

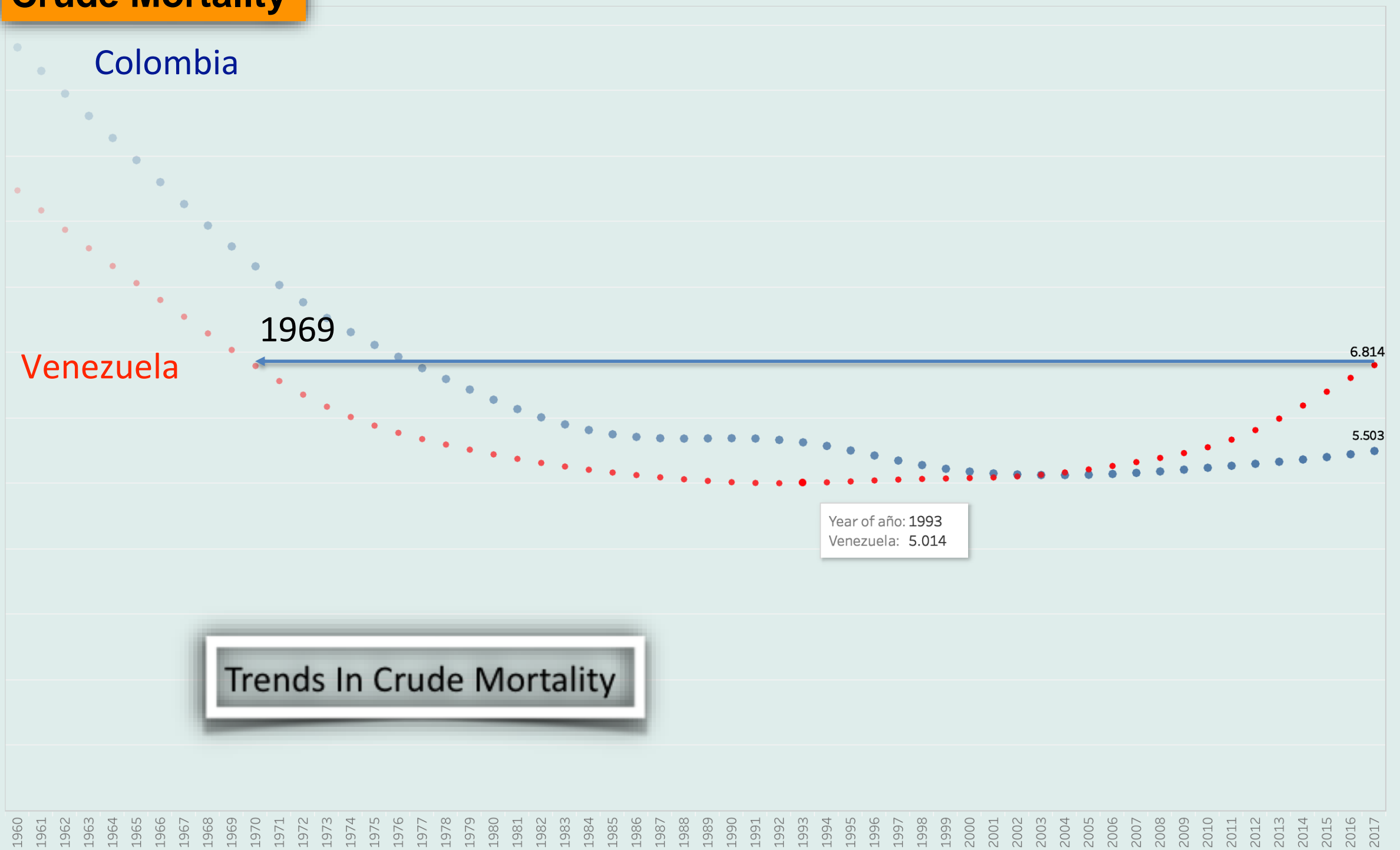
Health system situation and Proposals



@juliocastrom

Long History Short

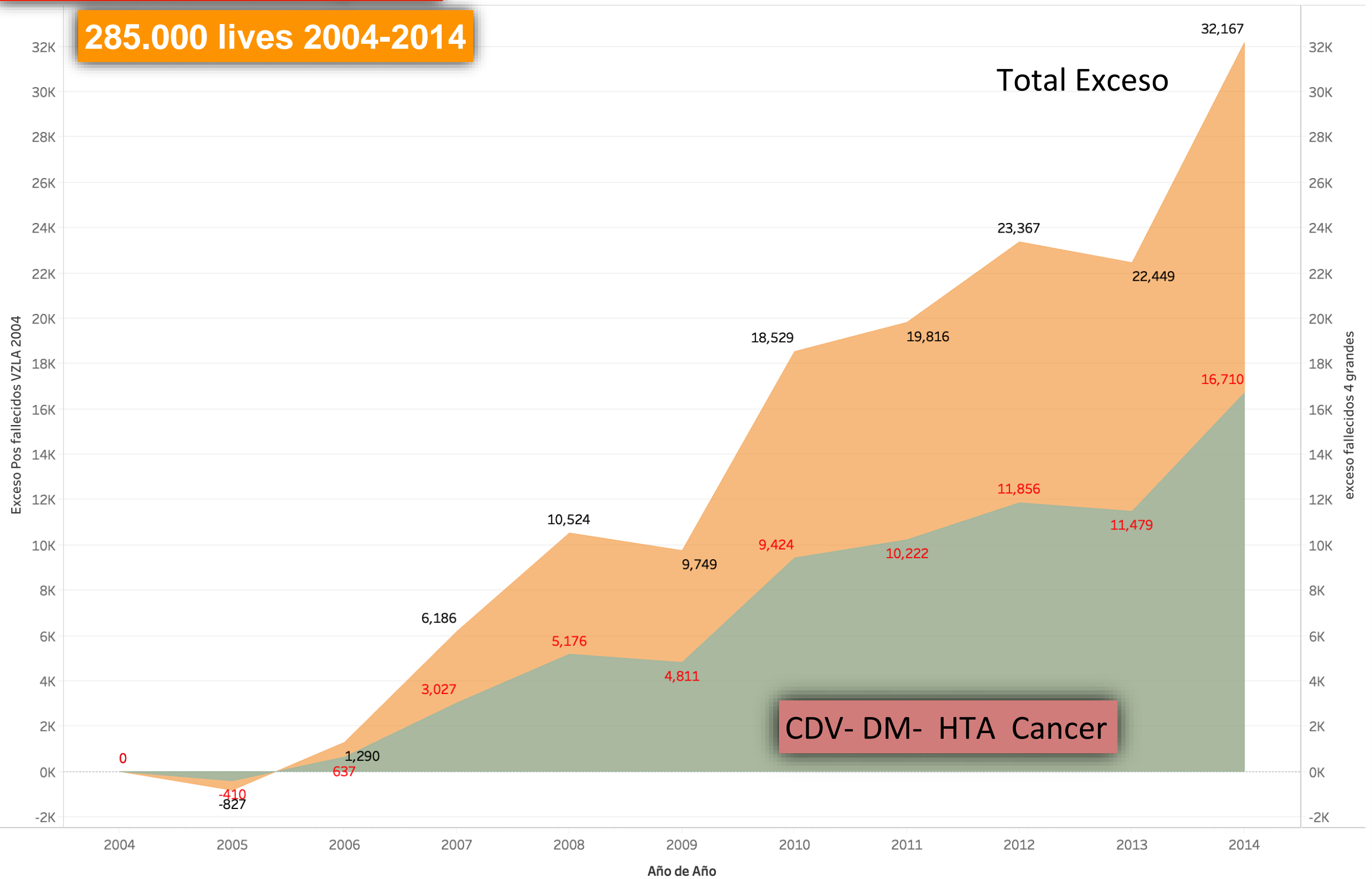
Crude Mortality



Trends In Crude Mortality

Excess Mortality

285.000 lives 2004-2014



Rational for Chronic diseases burden

Outcomes

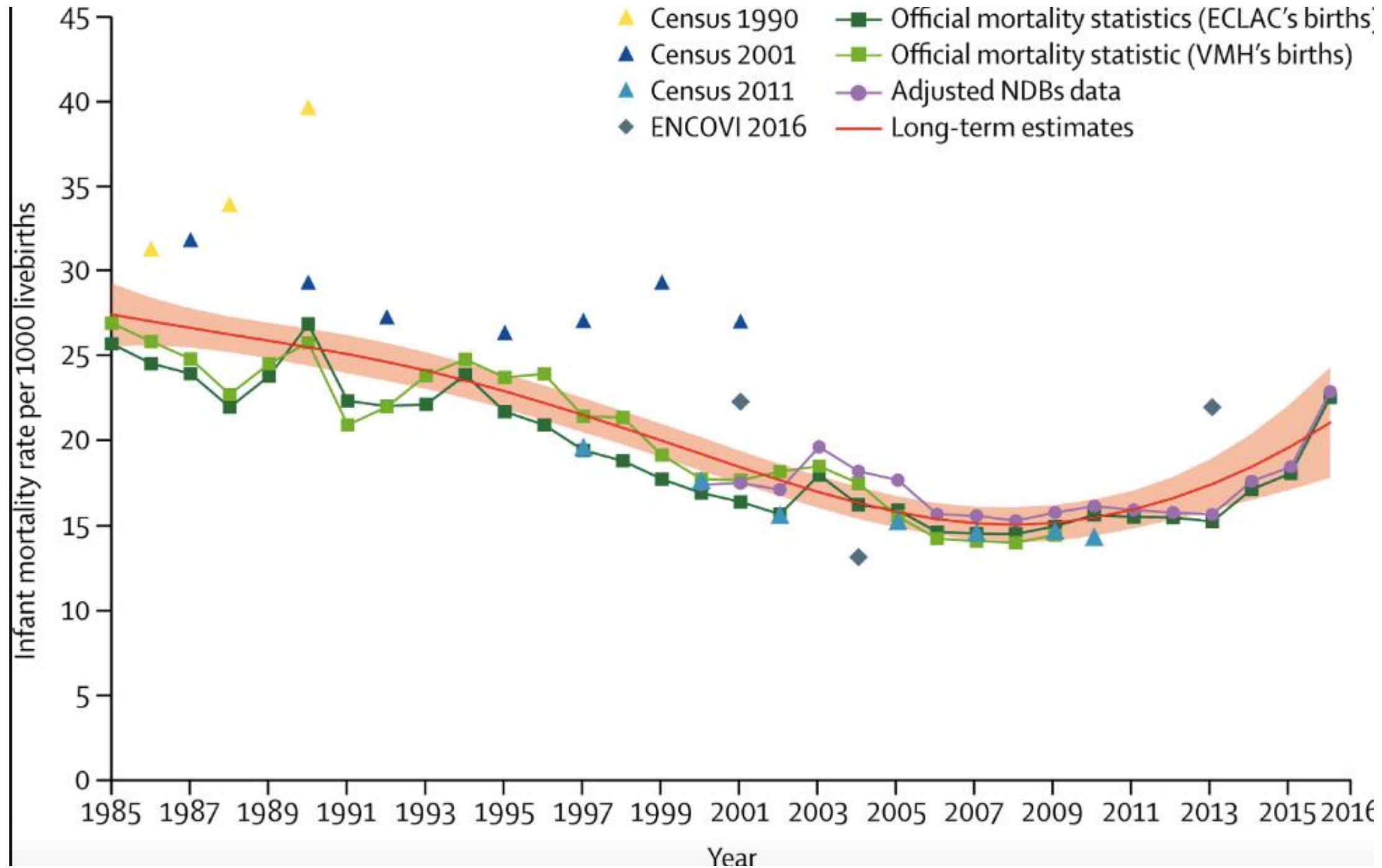
Trends in infant mortality in Venezuela between 1985 and 2016: a systematic analysis of demographic data

Jenny García, MSc · Prof Gerardo Correa, MSc · Prof Brenda Rousset, PhD

Open Access · Published: January 24, 2019 · DOI: [https://doi.org/10.1016/S2214-109X\(18\)30479-0](https://doi.org/10.1016/S2214-109X(18)30479-0)

