and publishes in the compendium.
- Case studies had been used for further content development (e.g. Sourcebook) and as a resources for the delivery of trainings.

SOURCEBOOK: Integrating health in urban and territorial planning

- Provides a better understanding on *why is important* to consider health in UTP and *how to* make it happen.
- Provides +70 resources, tools, case studies, approaches and entry points for integrating health into urban development.



Journal List > Elsevier Public Health Emergency Collection > PMC7680649

Elsevier Public Health Emergency Collection
Public Health Emergency COVID-19 Initiative

[Build Environ](#), 2021 Jan 15; 188: 107472. PMID: PMC7680649
Published online 2020 Nov 22. doi: [10.1016/j.buildenv.2020.107472](https://doi.org/10.1016/j.buildenv.2020.107472) PMID: [33250561](https://pubmed.ncbi.nlm.nih.gov/33250561/)

Crowding has consequences: Prevention and management of COVID-19 in informal urban settlements

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Abstract Go to:

COVID-19 spreads via aerosols, droplets, fomites and faeces. The built environment that facilitates crowding increases exposure and hence transmission of COVID-19 as evidenced by outbreaks in both cool-dry and hot-humid climates, such as in the US prison system and dormitories in Singapore, respectively. This paper explores how the built environment influences crowding and COVID-19 transmission, focusing on informal urban settlements (slums). We propose policy and practice changes that could reduce COVID-19 transmission.

There are several issues on how COVID-19 affects informal urban settlements. Slum populations tend to be younger than the overall population. Lower numbers of older people lessen the morbidity and mortality of the pandemic in slum areas. Second, many slum populations are highly mobile. By returning to their ancestral villages residents can avoid the risks of overcrowding and reduce the population density in a given area but may spread COVID-19 to other areas. Third, detection and registration of COVID-19 cases depends on patients presenting to health care providers. If the risk of visiting a health care centre outweighs the potential benefits patients may prefer not to seek treatment.

The control and prevention of COVID-19 in informal urban settlements starts with organizing community infrastructure for diagnosis and treatment and assuring that basic needs (food, water, sanitation, health care and public transport) are met during quarantine. Next, community members at highest risk need to be identified and protected. Low-income, informal settlements need to be recognized as a reservoir and source for persistent transmission. Solutions to overcrowding must be developed for this and future pandemics. In view of the constant risk that slums present to the entire population decisive steps need to be taken to rehabilitate and improve informal settlements, while avoiding stigmatization.

Keywords: Built environment, Slums, Informal settlements, Crowding, COVID-19, SARS-CoV-2

Learning from the past - Looking to the future

- The amazing speed of vaccine development was outstanding HOWEVER access to vaccines for most of the world is a major challenge
- With or Without vaccines, classical public health interventions are still needed
- Cities are at the “coal-face” and need resources to implement local-level:
 - Surveillance/feedback/early warning
 - Management of the epidemic/pandemics based on local knowledge and customs
- Future opportunities to re-think urban plans and infrastructure will enable more resilient communities (especially in urban space yet to be build)
- Cities will have to focus on both infectious and non-communicable diseases. Including LIFESTYLE INDICATORS AND ACCESS TO HEALTH PROMOTION
- Covid-19 was not the first or the last pandemic. It will most likely be a zoonotic disease that hits WE HAVE TO CONSIDER HOW EXTERNAL FACTORS WILL SEE SOME DISEASES APPEARING IN NEW SETTINGS!

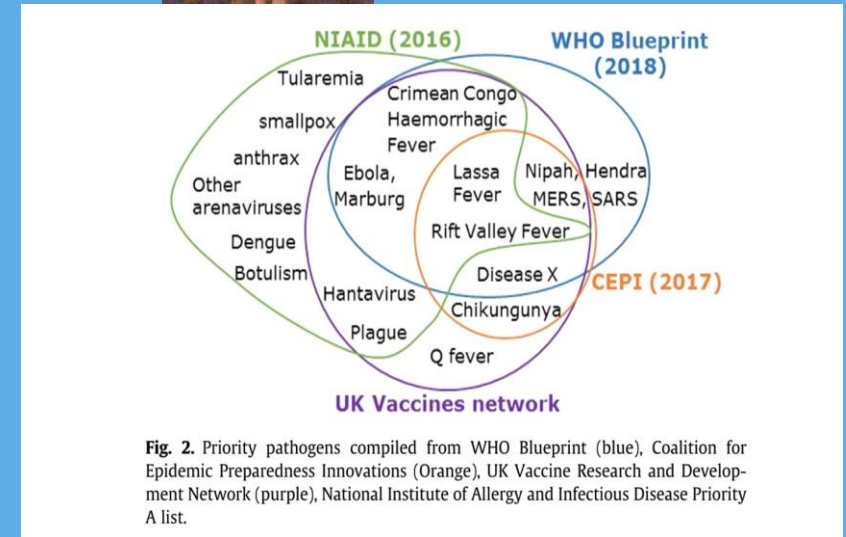
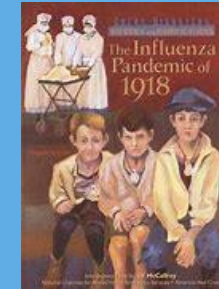
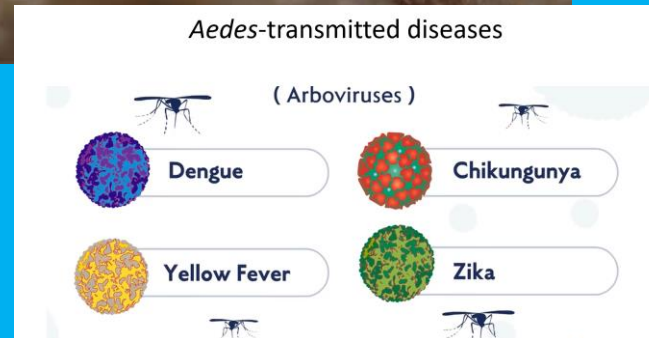


Fig. 2. Priority pathogens compiled from WHO Blueprint (blue), Coalition for Epidemic Preparedness Innovations (Orange), UK Vaccine Research and Development Network (purple), National Institute of Allergy and Infectious Disease Priority A list.



Vector-borne disease in urban settings



Lancet Commission: Controlling *Aedes*-transmitted Viral Diseases in Cities

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World Health
Organization

WHO technical consultation on the burden of and response to malaria in urban areas

Strategic Information for Response Unit,
WHO Global Malaria Programme. Geneva, Switzerland

Concluding Comments

- **NEW APPROACHES** to **understanding the urban landscape** are available and at low cost. These tools need to assist local-level data collection and decision making (simple tools based on excellent science)
- **RETHINK URBAN SPACE** many opportunities to plan urban are being lost. **MANY OF THE NEW URBAN AREAS ARE YET TO BE BUILT.** The design of urban space is critical in light of rapid unplanned urbanization. Efficient urban planning needs “density” to reduce infrastructure costs BUT must make provision for open space.
- Improved urban design (Housing and infrastructure) and access to services can help prevent disease and also strengthen the resilience to disease outbreaks & epidemics. **Including promotion of health lifestyles through sports (new urban indicators) THIS MUST BE LED BY CITY LEADERS**
- **MULTI-SECTORAL APPROACHES** to the prevention and management of diseases will mean that increasingly those outside the “formal” health sector will play an important role. Local level is where multisectorality comes alive. **Approaches must be applied to BOTH communicable and non-communicable diseases**
- **NEW PARTNERSHIPS** to **unlock civil society capacity to monitor** components for environmental management of disease

Thank you for your attention !

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