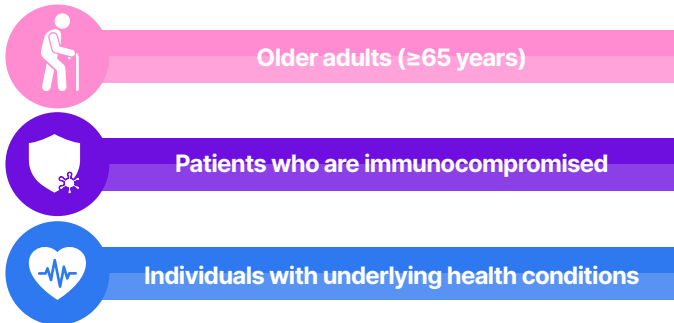
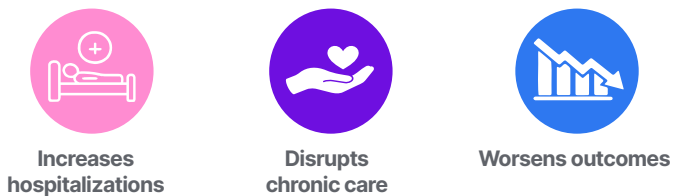


The Persistent Burden of COVID-19 in Vulnerable Populations

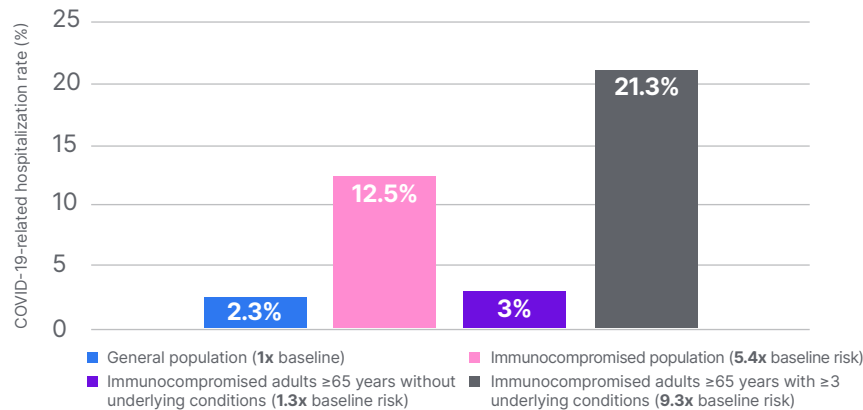
- Hospitalizations due to COVID-19 have declined, but SARS-CoV-2 transmission remains high in high-exposure settings and disproportionately affects the following populations:¹⁻³



- In vulnerable patients, SARS-CoV-2 infection:^{4,5}



- COVID-19-related hospitalization rates are higher in high-risk populations⁶



The Burden of COVID-19 Remains Higher Than That of Other Respiratory Infections

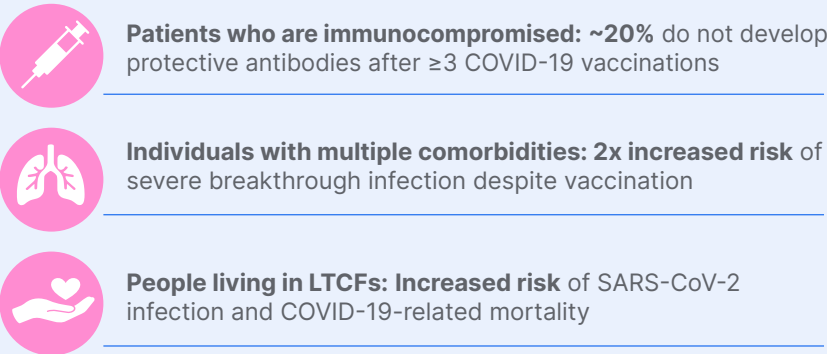
The risk of severe outcomes for SARS-CoV-2 infection exceeds that of influenza and RSV, especially for older adults, patients who are immunocompromised, and those with comorbidities^{7,8}

30-day hospitalization and mortality rates in 2022–2023⁸

	30-day hospitalization rate	30-day mortality rate
COVID-19	17.5%	1.0%
Influenza	15.9%	0.7%
RSV	14.4%	0.7%

Unmet Need for Prophylaxis

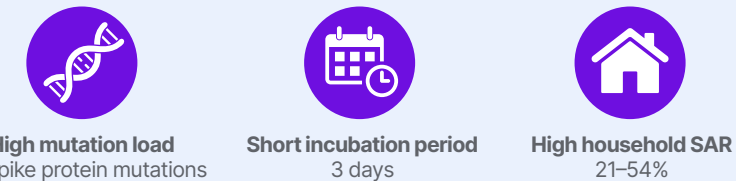
- Limited effectiveness of vaccines in high-risk populations
 - Although an essential first line of defense, **vaccines do not fully protect** certain high-risk groups⁹⁻¹¹