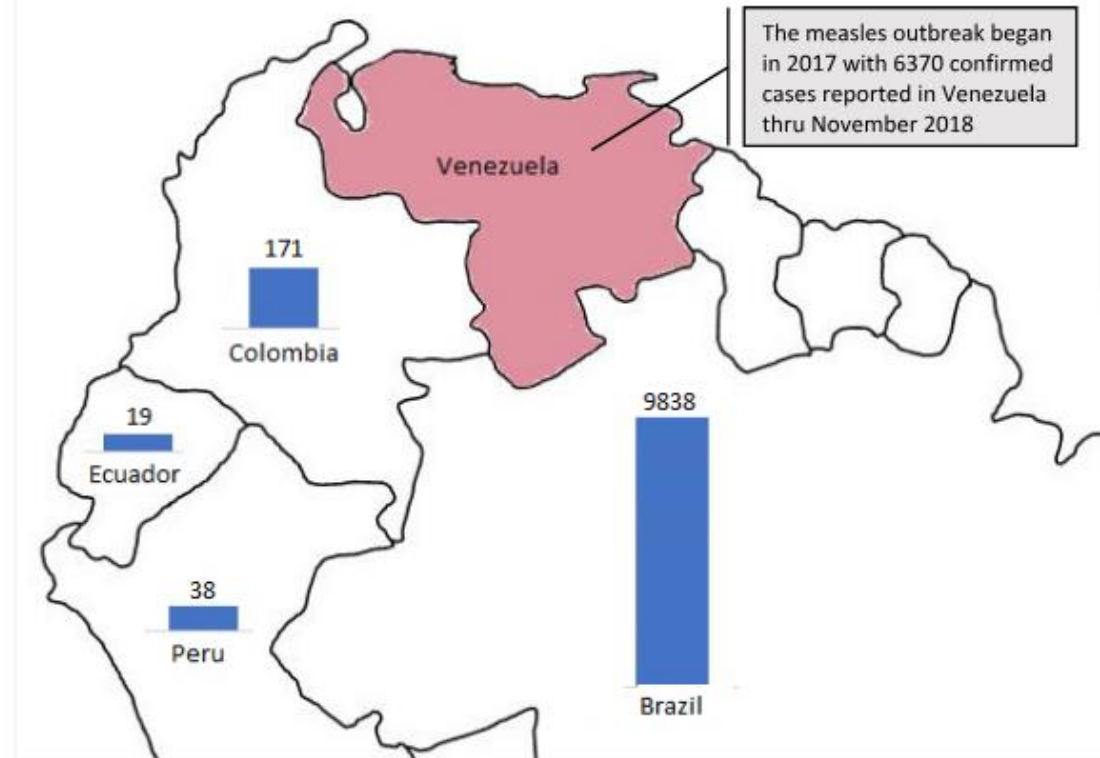
Check for updates

PDF [305 KB] Figures Save Share Reprints Request



Migration Crisis

Figure 4: Confirmed Measles Cases in Countries Neighboring Venezuela, 2018*²¹



*Only one measles case was reported in all of Brazil, Colombia, Peru and Ecuador in 2016 and 2017.

CORRECTED PROOF

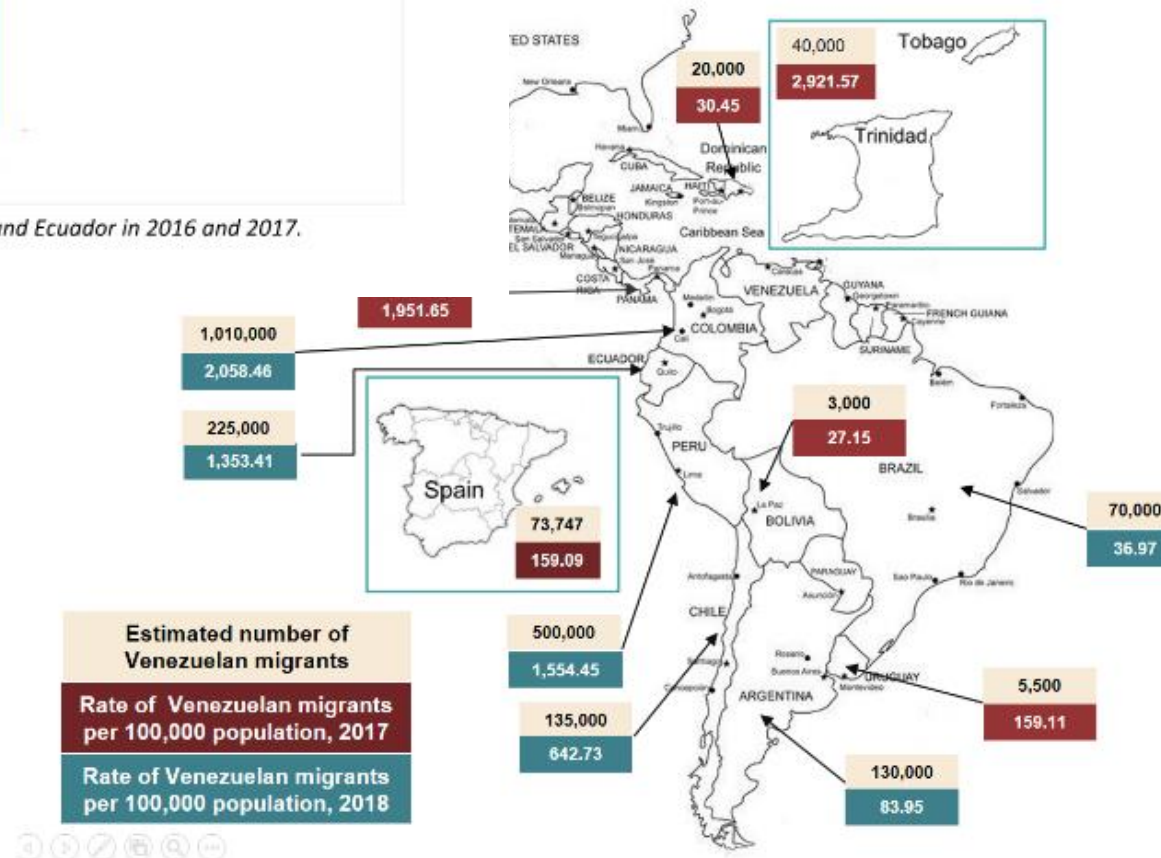
Venezuela's migration crisis: a growing health threat to the region requiring immediate attention

Jaime R Torres ✉, Julio S Castro

Journal of Travel Medicine, tay141, <https://doi.org/10.1093/jtm/tay141>

Published: 24 January 2019 Article history ▾

“ Cite Permissions Share ▾





Volume 25, Number 4—April 2019

Perspective

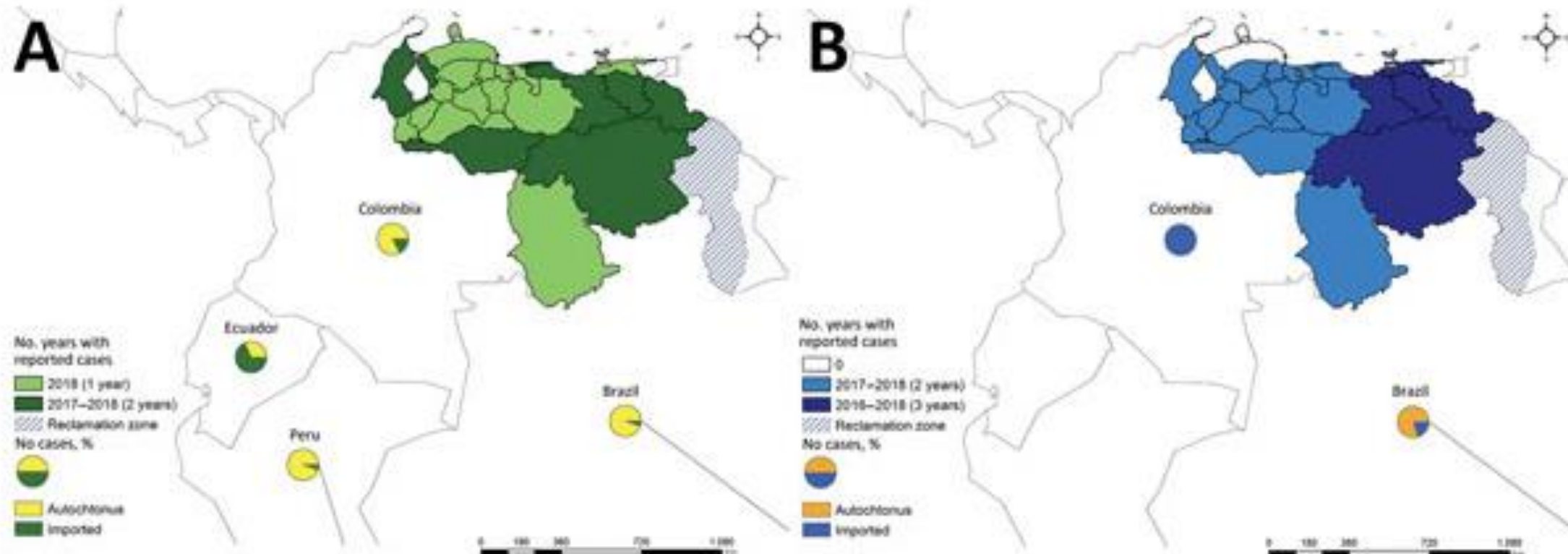
Resurgence of Vaccine-Preventable Diseases in Venezuela as a Regional Public Health Threat in the Americas

Alberto E. Paniz-Mondolfi, Adriana Tami, María E. Grillet, Mariliana Márquez, Juan Hernández-Villena, María A. Escalona-Rodríguez, Gabriela M. Blohm, Isis Mejías, Hunfades Urbina-Medina, Alejandro Rísquez, Julio Castro, Ana Carvajal, Carlos Walter, María G. López, Philipp Schwabl, Luis Hernández-Castro, Michael A. Miles, Peter J. Hotez, John Lednicky, J. Glenn Morris, James Crainey, Sergio Luz, Juan D. Ramírez, Emilia Sordillo, Martín Llewellyn, Merari Canache, María Araque, and José Oletta

On This Page

[Measles](#)

Figure 2



Hospitals Infraestructure

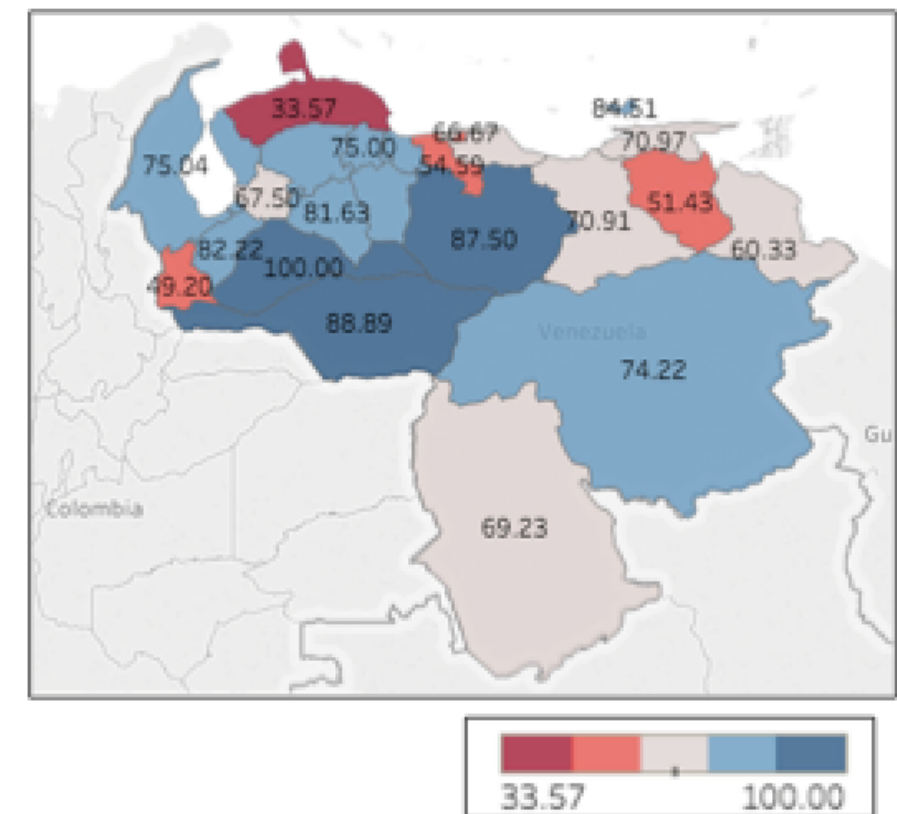
**National Health Survey
2014-2019**

 **ÉDICOS POR LA
SALUD**

INFRASTRUCTURE

- **18,300 hospital beds** available in 40 public hospitals included in the survey,
- **Of which 33% are inoperative.** This finding is consistent with previous measurements yielded HNE in 2016 and 2017,
- **in which the percentage ranged between 34 and 39%.**

