Understanding Coronavirus (COVID-19) Tests and Results

Unless you have studied microbiology or epidemiology, some of the terms prevalent in the news these days may be confusing.

This document attempts to explain a few of those terms in simple language. It also explains the significance and impact of testing results.

**VIRUS**

Virus particles are detected with a swab test.

- When you are **actively sick**, you have the virus in your system. You may or may not have symptoms.
- You can still “shed” the virus (give it to others) before, during, and after you have symptoms.
- You most commonly shed the virus through **coughing** and **sneezing**.
- If **someone else** comes into contact with the virus, it can enter their system through their eyes, nose, and/or mouth, and infect them.
- This is why it’s important to maintain **6 feet of separation** from others and avoid touching our faces as much as possible.

**ANTIBODIES**

Antibodies are detected with a blood test.

- When you are **exposed** to a virus, either through illness or a vaccine, your body starts to make antibodies after 7-10 days.
- Antibodies are “**soldier cells**” that start to fight the virus.
- After you recover from the virus, antibodies in your system continue “**patrolling**” for the virus to return.
- If the antibodies encounter the same virus again, they are already trained and ready to fight it.

**CHAIN OF INFECTION**

- Infectious diseases can be caused by viruses, bacteria, parasites, and fungi. They all follow the same progression.
- In this diagram, the best place to break the infection chain is at the **Mode of Transmission**.
- We can stop or reduce the number of people being infected by **isolating** those who are sick, **quarantining** those who may have been exposed, and **social distancing** everyone else.
- This can have a large impact on reducing the amount of illness in our community.

**TREATMENT**

Because this is a “novel” or new virus to humans, there is **no medication treatment available**, yet. (Studies are already in progress.)

The only available “treatment” is to isolate while you recover, which helps minimize the spread of infection to others. You can take over-the-counter medications for symptoms, and good nutrition and sufficient sleep are always recommended for optimal recovery and health.
Currently, the Telluride Regional Medical Center has two tests available:

- **Nasal or oral swab test**
  Tests for active virus.

- **c19 ELISA blood test**
  Tests blood antibodies to show if a person has been exposed to the virus, regardless of presence of symptoms.

### SWAB TEST KIT
This tests for active virus infection using a nasal or oral swab. Supplies are very limited and results take several days. If you have symptoms or believe you have been exposed, please self-isolate.

<table>
<thead>
<tr>
<th>SWAB RESULTS</th>
<th>RESULT INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive (+)</strong></td>
<td>You are actively infected with the virus and can give it to others, regardless of whether or not you have symptoms. Please self-isolate for at least 48 hours after your symptoms resolve.</td>
</tr>
<tr>
<td><strong>Negative (-)</strong></td>
<td>You do not actively have the virus. Either you have not yet been exposed, or you may have had it previously and have already recovered.</td>
</tr>
</tbody>
</table>

### C19 ELISA ANTIBODY BLOOD TEST
Per the San Miguel County partnership with United Biomedical, Inc. (UBI). This test is a high-precision antibody blood diagnostic test.

<table>
<thead>
<tr>
<th>TEST 1:</th>
<th>TEST 2*</th>
<th>RESULT INTERPRETATION:</th>
<th>WHAT YOU SHOULD DO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative (-)</td>
<td>Negative (-)</td>
<td>At this point, you have <strong>not</strong> been exposed to the virus and are <strong>not immune</strong>. You are still vulnerable and at risk of getting sick.</td>
<td>Self-quarantine. Stay home as much as possible to avoid possible exposure. Get outside to exercise and get some fresh air, but stay at least 6 feet away from others.</td>
</tr>
<tr>
<td>Negative (-)</td>
<td>Positive (+)</td>
<td>You likely are currently or very recently sick with the virus <strong>even if you do not have symptoms</strong>. Your body is starting to build immunity. We will want to test you again in 14 days to confirm a second positive (+) result.</td>
<td>If you <strong>have</strong> symptoms, self-isolate until you no longer have symptoms for at least 48 hours. If you do not have symptoms, self-isolate for 7-14 days. Then, you can be considered “safe.” Your contacts should be careful to monitor for symptoms and be tested.</td>
</tr>
<tr>
<td>Positive (+)</td>
<td>Positive (+)</td>
<td>You already have antibodies in your system and, as long as you don’t have any symptoms, are <strong>presumed to be immune</strong> at this point.</td>
<td>You are considered “safe” and no longer need to self-quarantine. Please continue to practice good hygiene to keep yourself and others healthy!</td>
</tr>
<tr>
<td>Positive (+)</td>
<td>Negative (-)</td>
<td>This result is unlikely, but may indicate that you were exposed to the virus several months ago. We will want to test you again in another 14 days.</td>
<td></td>
</tr>
</tbody>
</table>

*Test 2 is drawn 14 days from the date of your first blood draw. **This is a novel (new) virus to humans, so it has not yet been well-studied.