

# Bottom-up strategy for public health to address COVID-19 in Patagonia

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## Introduction

The purpose of this document is to provide an understanding of how the Government and local communities in the Andean region in Patagonia can better work together to address COVID-19. The key recommendations can also be applied to other public health infectious disease outbreak responses in the region such as Hanta Virus to be more effective and sensitive to local needs.

The document uses the following key terms:

Top-down strategy describes policy and regulations that come from top, government structures 'down' to communities and is hierarcical and runs the risk of being overly controlling.

Bottom-up strategy aims to give individuals, social groups, families and communities more control over the things that affect their lives and health and strengthens a disease outbreak response by promoting involvement and program adaptation at a local level.

## The context

A study was carried out in 4 municipalities in the Chubut side of the Andean region in Patagonia, Argentina: Epuyen, El Hoyo, Lago Puelo and El Maitén. In charge of each municipality is the Mayor and a collegiate body called a Deliberative Council which is normally renewed every 4 years.

**Table 1: Population and geographic data**

	El Maiten	Epuyen	Lago Puelo	El Hoyo
Population (1)	5034	1989	7943	3698
Approximate area of the territory	170 km <sup>2</sup>	827 km <sup>2</sup>	122 km <sup>2</sup>	141 km <sup>2</sup>
% households with unmet basic needs (2)	9.2	10.7	8.1	11

1. Population estimated at 1 June 2020 according to Census 2010.

2 National Census Data 2010. Homes with unmet needs are considered to have at least one of these characteristics: inconvenient housing, health deficiencies (including lack of toilet), overcrowding, school absence, impaired subsistence capacity.

This Andean region is a micro-region located around the 42nd parallel, which borders the provinces of Rio Negro (southwest boundary) with the province of Chubut (northwest boundary). The region is linked by a national highway that crosses the Argentine Republic from north to south. Through this highway the area under study is located 114 km away from the city of Esquel to the south and 128 km away from Bariloche to the North. The region is covered by forests with a smaller area dedicated to agriculture, mainly fruit and hops, and the bulk of economic activity comes from tourism and state services such as education, health and administration. It is not usual in Patagonia that so many small border towns coexist, with political-administrative autonomy and without being satellites of a large city. Consequently, some municipalities have a small population and a large territory (such as Epuyen), while others have a larger population, but a smaller territorial area (such as Lago Puelo).

### The data collection

The data was collected using a mixed methods approach with a questionnaire based on 2 open-ended questions and short telephone interviews with key stakeholders who had been involved in local policy decisions associated with COVID-19.

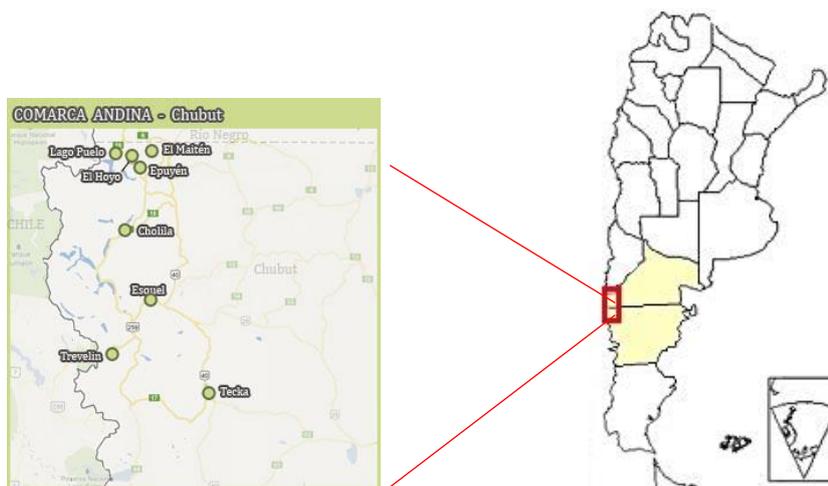
#### Questions asked:

Could you describe the process by which the COVID-19 measures were formulated? (those who participate, how priorities are chosen, which elements are considered, which problems are frequently addressed, etc.)

Could you tell us if there is any device, mechanism or process by which the community is consulted on the development and implementation of these measures?

Due to the sensitivity generated by the topic, the choice of candidate to answer the questionnaire was an important factor and was made through facilitators such as regional political actors and social communicators.

**Figure 1: Location of the Andean region in relationship to the Argentine territory**



Once the key stakeholders were identified a first phone call was used to explain the objectives of the data collection and they were also sent in writing more details about the process of the interview and questionnaire. An agreement on how to respond (by written response and/or by recorded telephone response) was reached before proceeding in each locality to gain the perspectives of the local decision-makers on policies about COVID-19. Each locality was also asked to provide documented evidence of the process of planning and local measures to control COVID-19.

### **Key findings**

The findings found commonalities in how the COVID-19 outbreak was addressed in the different localities involved in the data collection. Therefore, the findings have been presented under key headings that cover these common factors rather than as an analysis of the situation in each locality: the overall process of implementation and; the local process of implementation of control measures.