Inoperability of 33% of the beds currently available in the hospitals surveyed adds which reports a significant shortage of hospital beds in Venezuela . The rate was 30 beds for every 10.000 people and has now gone down to just over 13 in the second decade of this century”³. If we project the percentage of inoperative hospital beds allocated by ENH to the entire country, we can plausibly assume that, **in Venezuela, for every three hospital beds available, one remains idle three more are needed.**



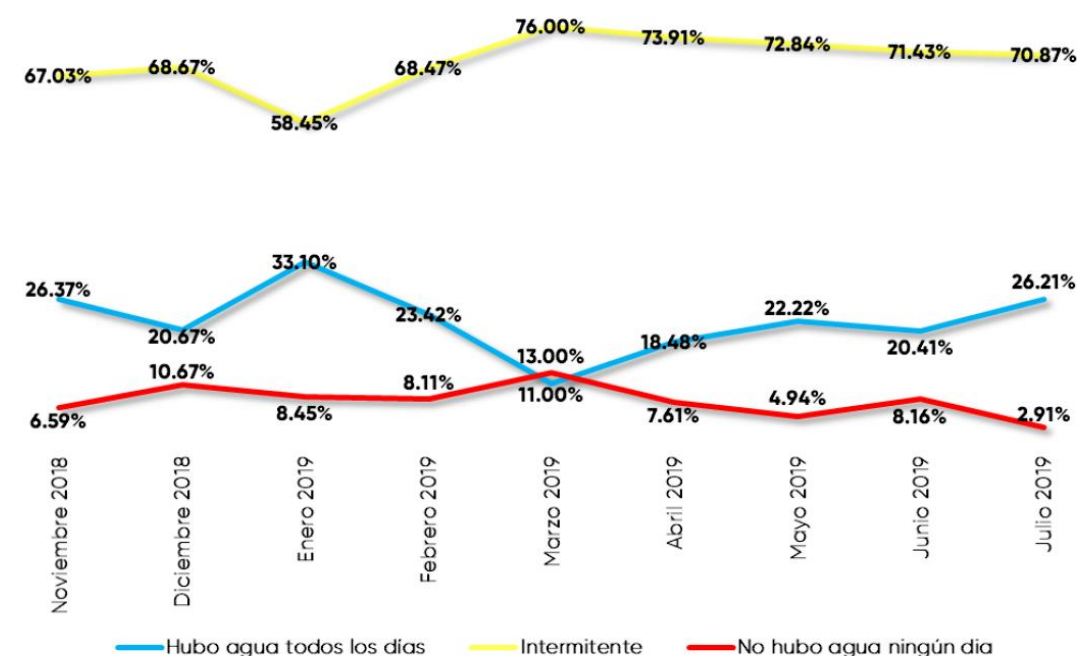
³Oletta López, JF (2012) Public hospitals in Venezuela. Technical Note No.47. Network of Scientific Medical Societies of Venezuela, May 5. In: <http://www.rscmv.org.ve>

INFRASTRUCTURE Water supply

. In this edition, the ENH did follow the behavior of basic public services for the operation of a hospital: water and electricity. Regarding the first,

- **70% reported having water supply failures at their centers**, Which is quite serious. However, the most the most concerning fact that
- **8% of hospitals reported having no water**.
- This service is essential for a hospital to function. It is needed for cleaning and also, many of the procedures.....

HISTÓRICO DE SERVICIO DE AGUA

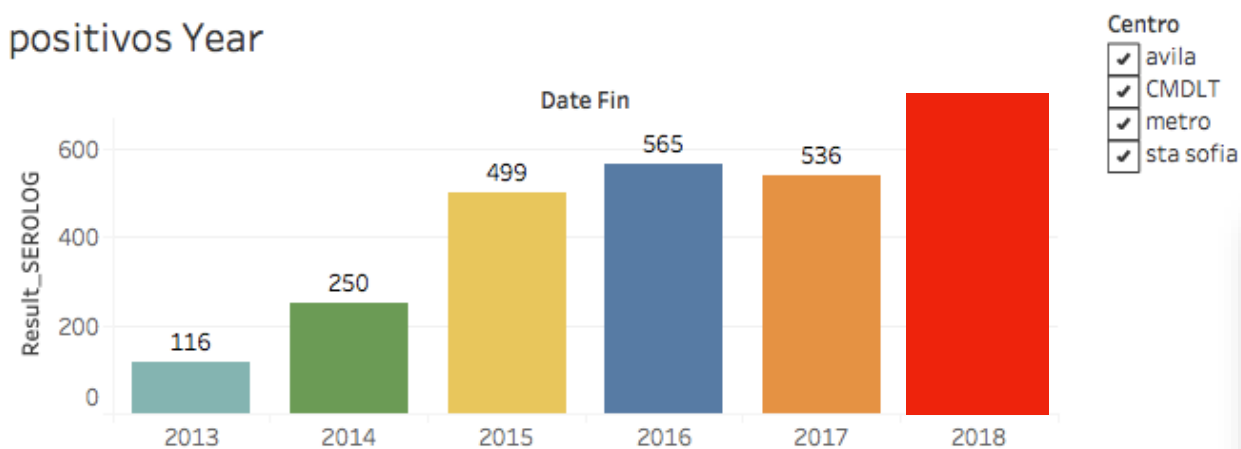


HAV aguda

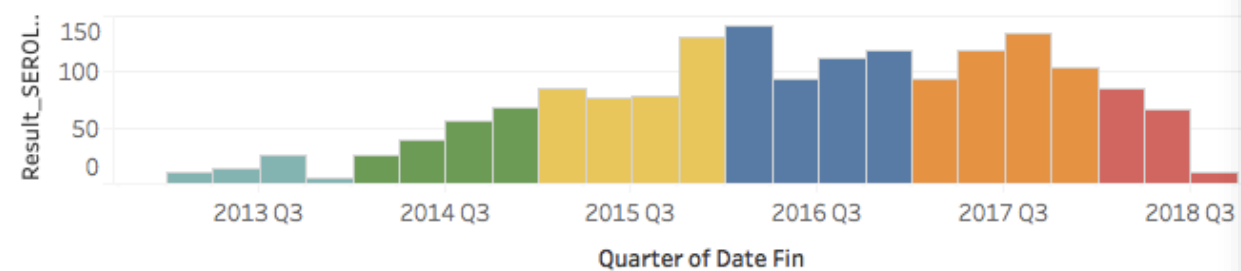
Contexto	Positivos # absolutos	Positivos tendencias % positivos igM	Tendencias positivos comparativas	Perfil edad seropositiv	Trends RRSS Google	comparación con data histórica
----------	-----------------------	--------------------------------------	-----------------------------------	-------------------------	--------------------	--------------------------------

Tendencias de IgM Positivas (absolutos)