- Waning of protection over time: gradual but relatively rapid waning in vaccine immunity against infection¹²

- Omicron sublineages are more transmissible and harder to contain

- Infection characteristics of SARS-CoV-2 Omicron¹³⁻¹⁶



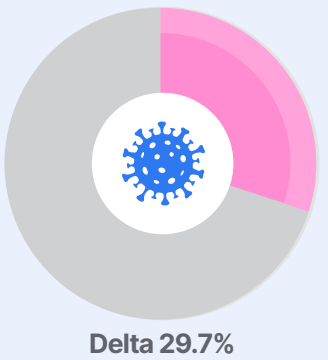
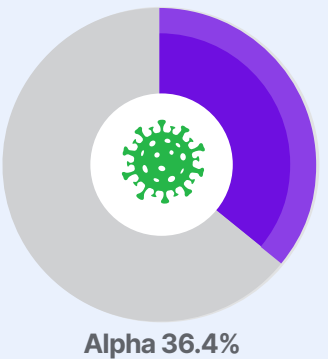
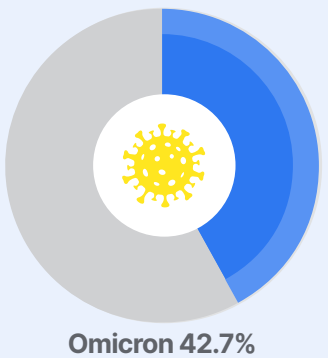
- Omicron spreads more effectively within households, even among vaccinated individuals¹⁷

Clinical Rationale for Early Intervention

- Oral antivirals offer meaningful clinical benefit when used early^{18,19}
 - Key benefits of early intervention:

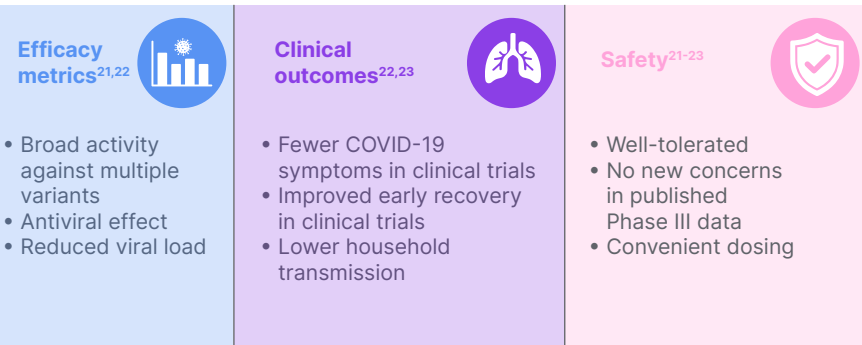


SAR of SARS-CoV-2 variants¹⁷



Clinical Considerations for PEP Using Emerging Antivirals

- Early PEP with oral antivirals aims to protect vulnerable populations and reduce COVID-19 transmission in high-risk settings²⁰⁻²²
- Clinical profile of oral antivirals being investigated for PEP



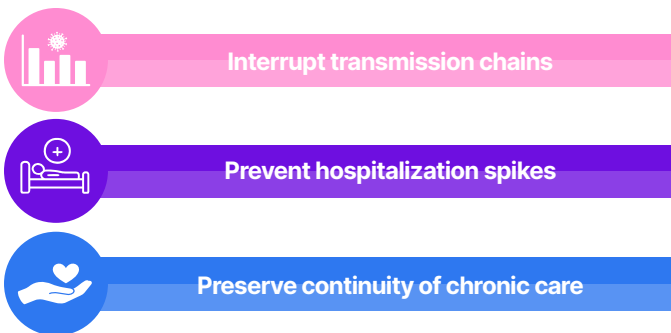
- Critical window for early PEP intervention^{1,14,23}



^{*}Based on SARS-CoV-2 Omicron

[†]Optimal timing may vary depending on the antiviral agent

- Early PEP in households and LTCFs could:^{19,23}



Key takeaways:

- The persistent burden of COVID-19 in vulnerable populations, coupled with the high transmissibility of Omicron sublineages and significant SAR, underscores the critical need for effective PEP strategies^{8,13-17}
- Emerging oral antivirals offer promising avenues to reduce the burden of hospitalization, viral load, and transmission, providing crucial protection where vaccines may offer limited efficacy²¹⁻²³
- Implementing timely PEP interventions is essential to mitigate the ongoing impact of COVID-19 and protect those at highest risk¹⁹⁻²³

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Abbreviations:

LTCF: long-term care facility; PEP: post-exposure prophylaxis; RSV: respiratory syncytial virus; SAR: secondary attack rate.