Response to COVID-19

Pune, Maharashtra

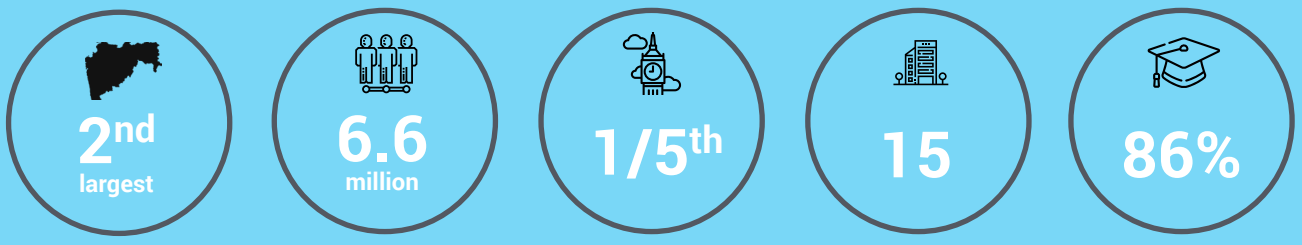
Context

As the world continues to grapple with the novel coronavirus, efficient responses to the pandemic continue to present a challenge for many countries. India is no exception. India, a country of great diversity, varies greatly from state to state; even city to city. While the characteristics of the disease and principal modes of its transmission are similar across the world, local factors such as population density, patterns of social interaction and the capability of local public health systems determine the course of the disease. In many places, innovations driven by local initiative, resourcefulness, and commitment are leading to inspiring success stories.

One of India's examples of relative success in dealing with the spread of COVID-19 can be witnessed in Pune. Pune is the second largest city in Maharashtra, a western coastal state in India. With an estimated population of 6.6 million[1] in 2020, the city has a population larger than that of the country of Finland living in an area one fifth the size of London. Administered by the Pune Municipal Corporation, it is divided into five zones comprising 15 ward offices.

Although Pune's high population density poses a threat, the city also has unique strengths. Its wide and active network of civil society organisations with a long history of working with the local population, particularly its informal settlements, and high literacy rate (86%) provide opportunities to address the challenge posed by the pandemic.