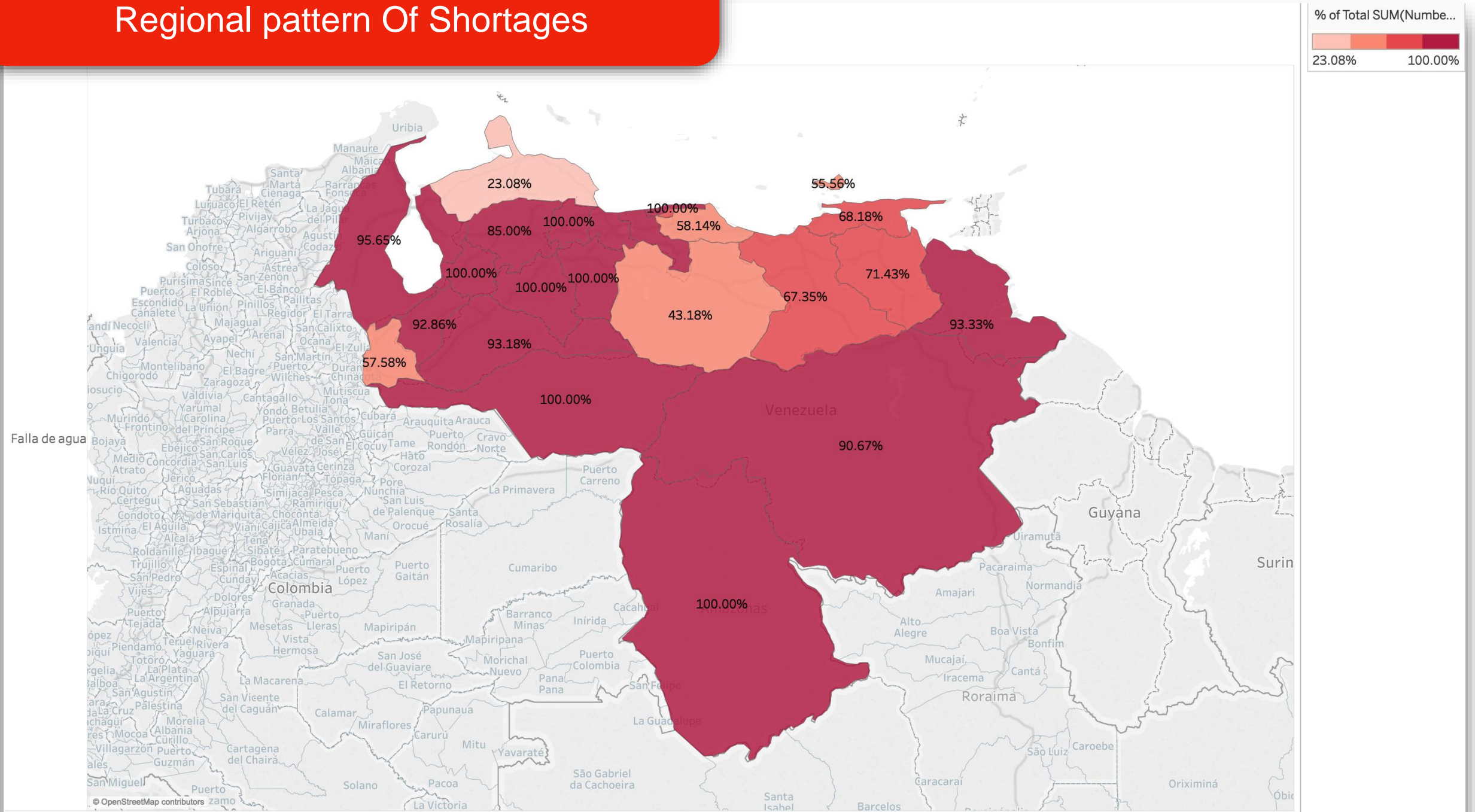
positivos Year



todos positivos Q



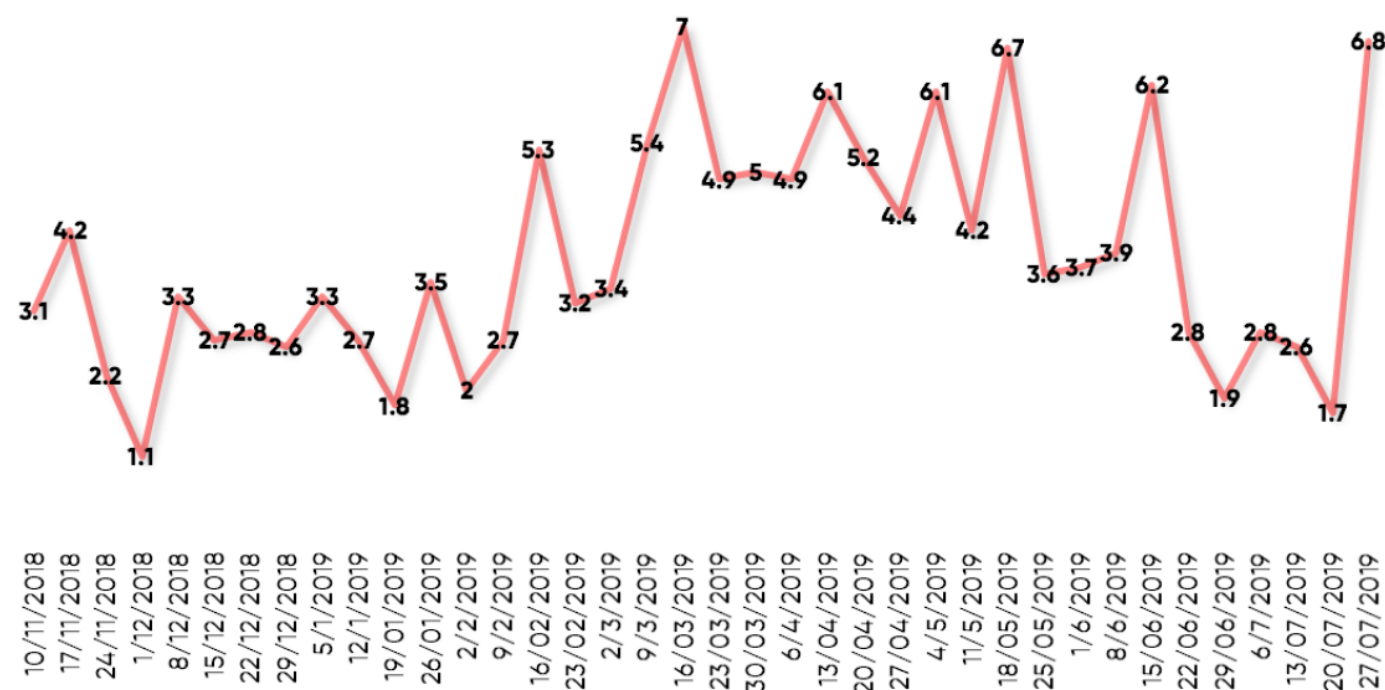
Regional pattern Of Shortages



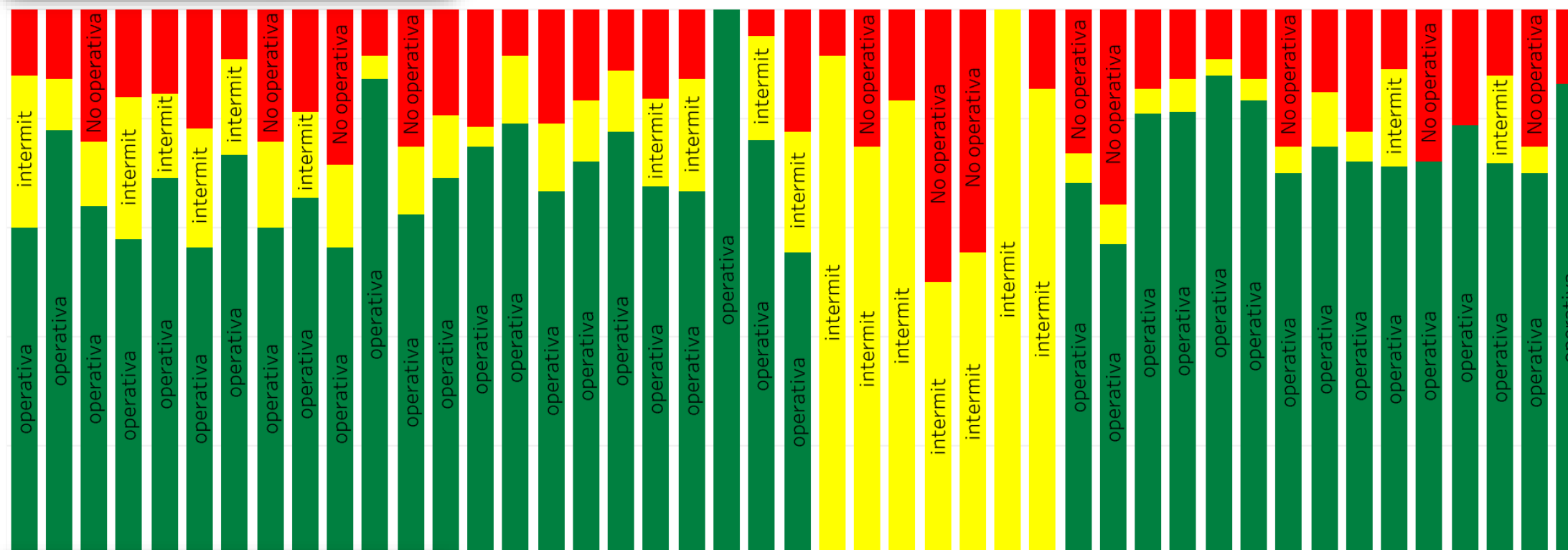
INFRASTRUCTURE Power

- Regarding electricity service, **67% of hospitals** reported having **suffered of power outages**. In addition, **32% of hospitals reported equipment failures** after restoring power.
- Hospitals reported a total of 105 hours without electricity.

PROMEDIO SEMANAL DE HORAS SIN SERVICIO ELÉCTRICO



ICU op

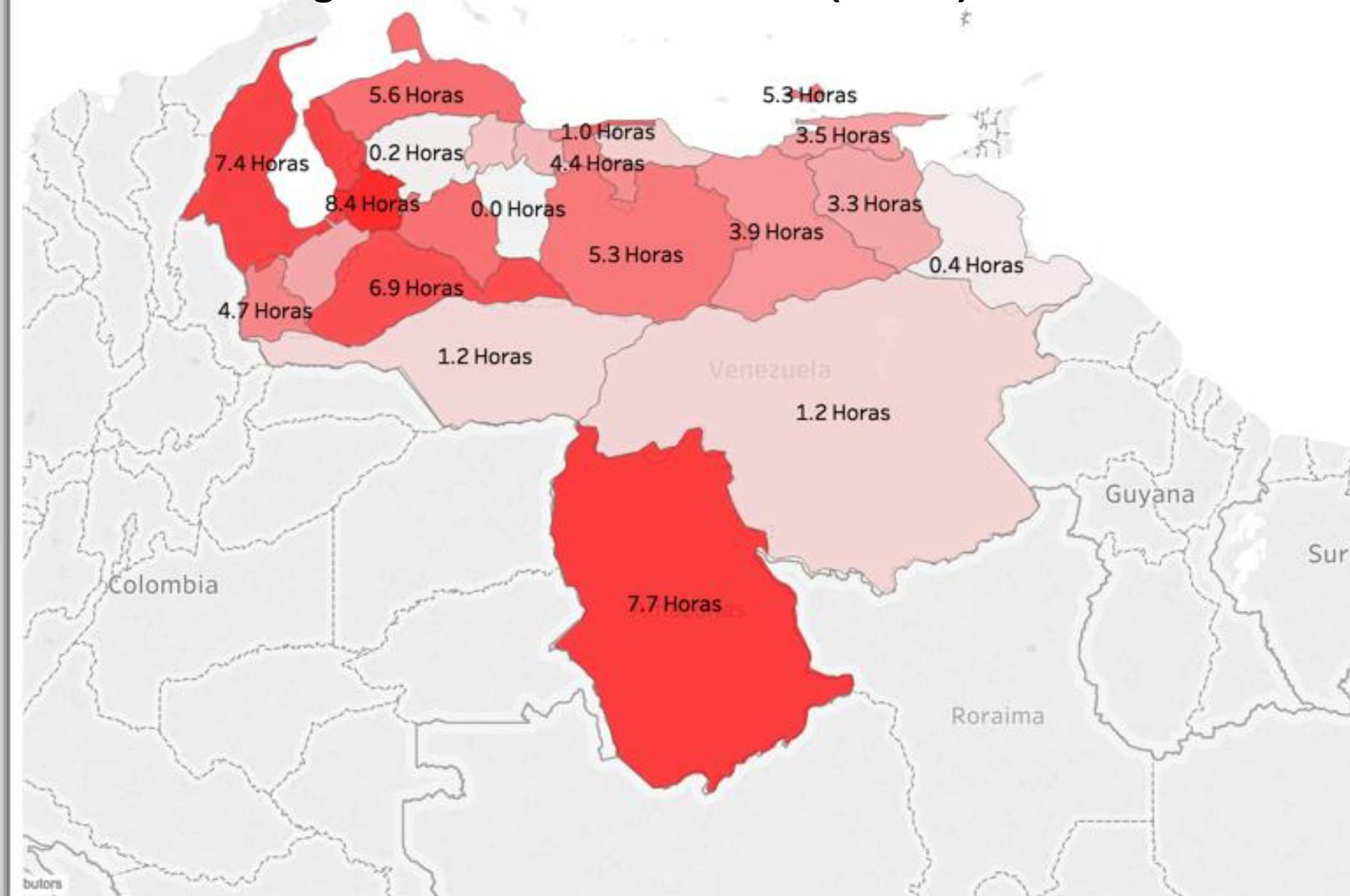


ICU ® op

Timestamp (copy) (Week numbers)



Average of electrical blackouts (hours)



DIAGNOCTIC TOOLS (Labs)

. When we talk about medical technology, we are referring to all services that will serve as support for patient diagnosis.

in this survey laboratory services, X-ray CT MRI and Echo were assessed

Regarding hospital laboratories, monitoring indication that

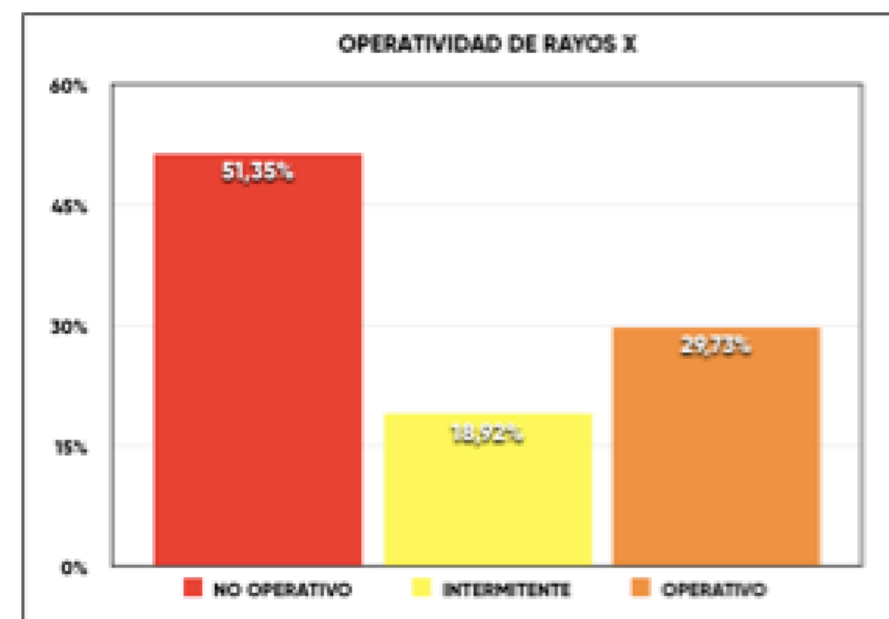
- **43% of these services nationwide are not operating**, 43% of hospitals are unable to perform basic testing
- For clinical laboratory it is of particular concern given its importance in decision making regarding to patiene Diagnosis and treatment.
- **It is estimated that an average inpatient generates demand for laboratory services in the order of 20 analytes during their hospital stay, distributed in hematology and coagulation, blood chemistry, and urinalysis copro, bacteriology and special tests**



