

ONE WORLD

THE PHANTOM HERD IMMUNITY TO COVID-19

15.05.2020

When most of a population is immune to an infectious disease either by natural infection or by vaccination, this provides indirect protection — or herd immunity — to those who are not immune to the disease.

A positive antibody response does not necessarily mean that there is immunity but nevertheless it may give a first indication how many individuals may have had contact with a virus. Be aware of several infodemic websites on seroprevalence. Also note that most information is distributed by news agencies, press offices and preprints only bypassing usual standards in science. Unfortunately also most tests have [not been properly standardized](#).

| COUNTRY | DATE | N | REPRESENTATIVE | ANTIBODY PREVALENCE % | METHOD | LINK |
|------------------------|-----------------|---------------|-------------------------|-----------------------|---|--|
| Wuhan, China | 2Apr20 | 1.401 | no | 10 | ? | journal |
| Robbio, Italy | 6Apr20 | 2.000? | no? | 13.5 | ? | link to Ref 24 by Bendavid not working |
| Telluride, USA | 8Apr20 | 986 | ? | 0.8 | ? | newspaper |
| Santa Clara, USA | 17Apr20 | 3.330 | no (Facebook) | 1.5 | Premier Biotech, Minneapolis | medrxiv |
| Netherlands | 15Apr20 | 7.361 | no (plasma donors) | 3.1 | Wantai Biological Pharmacy | NIH |
| Los Angeles, USA | 20Apr20 | 863 | yes? | 4.1 | ? | press release |
| Trieste, Italy | 22Apr20 | 727 | no (clinic staff) | 17.2 | Wantai SARS-CoV-2 Ab Rapid Test | medrxiv |
| Brevard, USA | 24Apr20 | 1000 | no? | 1.0 | ? | newspaper |
| Miami, USA | 14Apr20 | 1.800 | yes | 4.4-7.9 | ? | press release |
| Scotland, GB | 17Apr20 | 1.000 | no (blood donors) | 1.0 | neutralisation assay | medrxiv |
| Chelsea, USA | 17Apr20 | 200 | no (passengers) | 32 | ? | newspaper via Science |
| New York, USA | 27Apr20 | 7.500? | ? | 15.0 | ? | newspaper |
| Denmark | 28Apr20 | 9,496 | no (blood donors) | 1.7 | Livzon Diagnostics IgM/IgG | medrxiv |
| Germany | May20 (weekly) | 1.342 | yes | 1.0 | ? | RKI |
| Iran | 1May20 | 551 | yes | 22 | VivaDiag COVID-19 VivaCheck | medrxiv |
| Barcelona, Spain | 2May20 | 578 | no (healthcare worker) | 9.3 | Luminex / Krammer | medrxiv |
| Gangelt, Germany | 4May20 | 919 | no (hotspot) | 14.1 | Euroimmun? | UK Bonn |
| Padova, Italy | 1May20 | 133 | no (health care worker) | 5.3 | Chemiluminescence | medrxiv |
| San Miguel County, USA | 1May20 | 5.455 | ? | 0.5 | UB? | website |
| Philadelphia, USA | 9May20 | 237 | no (patients) | 5.9 | own ELISA / Florian Krammer | researchsquare |
| Boise, USA | 7May20 | 4.856 | no (self selected) | 1.8 | Abbott SARS-CoV-2 IgG | journal |
| Kobe, Japan | 5May20 | 1.000 | no (outpatients) | 3.3 | RC-NC002, KURABO | medrxiv |
| Wake Forest, USA | 8May20 | 676 | no (former patients) | 2.2 | ? | newspaper |
| Lausanne, Schweiz | 6May20 (weekly) | 1.335 | yes | 3.1, 6.1, 9.7 | Euroimmun | medrxiv |
| Brazil | 10May20 | 4.188 | yes | 0.05, 0.13 | Wondfo Biotech | medrxiv<7a> |
| Singapore | 12May20 | 32.000 | no (workers in dorms) | ? | ? | newspaper |
| Berlin, Germany | 13May20 | 5.000 / 7.500 | no (Charité staff) | 2.3, 0.3 | ? | Ärzteblatt |
| Spain | 15May20 | 60.000 | yes (?) | 5.0 | ? | Reuters |
| Cambridge, UK | 15May20 | 1.032 | no (health care worker) | 3.0 | own protocol | medrxiv |
| Hannover, Germany | 18May20 | 217 | no (health care worker) | 1.0 | Euroimmun | medrxiv |
| Stockhom, Sweden | 19May20 | 1.104 | yes? | 7.3 | ? | newspaper |
| Birmingham, UK | 22May20 | 554 | no (health care worker= | 24.4 | high-sensitivity ELISA developed in-house | medrxiv |

There is [preprint](#) that lists some studies that I could not locate so far.

Prevalences should NOT be compared [for methodological reasons](#).

No idea from where the [NYT data originate](#).