

COVID-19 point-prevalence Chelsea, MA * March 2020

- * second most densely populated city in MA
- * city with second-highest % Latinx residents in MA

Inclusion criteria:

- Lived in Chelsea > 1 month
- no history of prior Covid-19 test
- Questionnaire in Spanish/Portuguese/English - multilingual medical staff
- Fingerstick blood test (Biomedomics IgM/IgG test kit)

Funded by MGH Dept of Pathology

- Study site enrolling within 90 minutes of IRB approval
- 200 participants enrolled and tested within two days



The Boston Globe

Nearly a third of 200 blood samples taken in Chelsea show exposure to coronavirus

Mass. General researcher says the results point to a 'raging epidemic,' but may also indicate the city is further along the disease curve than some other municipalities

By [Jonathan Saltzman](#) Globe Staff, Updated April 17, 2020, 6:26 p.m.

	IgG +	IgG -
IgM +	36 (18%)	18 (9%)
IgM -	10 (5%)	136 (68%)

- At least 64/200 (32%) exposed to SARS-CoV-2 & not diagnosed with COVID-19 illness
- 27% IgM+: likely early infection
- 5% IgM- IgG+: likely later in infection
- 68% had no antibodies – does not exclude prior exposure, illness or infectiousness

Immunogenicity of mRNA-1273, BNT162b2 and Ad26.COVS.2.S

COVID-19 vaccines

Vivek Naranbhai, Wilfredo F. Garcia-Beltran, Cristhian Berrios Mairena, Julia C. Thierauf, Christina C. Chang, Grace Kirkpatrick, Maristela L. Onozato, Ju Cheng, Kerri J. St. Denis, Evan C. Lam, Clarety Kaseke, Rhoda Tano-Menka, Diane Yang, Maia Pavlovic, Wendy Yang, Alexander Kui, Tyler E. Miller, Michael G. Astudillo, Jennifer E. Cahill, Anand S. Dighe, David J. Gregory, Mark C. Poznansky, Gaurav D. Gaiha, Alejandro B. Balazs, A. John Iafrate

doi: <https://doi.org/10.1101/2021.07.18.21260732>

“...a single dose of mRNA vaccine in seropositive convalescent patients elicits comparable antibody titers to seronegative individuals who receive two doses of mRNA vaccine

...warrants further study about the possible benefit of booster doses.”

B SARS-CoV-2 pseudovirus neutralization