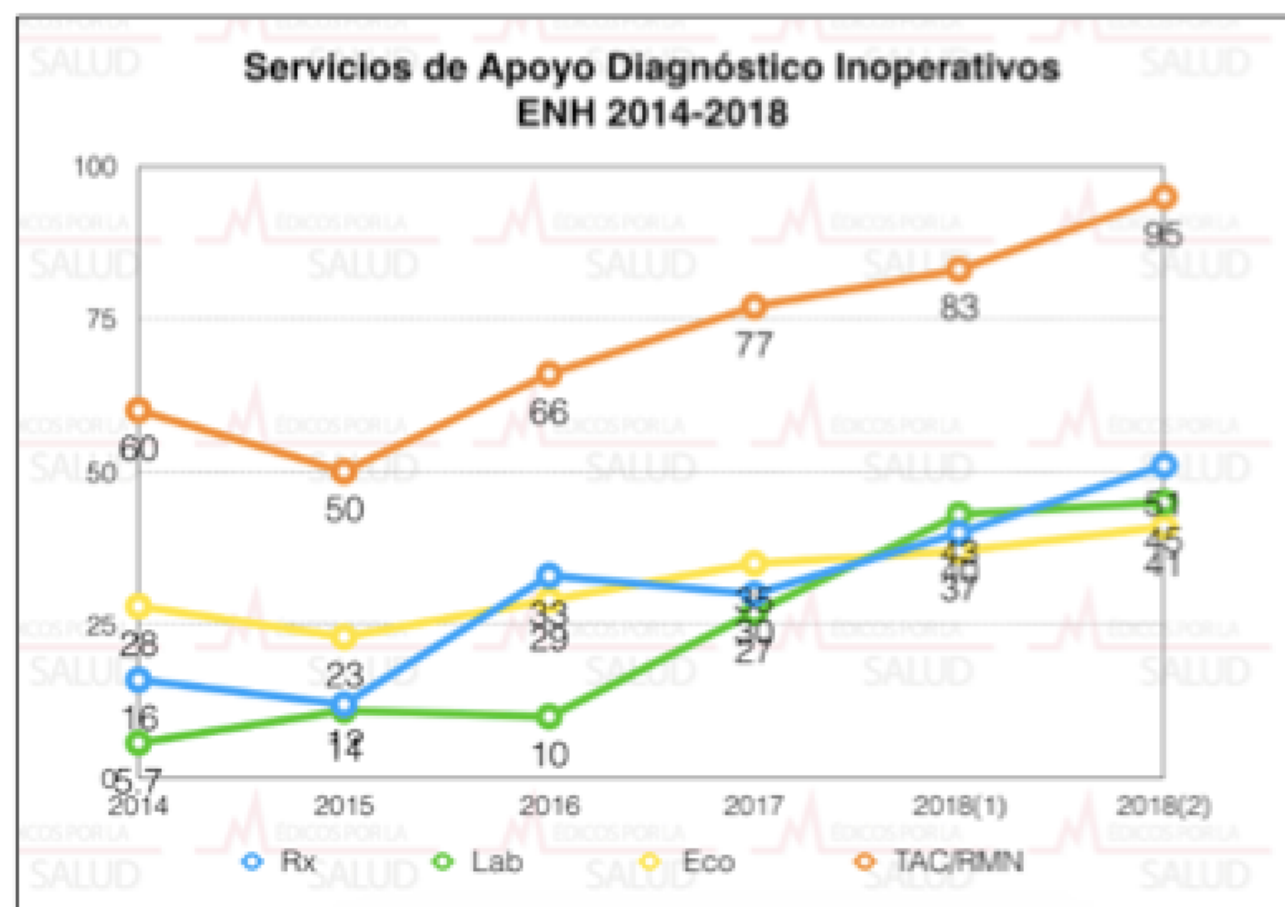
DIAGNOSIS TOOLS X Rays

As for the services of X-rays services ,

- **51% of the country's hospitals reported that they are completely closed**, ie more than half of the country's health centers have no ability to even make a chest X-ray te. Of the remaining hospitals, 19% reported that their x-ray services operate intermittently, ie,
- when a patients arrives, x-ray services may or may not be operating, it is completely random.



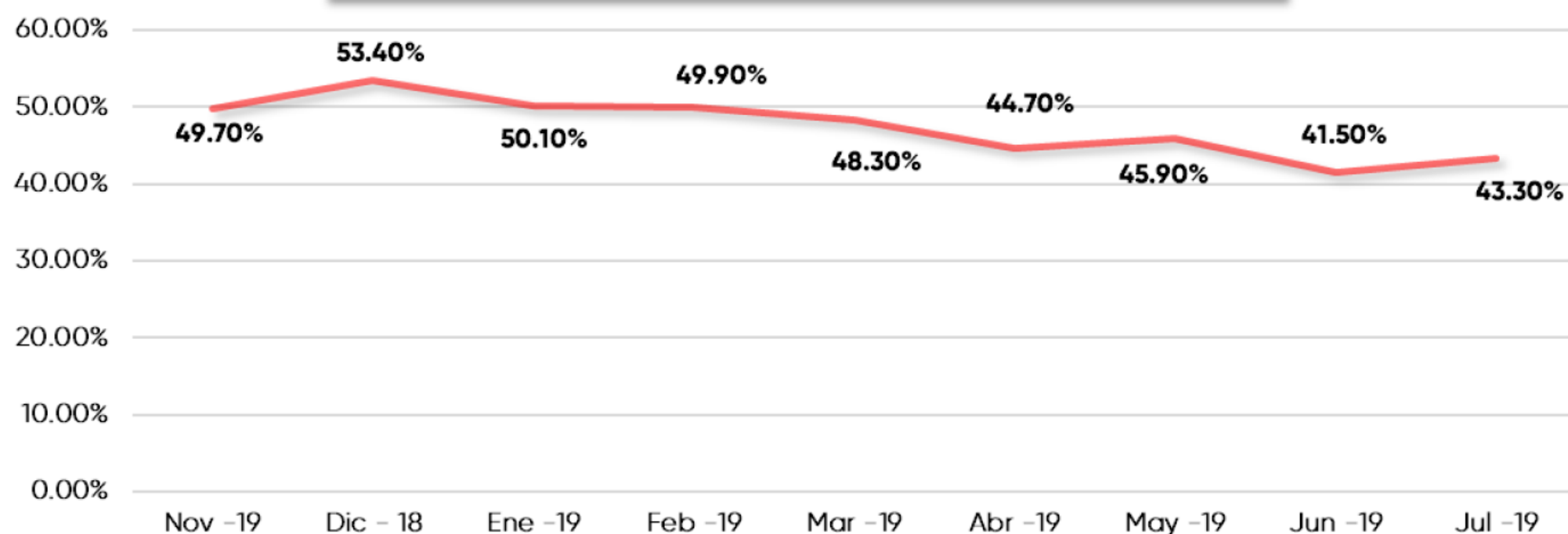
DIAGNOSTICS Tools



This table shows the historical information that ENH registered since its first issue regarding Diagnostic Support services. In it , can be seen the sustained worsening of each of the services, and more seriously, the curve relating to the TACs and magnetic resonators.

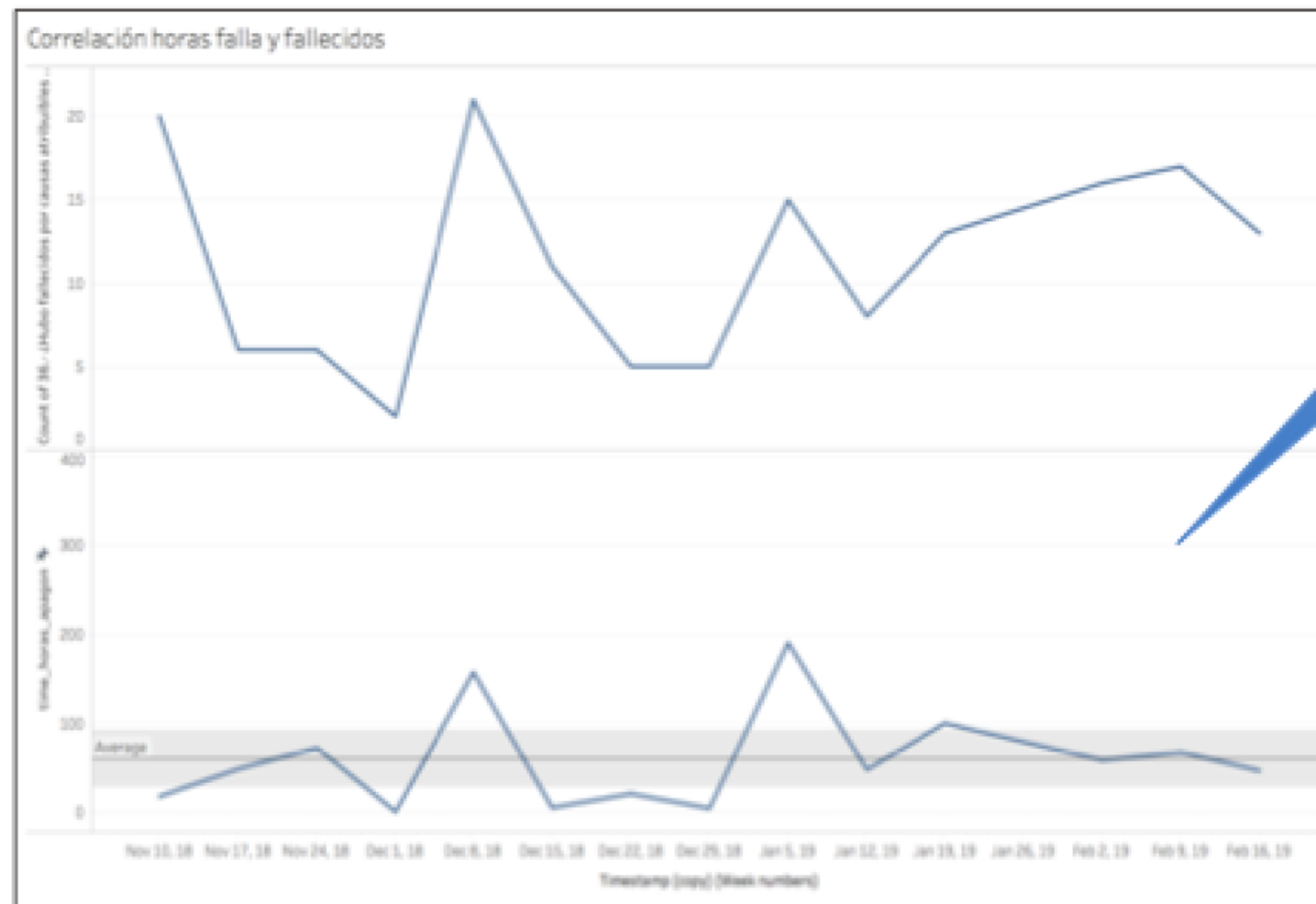
EMERGENCY

ÍNDICE DE DESABASTECIMIENTO EN EMERGENCIA



According the existence registered hospitals, **national average emergency shortage of 51%**
the shortage 57.5% in phamd related to Hypertension .

