Health system situation and Proposals
**Long History Short**

**Crude Mortality**

- Colombia
- Venezuela

**Trends In Crude Mortality**

Year of año: 1993
Venezuela: 5.014
Excess Mortality
285,000 lives 2004-2014

Rational for Chronic diseases burden
Outcomes
Migration Crisis

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

The measles outbreak began in 2017 with 6370 confirmed cases reported in Venezuela thru November 2018.

*Only one measles case was reported in all of Brazil, Colombia, Peru and Ecuador in 2016 and 2017.
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. grille, Marlianni Márquez, Juan Hernández-Villena, María A. Escalona-Rodríguez, Gabriela M. Blohm, Isis Mejías, Hurlades Urbina-Medina, Alejandro Rioblez, 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 Cenney, Sergio Luc, Juan D. Ramírez, Emilia Sordillo, Martin I. Ovandun, Mario Casto, María Branco, and Ingrid Cifuentes

Figure 2. States affected by (A) measles and (B) diphtheria (blue), Venezuela, 2017–2018. Circles indicate neighboring countries reporting
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. 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.

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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 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.
Tendencias de IgM Positivas (absolutos)

positivos Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Result. SEROLOG</th>
</tr>
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<tbody>
<tr>
<td>2013</td>
<td>116</td>
</tr>
<tr>
<td>2014</td>
<td>250</td>
</tr>
<tr>
<td>2015</td>
<td>499</td>
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<tr>
<td>2016</td>
<td>565</td>
</tr>
<tr>
<td>2017</td>
<td>536</td>
</tr>
<tr>
<td>2018</td>
<td>640</td>
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</table>

todos positivos Q

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Result. SEROLOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2013</td>
<td>10</td>
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<tr>
<td>Q3 2014</td>
<td>20</td>
</tr>
<tr>
<td>Q3 2015</td>
<td>50</td>
</tr>
<tr>
<td>Q3 2016</td>
<td>70</td>
</tr>
<tr>
<td>Q3 2017</td>
<td>90</td>
</tr>
<tr>
<td>Q3 2018</td>
<td>110</td>
</tr>
</tbody>
</table>

Quarter of Date Fin

Centro
- avila
- CMDLT
- metro
- sta sofia
Regional pattern Of Shortages
Regarding electricity service, 67% of hospitals reported having suffered power outages. In addition, 32% of hospitals reported equipment failures after restoring power. Hospitals reported a total of 105 hours without electricity.
Average of electrical blackouts (hours)
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 patient 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.
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 test. 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.
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

Correlation power failures and deaths, per week.

- Repetitive
- Clustered
- Persistence

Deaths associated to power failure: 95
Disease surveillance

DIPHTHERIA
MEASLES

Malaria
Human Resource (Physicians)

- 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*, Feliciana 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

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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

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

a Venezuelan citizen earning enough to live

Social policy

Skills for employment

- Education policy
- Health policy
- Social Security Policy
- Housing, infrastructure and services
• Preventable Death
• Long term Impact (epigenetic burden)
• Quick Wins
• Trust and Governance
• New system Baseline
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
<table>
<thead>
<tr>
<th>Programa</th>
<th>% de total</th>
<th>Monto</th>
<th>Monto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desnutrición</td>
<td>5.15%</td>
<td>149,232,000</td>
<td></td>
</tr>
<tr>
<td>Epidemias</td>
<td>1.53%</td>
<td>44,500,000</td>
<td></td>
</tr>
<tr>
<td>Hospitales</td>
<td>32.33%</td>
<td>937,262,848</td>
<td></td>
</tr>
<tr>
<td>Medicamentos esenciales</td>
<td>53.67%</td>
<td>1,555,797,953</td>
<td></td>
</tr>
<tr>
<td>RED PRIMARIA</td>
<td>0.90%</td>
<td>26,159,000</td>
<td></td>
</tr>
<tr>
<td>Salud materna</td>
<td>0.87%</td>
<td>25,110,448</td>
<td></td>
</tr>
<tr>
<td>Vacunas</td>
<td>5.55%</td>
<td>161,000,000</td>
<td></td>
</tr>
</tbody>
</table>

### Presupuesto Global

#### 100% COBERTUTA

- Medicamentos esenciales: 53.67%
- Hospital: 32.33%

#### 85% POBLACIÓN

- Vacunas: 5.55%
- Desnutrición: 5.15%

### Monto Global

2,899,062,249

### Sheet 2

- **Medicamentos esenciales**: 1,555,797,953
- **Hospitales**: 937,262,848
- **Vacunas**: 161,000,000
- **Desnutrición**: 149,232,000
- **Epidemias**: 44,500,000
- **RED PRIMARIA**: 26,159,000
- **Salud materna**: 25,110,448

2.800 million $
¿Qué ha pasado con la ayuda humanitaria?

POR Julio Castro Méndez
Humanitarian Response Plan at a Glance

**Summary**

<table>
<thead>
<tr>
<th>Population in Need</th>
<th>Population Targeted</th>
<th>Requirements (US$)</th>
<th>Partners</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>7M</td>
<td>2.6M</td>
<td>$223M</td>
<td>61</td>
<td>98</td>
</tr>
</tbody>
</table>

**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**

- **WOMEN**
  - 54% (1.4M)
- **MEN**
  - 46% (1.2M)

- **Girls and boys (0-4 years)**: 0.56M
- **Girls and adolescents (5-19 years)**: 0.7M
- **Adults (20-59 years)**: 0.7M
- **Older adults (≥60 years)**: 0.6M

**Number of Projects and Financial Requirements by Type of Organization**

- **UN Agencies**: 32 projects, 73% financial requirements
- **National NGO**: 49 projects, 19% financial requirements
- **International NGO**: 10 projects, 6% financial requirements
- **Others**: 7 projects, 2% financial requirements

**G. Summary of needs, target population and requirements**

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>SEX AND AGE</th>
<th>TARGET POP. DISAGGREGATION</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People in Need</td>
<td>Target Population</td>
<td>0 - 4 years old</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WASH</strong></td>
<td>4.3M</td>
<td>1.4M</td>
<td>118K</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>2.2M</td>
<td>1.0M</td>
<td>396K</td>
</tr>
<tr>
<td><strong>Nutrition</strong></td>
<td>1.9M</td>
<td>0.5M</td>
<td>425K</td>
</tr>
<tr>
<td><strong>Protection</strong></td>
<td>2.7M</td>
<td>0.7M</td>
<td>48K</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>2.8M</td>
<td>1.2M</td>
<td>465K</td>
</tr>
<tr>
<td><strong>Food Security</strong></td>
<td>3.7M</td>
<td>0.3M</td>
<td>28K</td>
</tr>
</tbody>
</table>

**TOTAL**: 7.0M | 2.6M | 560K | 706K | 756K | 639K | 38% | $223M"
There is no better approach that turns 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