### **The overall process of implementation**

The overall process of implementation of the measures to combat COVID-19 can be divided into two phases. Firstly, national and provincial measures were communicated down to local authorities to validate the objectives to mitigate the impact of COVID-19. The measures were geared towards complying with directions from top-down state authorities within the context of the urgency of the disease outbreak. Secondly, there was an unfolding of the regulatory hierarchy to the local situation including to commercial sector standards for the mitigation of the impact of COVID-19. Social and commercial sectors affected by top-down measures were an important consideration during the second phase which led to the adaptation of specific protocols to lower the risk of any negative economic impact. This was sometimes pressured by local actions such as a demonstration by producers, harvesters and builders affected by the economic hardships created by the outbreak.

The overall process of implementation was top-down, hierarchical and somewhat bureaucratic and did not initially consider bottom-up inputs as an important part of planning or of the delivery of COVID-19 control measures. The overall process of implementation was also based on previous experiences of disease outbreak responses in the Andean region including for the Hanta virus in 2018-2019.

### **An Outbreak of Hantavirus**

An outbreak of Hantavirus Cardio-Pulmonary Syndrome was reported in the town of Epuyen between November 2018 and March 2019. This zoonotic disease is of episodic appearance in the Andean region and has a wild mouse as a natural reservoir which passes the virus onto humans by saliva, urine or faeces. The outbreak was characterized by the human transmission of 34 confirmed cases, of which 12 people died. Authorities first restricted all group activities in the town and a few days later, through legal action generated by the Ministry of Health, isolation was declared in family members and close contacts of confirmed cases, that lasted 45 days. There was no mechanism for bottom-up approaches in the outbreak response.

### **The local process of implementation of control measures**

An organizing body was created in each municipality, the Municipal Emergency Committee (COEM), a standard practice in the region. The COEM was an independent body that provided legitimacy to the local measures to control COVID-19 and typically included representatives of the local hospital, the police, firefighters, civil defense and education services. The COEM could also have a wider remit that operated as a forum for discussion and agreed upon specific control measures, which were then put before the municipal executive for the final decision.

The process of implementing measures at the local level was initially based on following the top-down instructions for isolation, restrictions on traffic and socio-economic activities. The local communities acted by validating these measures and facilitating their implementation in their area of responsibility including a determination on the intensity of the measures imposed. For example, in some localities the traffic restrictions were extreme, with intense monitoring of the entry, exit and isolation of vehicles, while in other locations the level of control was much more relaxed.

However, as early as December 2020 there emerged a desire for more autonomy in regard to the implementation of local measures. Economic considerations were important for each locality and it was observed that in some areas additional measures were implemented as an adaptation to those from the federal and provincial authorities. A resistance towards top-down control during the COVID-19 outbreak was observed which led to a series of institutional arrangements between the different social and political actors. This led to the development of specific protocols to guide how each local measure should function and was not a planned activity but occurred as a response to social tensions that occurred independently in different communities. For example, the suicide of a young man that led to a debate and a conflict between the deliberative council and the municipal council on the implementation of regulations at the local level.

## **Conclusions**

There were no institutional mechanisms for a bottom-up strategy. No planning tools or mechanisms to include community members in the COEM, to encourage flexibility and autonomy, to share experiences between COEMs or to communicate local ideas to provincial or national actors. Later in the outbreak, out of a need of necessity, some local authorities took into account the opinion of sectoral and community actors in the implementation of local measures. However, even in localities with greater social dialogue, this did not happen through institutional intervention, but was spontaneous, driven by local tensions. Despite the lack of formal spaces for community involvement, these actions made it possible to create an agenda to address local concerns in regard to COVID-19. A bottom-up approach aims to reduce local tensions so that community voices can be heard and community needs can be addressed during a disease outbreak.

In practice, an appropriate balance of both top-down and bottom-up strategies are necessary to provide an open and more effective style of working together that also builds public trust and enables people to take positive actions to improve their health. Bottom-up and top down strategies address both community needs and government agendas and offers a greater level of participation, compliance to control measures, local autonomy and project sustainability.

**Key recommendations**

To promote better planning and the inclusion of communities through both bottom-up and top-down strategies in the Andean region, the following recommendations are proposed:

1. Use a parallel-tracking diagram for the planning of COVID-19 outbreak responses (see below).
2. Provide a mechanism to include the representation of local leaders on the COEM.
3. Provide a mechanism to encourage flexibility and autonomy for the COEM to adapt broader top-down guidelines for COVID-19 control measures.
4. Provide a mechanism for COEMs to share experiences with one another about COVID-19 and for other disease outbreaks such as Hanta virus.
5. Enable the COEMs to communicate their key ideas and experiences to authorities at the provincial and national level.

**Parallel-tracking for the prevention of COVID-19 in the Andean region**