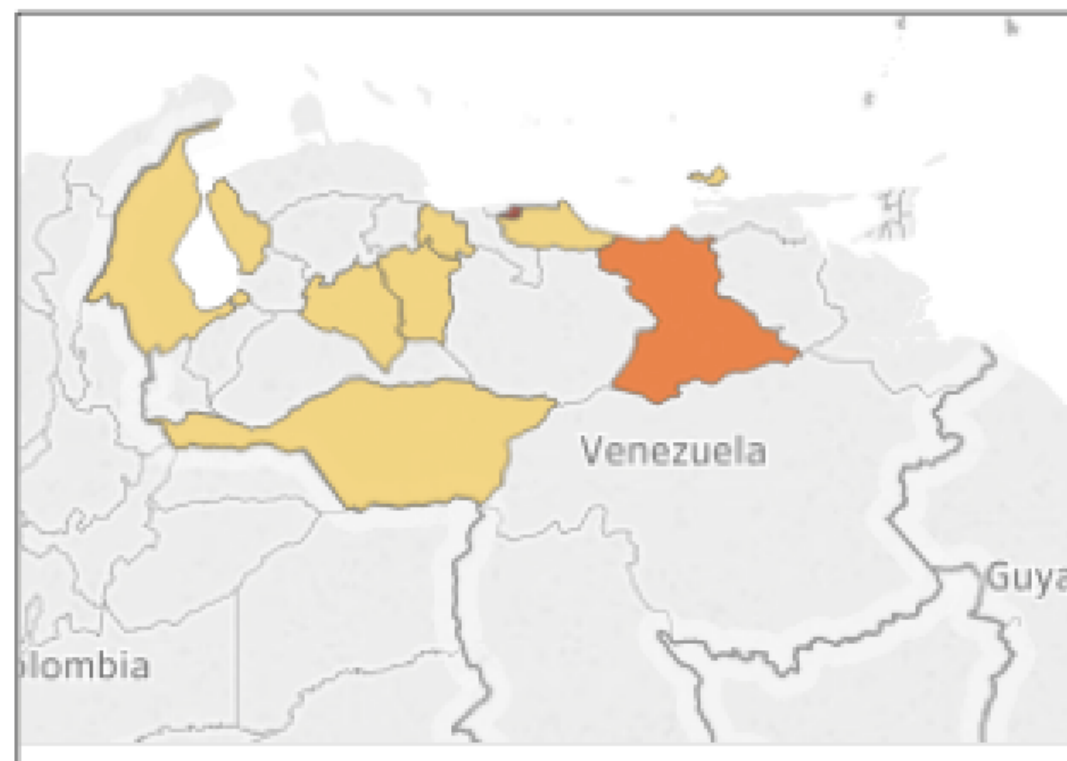
Deaths due to power failure



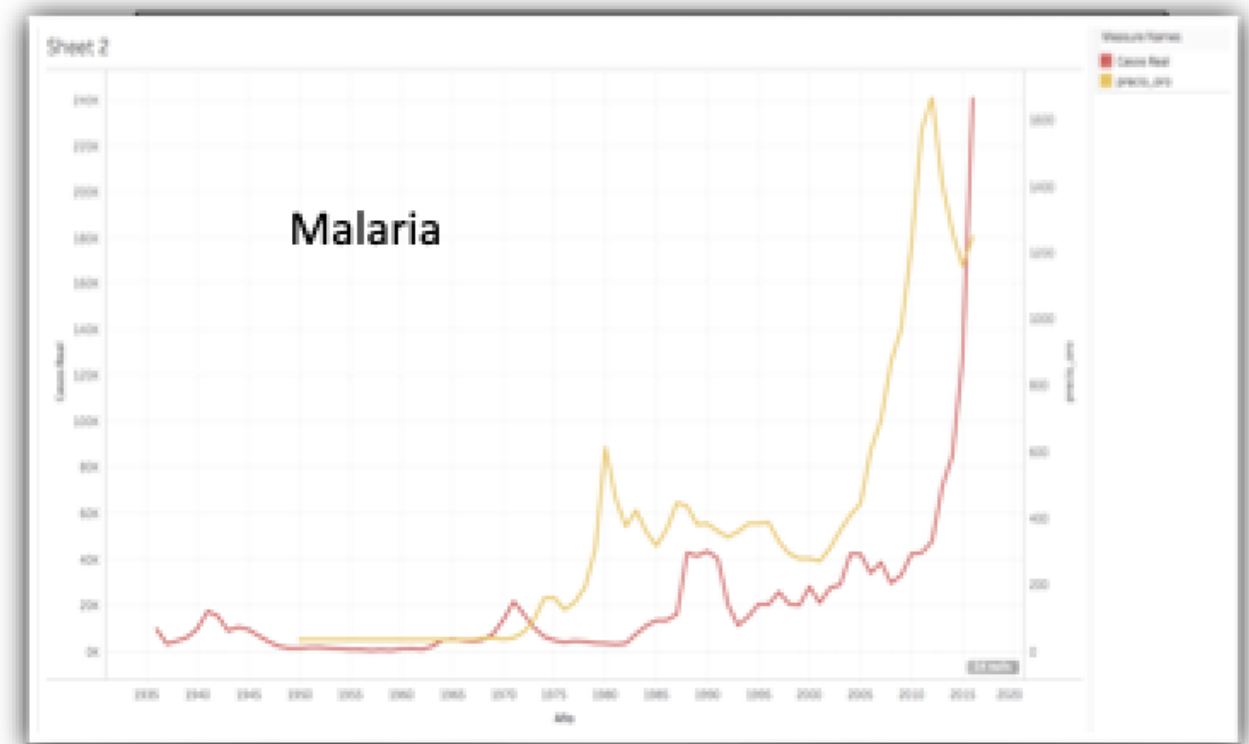
- Repetitive
- Clustered
- Persistence

Correlation power failures and deaths, per week.

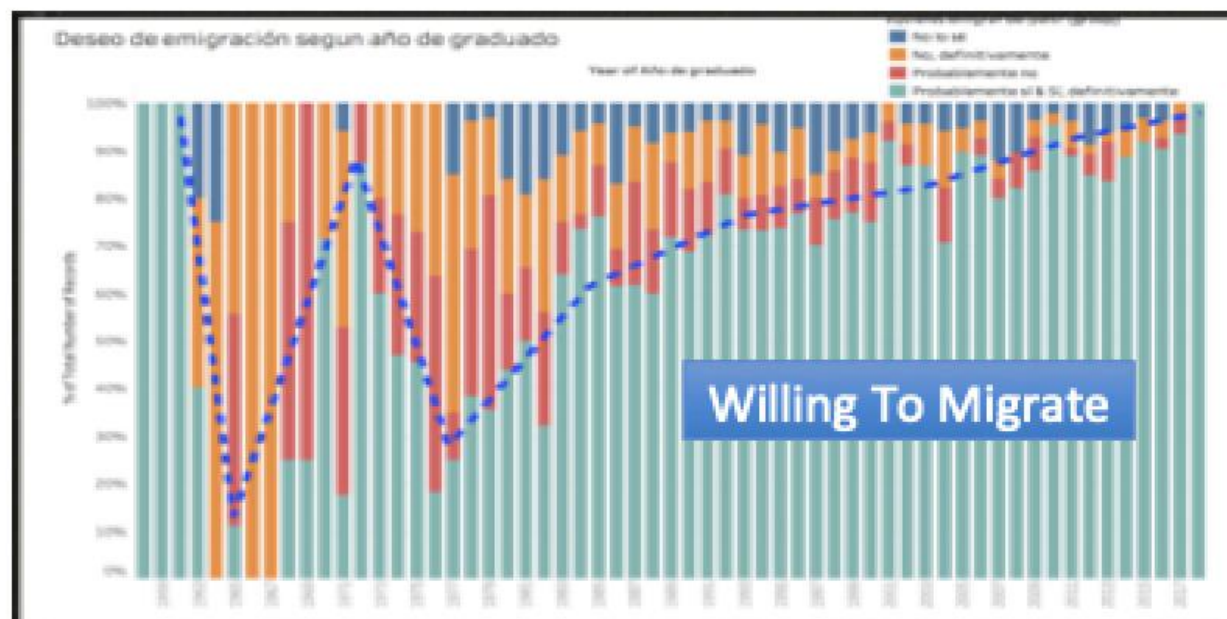
Disease surveillance



DIPHTHERIA
MEASLES



Human Resource (Physicians)



RRHH

Salary 7 \$ / Month



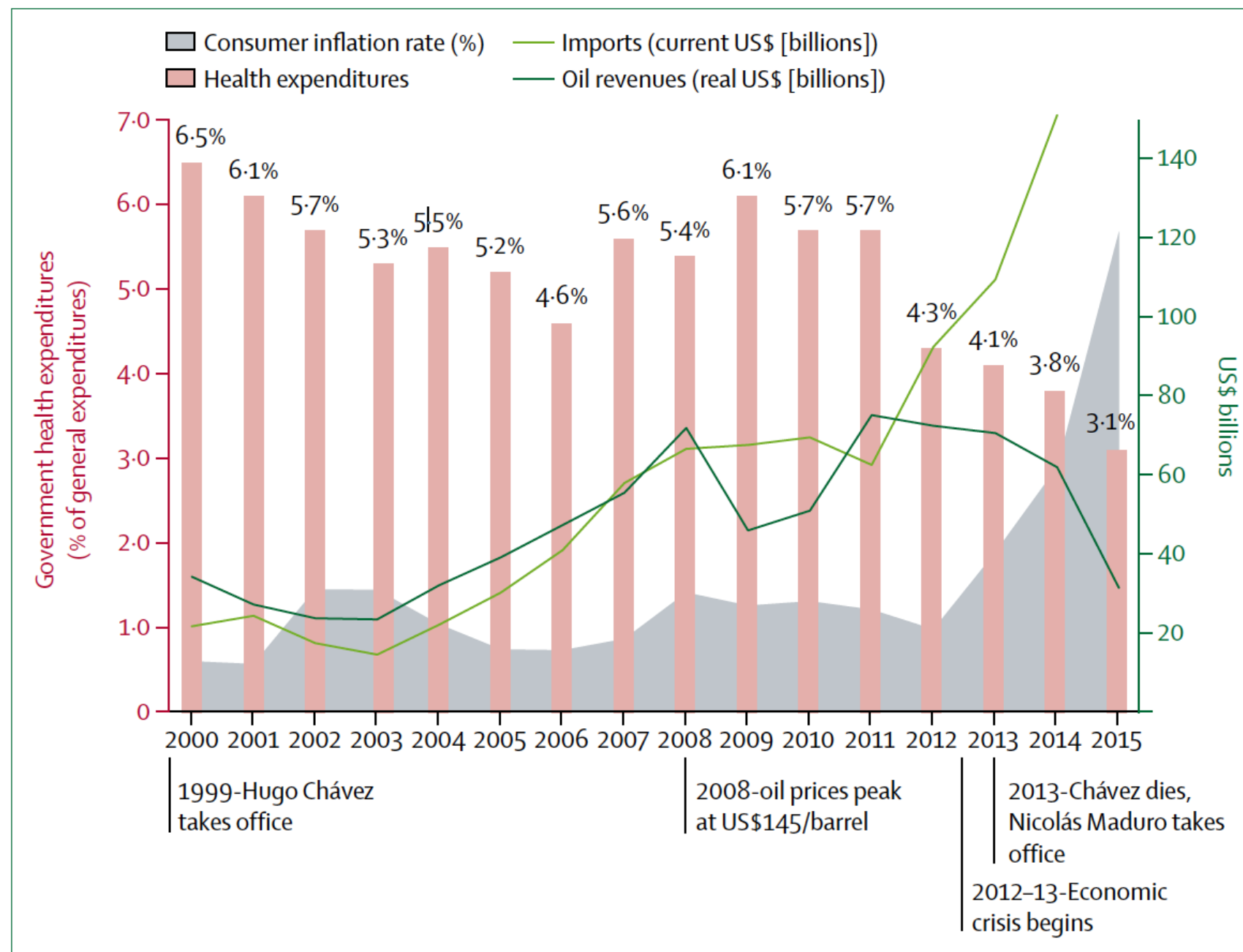
Fuente : Encuesta Migración sector salud

- 23% of the physicians are outside Venezuela
- almost 65% of young doctors are outside Venezuela

Venezuela's public health crisis: a regional emergency



Kathleen R Page*, Shannon Doocy*, Feliciano Reyna Ganteaume, Julio S Castro, Paul Spiegel, Chris Beyrer



Published Online

March 11, 2019

[http://dx.doi.org/10.1016/S0140-6736\(19\)30344-7](http://dx.doi.org/10.1016/S0140-6736(19)30344-7)

S0140-6736(19)30344-7

*Contributed equally

Johns Hopkins School of Medicine, Baltimore, MD, USA (K R Page MD); Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA (S Doocy PhD, P Spiegel MD, Prof C Beyrer MD); Acción Solidaria, Caracas, Venezuela (F Reyna Ganteaume BArch); and School of Medicine, Caracas, Universidad Central de Venezuela (Prof J S Castro MD)

Correspondence to:

Dr Shannon Doocy, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA

doocy1@jhu.edu

or

Dr Kathleen Page, Johns Hopkins School of Medicine, Baltimore, MD 21287, USA

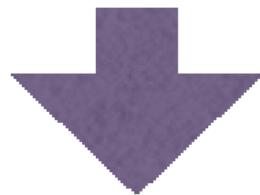
kpage2@jhmi.edu



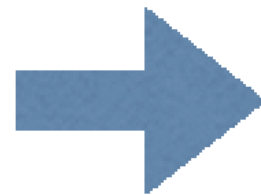
In Venezuela we have a complex and deep institutional problem that includes the health sector, the current crisis is not a temporary situation, it is a systematic problem caused by a way of governing

An comprehensive plan


Economic policy



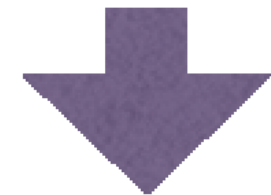
Employment opportunities



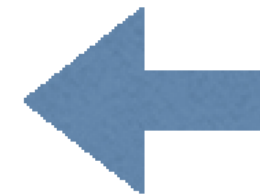
**a Venezuelan citizen
earning enough to
live**


- 
- + Fiscal policy
 - + Monetary politics
 - + Exchange Rate policy
 - + Commercial policy

Social policy



Skills for employment



- 
- + Education policy
 - + Health policy
 - + Social Security Policy
 - + Housing, infrastructure and services

Priority / Rationale

- Preventable Death
- Long term Impact (epigenetic burden)
- Quick Wins
- Trust and Governance
- New system Baseline