Pune City: Overview

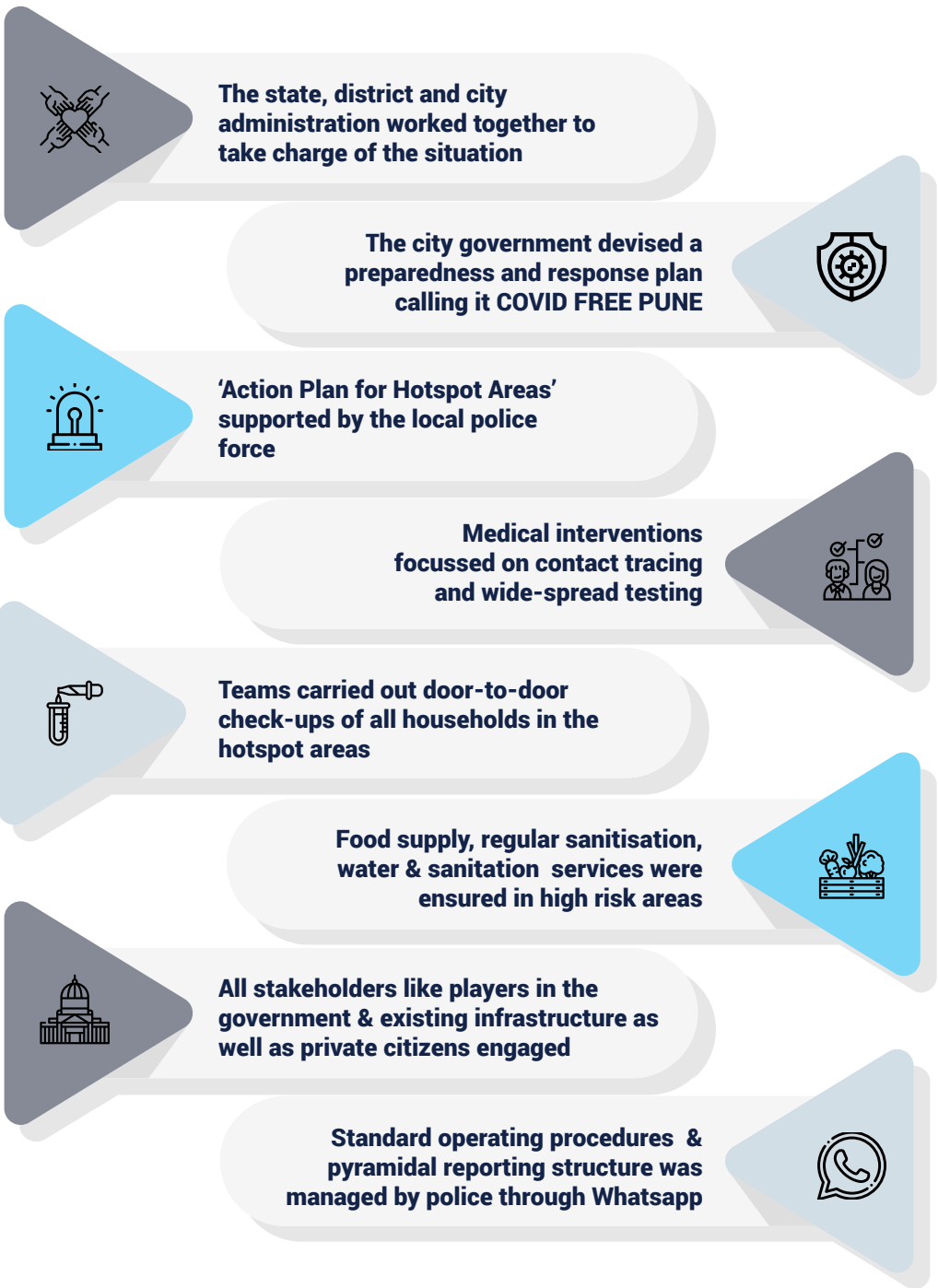


The first case of COVID-19 was detected in Pune on 9th March 2020. The city created a COVID-19 response team and a 106-bed isolation facility. Meetings were held with department heads, government hospitals and public representatives to devise a preparedness plan.

After the detection of the first case, it took 48 days for Pune to cross 1000 cases but only 11 more days to cross 2000[2]. A decision was taken to identify and focus on hotspots within the city to control community spread. The city government identified five wards with the highest number of cases and created the Action Plan for Hotspot Areas to address the root causes of COVID-19 spread in these areas[3]. The highest density of cases was reported from informal slum settlements within these wards. It was understood that the lack of space within these settlements made it a challenge to implement proper social distancing within them, as was the case in places like Dharavi—Asia's largest slum, located in Mumbai, the city with the most COVID-19 cases in India—which witnessed an early spread.

1. https://worldpopulationreview.com/world-cities/pune-population/
2. https://timesofindia.indiatimes.com/city/pune/in-just-11-days-areas-in-pmc-limits-add-1000-covid-cases/articleshow/75612047.cms
3. Bhavani Peth, Kasba-Vishrambaugwada, Dhole Patil Rd, Yerwada-Kalas-Dhanori, and Shivaji Nagar-Ghole road

Innovations and outcomes



The state, district and city administration worked together to take charge of the situation. Officials met with various stakeholders, including private hospitals and civil society groups.

The city government devised a preparedness and response plan to tackle the crisis, calling it COVID FREE PUNE, which acted as an acronym for the various interventions. Operationalising this plan required engagement with local donors, community groups, and existing programs to mobilise the required resources and capacities.

Within the overall plan, the Action Plan for Hotspot Areas focussed on medical interventions and supplies, water and sanitation support, food and shelter planning and public awareness supported by the local police force.

Targeted attention was paramount. Medical interventions focussed on contact tracing and wide-spread testing, with a focus on high and low risk contacts of confirmed cases. The city established dedicated COVID care booths in hotspot areas and allotted 10 dedicated ambulances for ward-wise response. It also designated 75 teams per ward for the five hotspot wards and 25 teams in the remaining 10 wards.

Action was painstaking and localized. These teams carried out door-to-door check-ups of all households in the hotspot areas. Immunity-enhancing medicine was also prescribed, as per state guidelines on the handling of symptomatic persons. Individuals found to be negative were discharged with a packet of five masks, sanitizer, soap and floor disinfectant. The city tried to ensure comprehensive medical, nutritional, and psycho-social care for those identified as COVID-19 positive. In order to maximise identification of cases, the city adopted standardized systems for molecular testing, supported by assured access to reagents and kits.

Along with precautionary measures, great care was taken to ensure that food was not in short supply. Hotspot areas were also sanitized by municipal workers, and water and sanitation services were ensured in high risk areas. In areas under containment, schools were designated as night shelters and central kitchens provided cooked food so that people would not have to venture out for groceries.

It was important to engage all stakeholders, including players in the government and existing infrastructure as well as private citizens. The Pune Police played an important role in this plan. It designated 7,500 Special Police Officers (SPO) with some specific powers to help the police to manage micro-clusters, places with high population density and over five positive cases. SPOs were tasked with providing essential services and spreading awareness about social distancing and lockdown norms. In future, these SPOs may become volunteers for supporting COVID Care Centres.

Standard operating procedures were developed for the city, and the Police developed a pyramidal reporting structure that was managed through Whatsapp groups.

