COVID-19
Diminishing the impact

Every day, coronavirus disease 2019 — or COVID-19 — is found in more communities across the nation. Its spread is based on 3 factors:
Transmission of the virus has occurred since at least December 2019; symptoms of the disease can take up to 14 days to surface; and infected people can transmit the virus before symptoms appear.

It is not always possible to identify the original sources of infection, which means community-based transmission is occurring.

In mid-March, the World Health Organization declared COVID-19 a global pandemic. In addition, the CDC issued interim guidance for permissive mitigation that will help inform a strategy to:

• Slow the spread of the virus
• Reduce the impact on our overburdened health care system
• Provide the right level of care
• Expand testing capabilities and increase hospital capacity
• Reduce exposure to droplets throughout medical facilities

These steps will help ensure continuous operations of our impacted health care system and optimize its response to COVID-19 in the months to come.

What is COVID-19 and how is it spread?
COVID-19 is caused by the Severe Acute Respiratory Syndrome Coronavirus Type 2 (SARS-CoV-2), a contagious virus that can cause a fever, cough, and shortness of breath. Based on multiple early reports, the characteristics of the virus include:

• Incubation period: Estimated to be 2 to 14 days
• Mode of transmission: Primarily spread via respiratory droplets between people who are within 6 feet of each other. Droplets may fall onto surfaces or objects, but this is likely not the main way the virus spreads.

• Transmissibility: On average, 1 infected person may spread the virus to 2 to 3 individuals. This would make COVID-19 more transmissible than the common flu, but less than other infectious diseases such as SARS.
• Severity: 80% of people with the disease experience only mild illness. Different reports estimate the mortality rate is between 0.7 to 3%, but it is likely lower since most people experiencing mild illness are not tested.
• Convalescence: The period at which someone can be considered clinically recovered and no longer capable of transmitting the virus has yet to be determined. CDC has reported that viral shedding may occur for 15 to 30 days after the onset of infection.
Our mitigation strategy should be based on these 5 P’s:

**Precautions:** Use droplet protections — surgical masks, disposable gowns and gloves, and protective eyewear — when treating patients who show symptoms. Require N-95 masks and electrified respirators for procedures with high risk of transmission.

**Population management:** Encourage recovery at home for mild cases — and if symptoms increase during that recovery, use telehealth as much as possible. Evaluate patients with respiratory disease at designated sites. Only test those patients who are already hospitalized for respiratory illness, as well as outpatients with significant symptoms. Promote “social distancing”: Limit large groups of people coming together and cancel events.

**Personnel:** Require health care personnel who may have been exposed to COVID-19 to monitor themselves for symptoms — anyone experiencing them must stay home. Only test personnel with severe symptoms and potential exposure to the virus.

**Patient placement:** Place patients arriving at an emergency department with respiratory symptoms in single rooms, and double up confirmed COVID-19 patients as needed. If hospitals are full, deploy mobile facilities. Discourage visits with COVID-19 patients, and require all visitors to use full droplet precautions.

**Products:** Carefully allocate and use personal protective equipment, in line with standard protocols for droplet protection. Coordinate with federal, state, and local health authorities when faced with potential shortages of medical supplies.

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Kaiser Permanente is committed to helping shape the future of health care. We are recognized as one of America’s leading health care providers and not-for-profit health plans. Founded in 1945, Kaiser Permanente has a mission to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

**About the Permanente Medical Groups**
The Permanente Medical Groups are self-governed, physician-led, prepaid, multispecialty medical groups composed of more than 23,000 physicians. We are dedicated to the mission of improving the health of our patients and communities. We are part of Kaiser Permanente, an award-winning health care system that delivers Permanente Medicine to more than 12.2 million members. We work collaboratively, enabled by state-of-the-art facilities and technology, to provide preventive and world-class complex care in eight states — from Hawaii to Maryland — and the District of Columbia.