Hospital

Chronic
Diseases

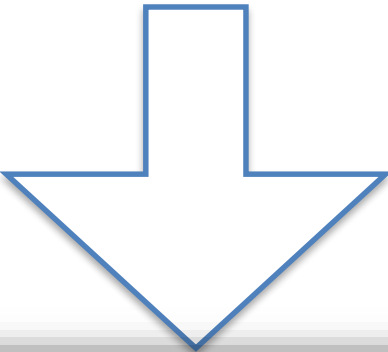
Vaccine
Epidemics

Maternal
Childhood

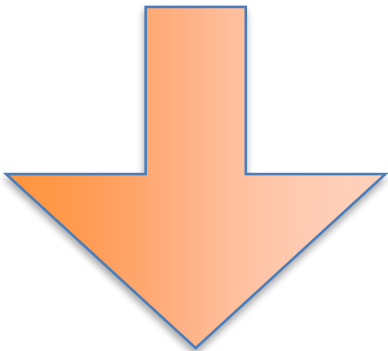
Malnutritio
n

Chronic and High Burden diseases example

Epidemiological Data



Mathematical Models Markov
Treatments Protocols



Cost

Logistics

CDV

DM

HTA

ID

COPD

CANCER

NEUROLOG

ambulatory Care Units

Program
Cost
Emergency
1st Year

2.800 million \$

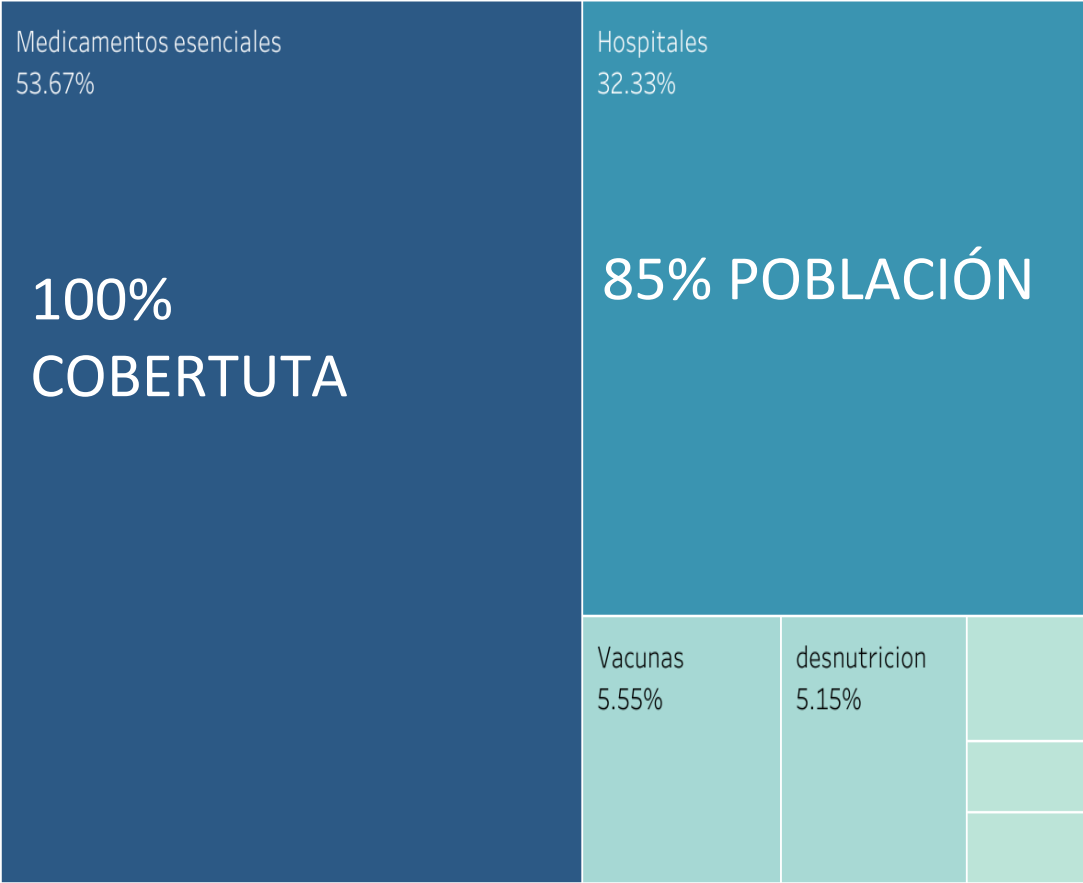
tabla montos por programa

Programa	% de total Monto junto co..	Monto
desnutricion	5.15%	149,232,000
Epidemias	1.53%	44,500,000
Hospitales	32.33%	937,262,848
Medicamentos esenciales	53.67%	1,555,797,953
RED PRIMARIA	0.90%	26,159,000
Salud materna	0.87%	25,110,448
Vacunas	5.55%	161,000,000

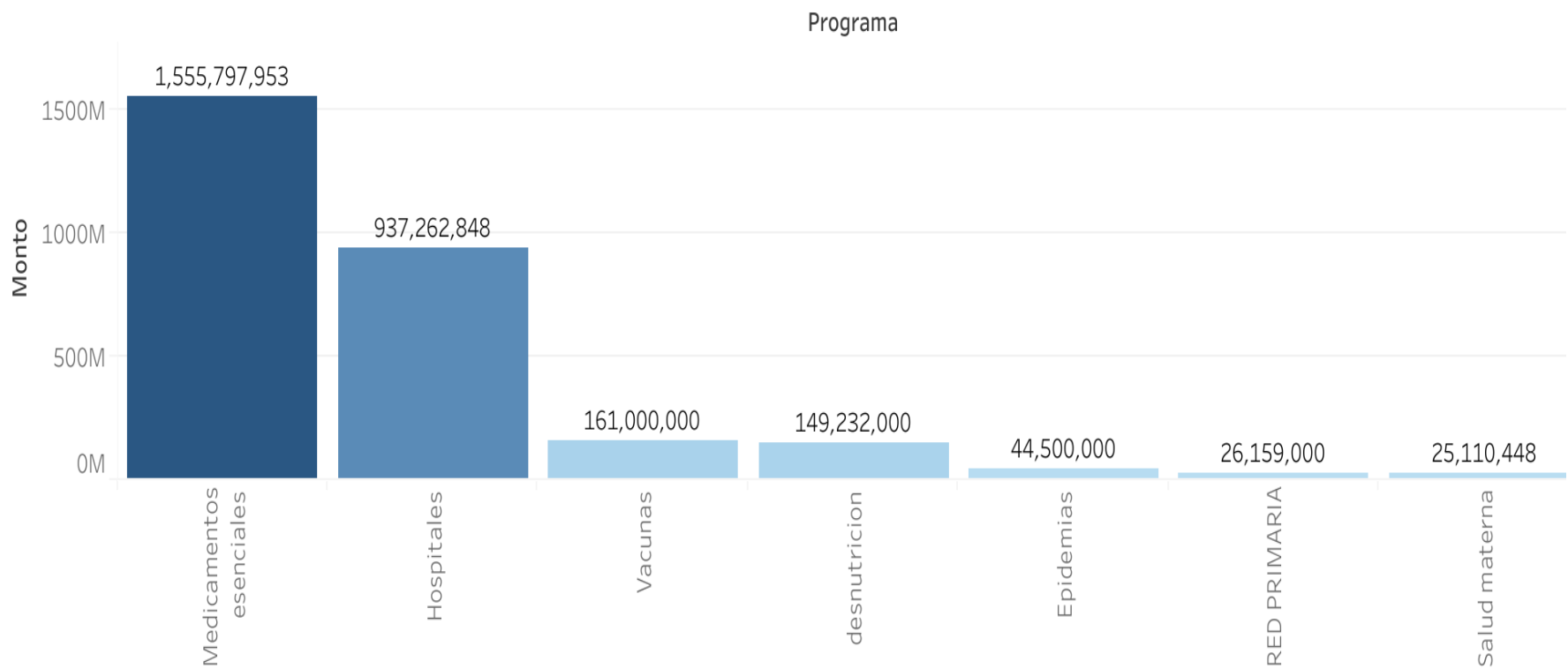
Monto Global

2,899,062,249

presupuesto global

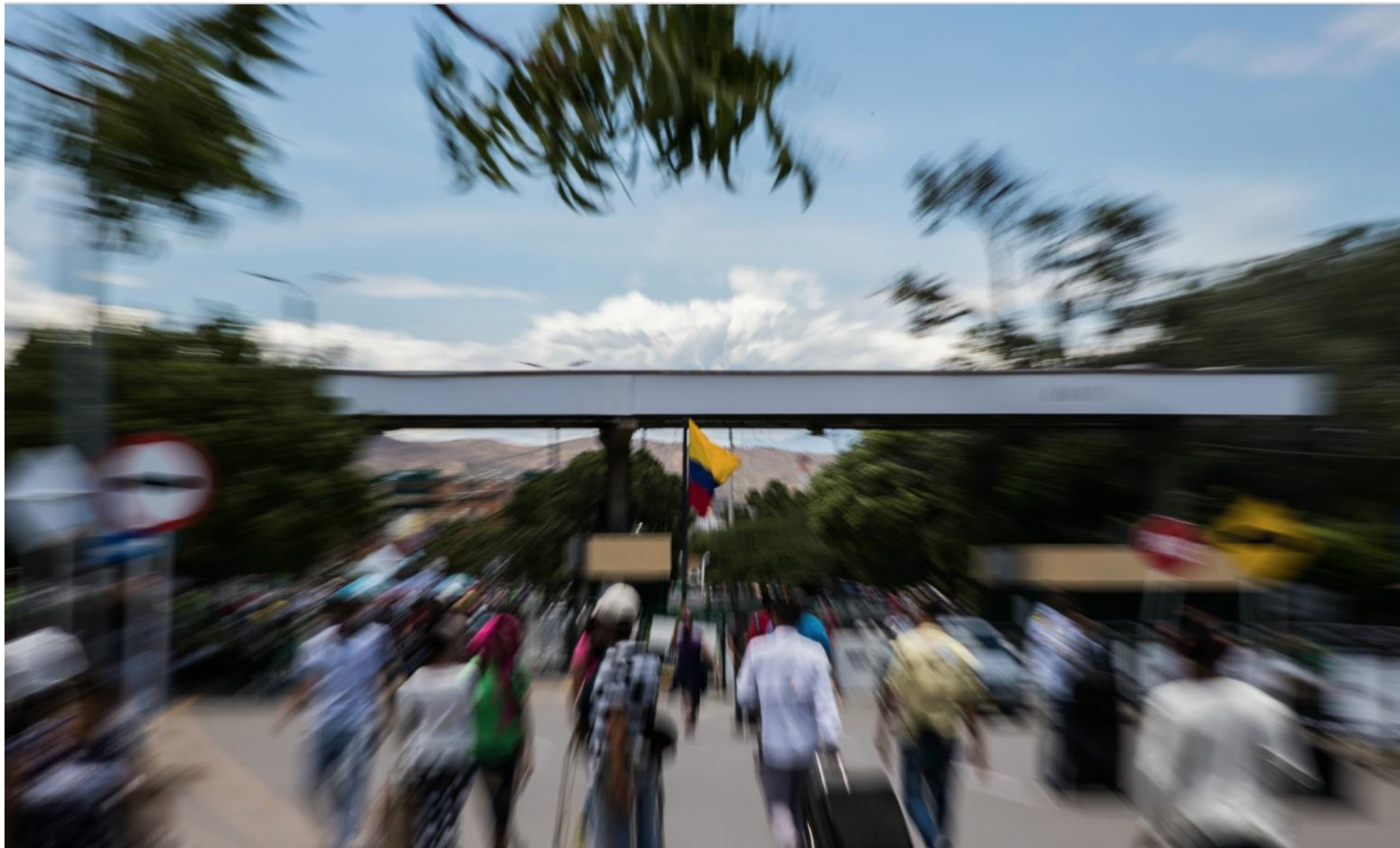


Sheet 2



¿Qué ha pasado con la ayuda humanitaria?