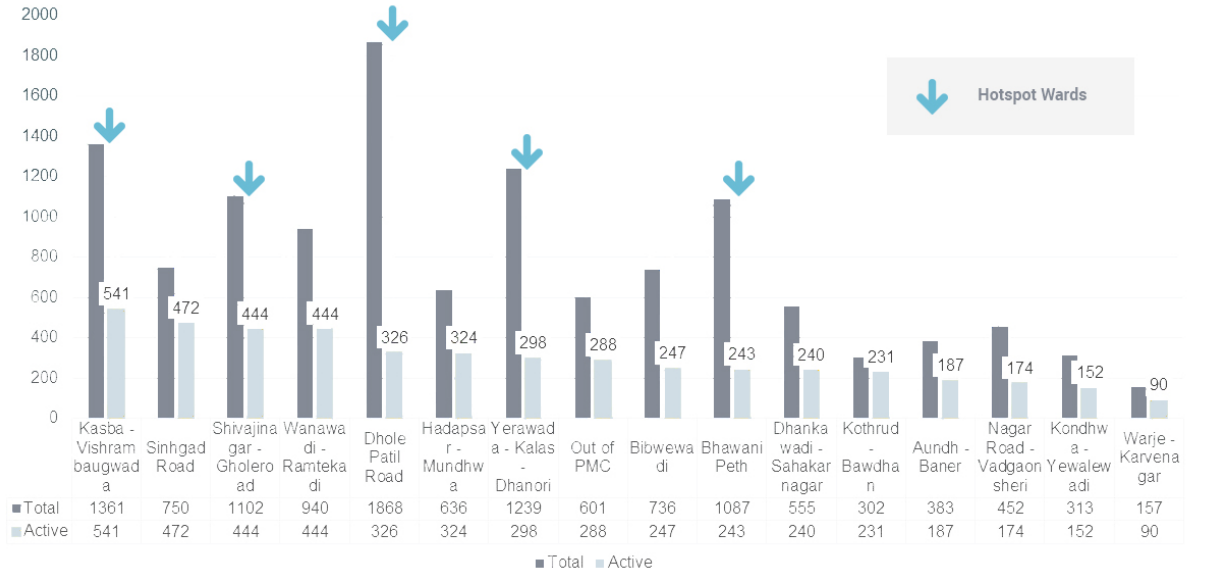
The municipal corporation displayed helpline numbers at all prominent locations. They established two-way communication channels for community and public information sharing such as 24X7 hotlines (available via text and phone-calls) and responsive social media and radio shows, with systems to detect and rapidly respond to and counter misinformation.

Outcomes and way forward

Through these actions, the city was able to successfully slow down the spread of the infection in hotspots, evident in the reduction of active cases as shown in graph 1, below.

Ward wise Positive Cases Distribution

As of Jun 21, 2020



Ward mapping completed for: 20654 Active Cases mapped: 3737. Data updated as per Medical Records.

Graph 1: Showing how active cases in Hotspots were brought down below normal levels of other wards

While cases of COVID-19 continue to rise in Pune, with a current total of more than 17, 000 as of Wednesday, 24th June, the administration, police force and citizens' groups are working together to slow down the spread of the virus. The number of recovered persons now are more than number of active cases. If they are able to flatten the curve, they will help prevent overwhelming the capacity of local health infrastructure.

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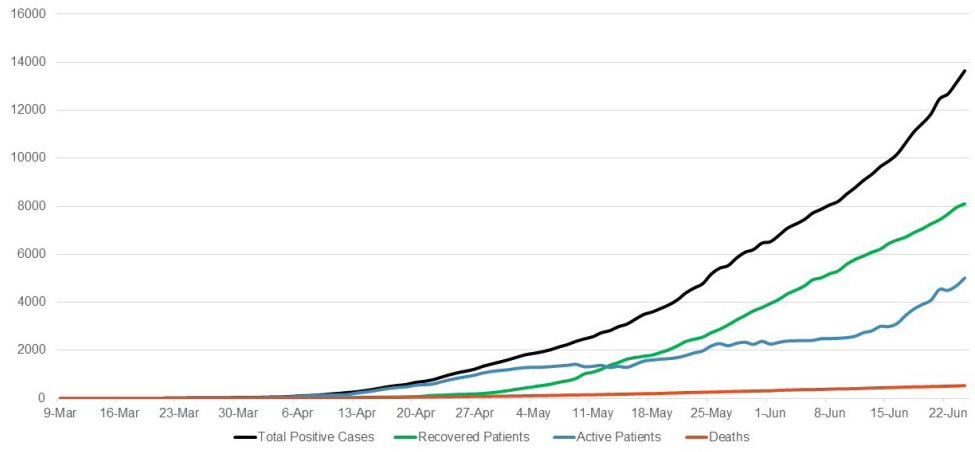

COVID-19 Pune Graph, June 2020

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