POR Julio Castro Méndez



Humanitarian Response Plan at a Glance

JULY - DECEMBER 2019

Summary

POPULATION IN NEED	POPULATION TARGETED	REQUIREMENTS (US\$)	PARTNERS	PROJECTS
7M	2.6M	\$223M	61	98

STRATEGIC OBJECTIVES

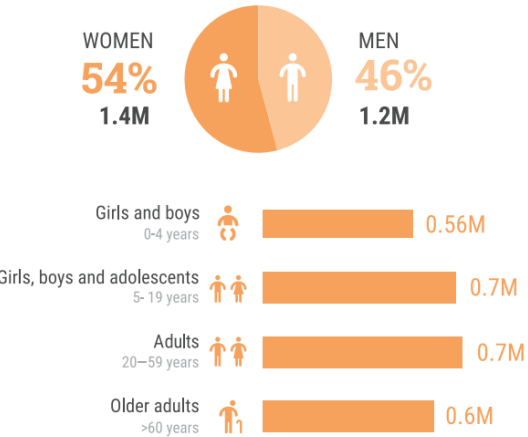
- 

SO 1
Ensure the survival and well-being of the most vulnerable people by age, gender and diversity, improving their access to goods and essential services in quantity, quality, continuity and territorial coverage under a rights-based approach.
- 

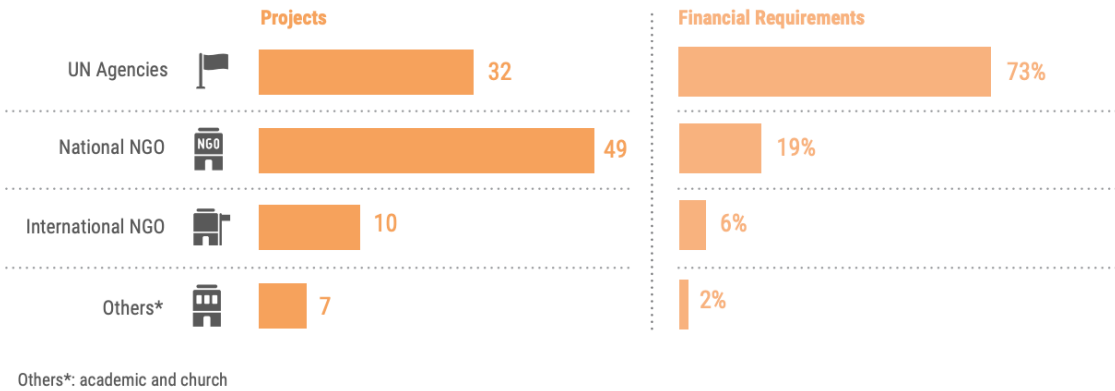
SO 2
Promote and reinforce the protection and dignity of the most vulnerable groups through a humanitarian response that strengthens institutional and community mechanisms, according to humanitarian principles and respect for human rights.
- 

SO 3
Strengthen the resilience and livelihoods of the most vulnerable people by age, gender and diversity and contribute to the sustainability of essential services.

TARGET POPULATION BY SEX AND AGE



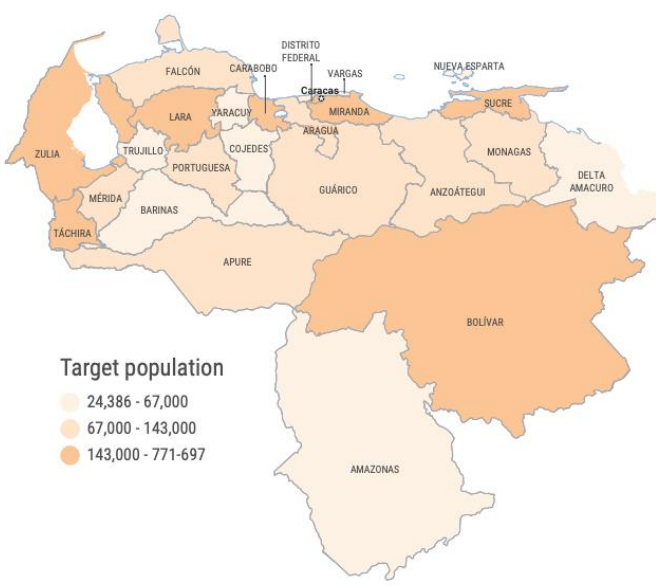
NUMBER OF PROJECTS AND FINANCIAL REQUIREMENTS BY TYPE OF ORGANIZATION









PRIORITIZED STATES



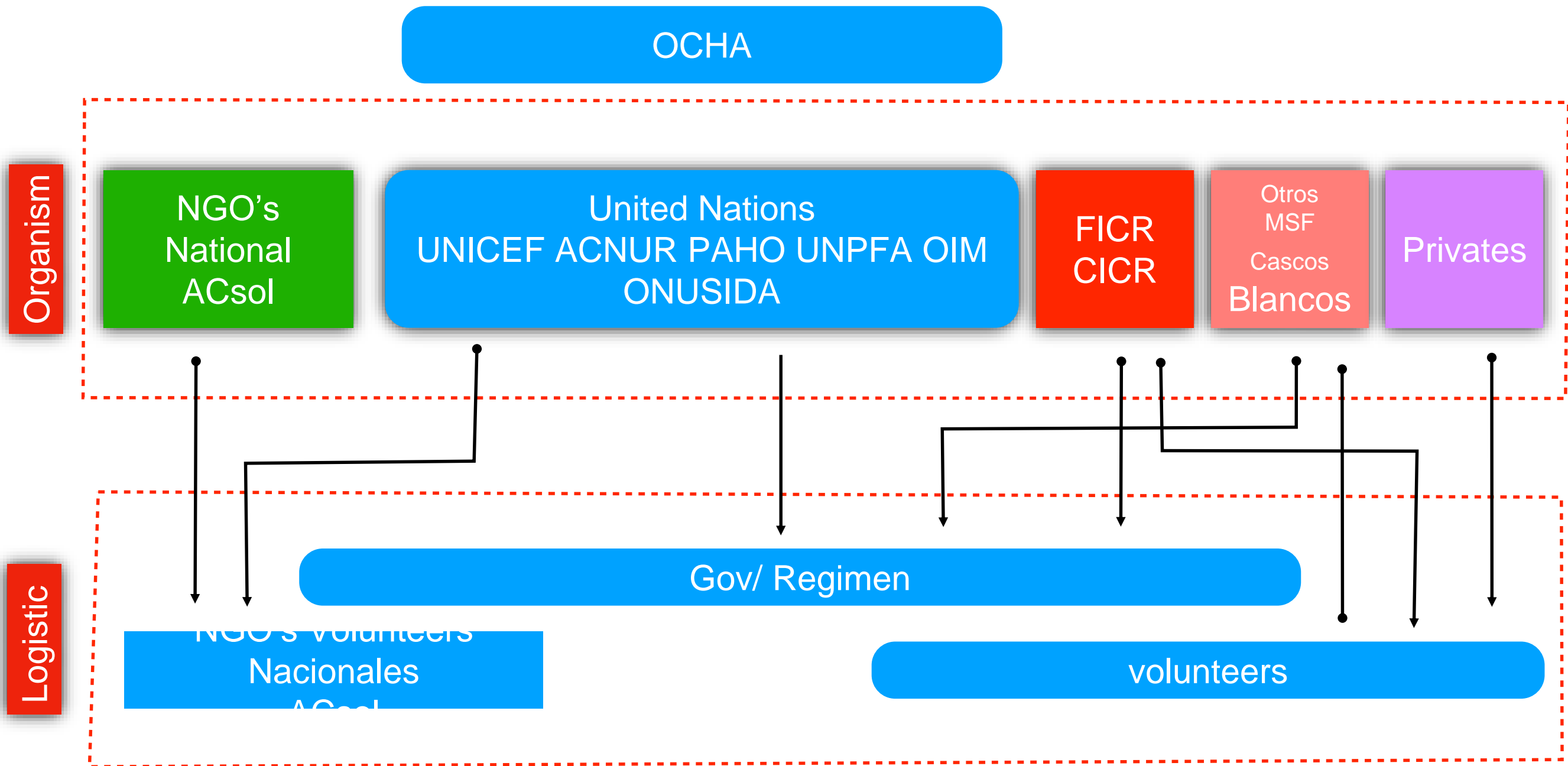
TARGET POPULATION BY STATE



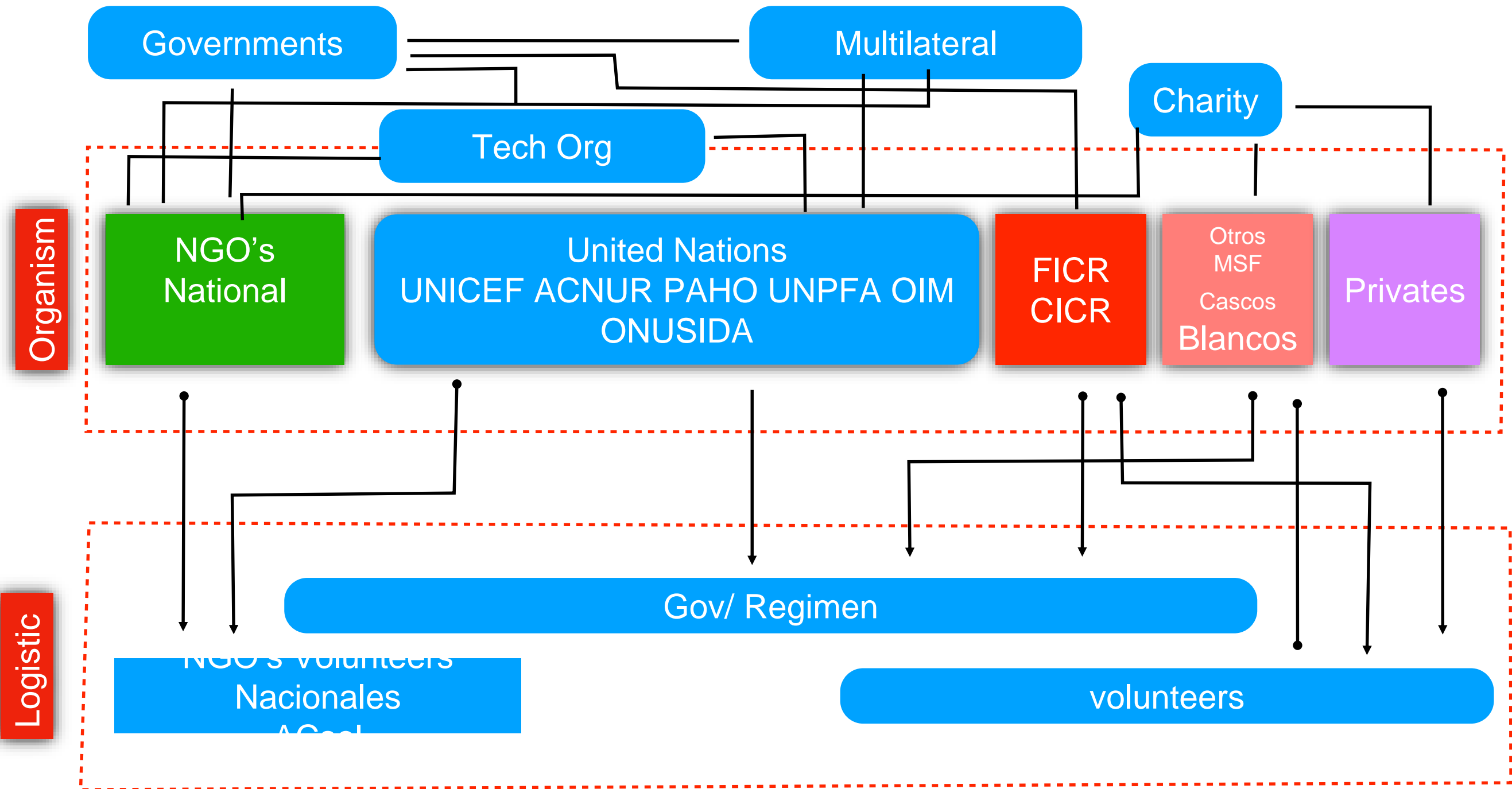
G. Summary of needs, target population and requirements

		TOTAL ¹		SEX AND AGE		TARGET POP. DISAGGREGATION			REQUIREMENTS
		People in Need	Target Population	0 - 4 years old	5 - 19 years old	20 - 60 years old	Over 60 years old	% Target population / Needs	Total
	WASH ²	4.3M	1.4M	118K	374K	749K	19K	33%	30.5M
	Education	2.2M	1.0M	396K	657K			45%	42.8M
	Nutrition	1.9M	0.5M	425K	27K	83K		26%	10.4M
	Protection	2.7M	0.7M	48K	281K	233K	165K	26%	41.2M
	Health	2.8M	1.2M	465K	60K	90K	633K	43%	61.6M
	Food Security	3.7M	0.3M	28K	67K	177K	19K	8%	34.7M
TOTAL		7.0M	2.6M	560K	706K	756K	639K	38%	\$223M ³

Humanitarian Estructure



Humanitarian Estructure Funding



Bottom line of Humanitarian situation

Needs exceeding capacity/funds

Logistics constrains

Origins of crisis still

Needs tend to increase

Regimes interfere with humanitarian structure

There is no better approach that turn the origin or cause of the man made crisis
in the meanwhile our ethical mandate is to help people, prevent death or suffering

Rebuilding Strategies

Funds

Multilateral , Bilateral , international , Investment .

Human Resources

Plan for repatriate , Training , Scholars

Solidarity

Faith , Church , religions, goodwill, Diaspora

Knowledge

Experience , skills, Mindsets, Institutions



@medicosxlasalud
@juliocastrom

www.encuestanacionaldehospitales.com