CLAIMS

What is claimed is:

1. A nitric oxide releasing solution (NORS) comprising:

at least one nitric oxide releasing compound and at least one acidifying agent, wherein the NORS releases a therapeutically effective amount of nitric oxide (NO) to a subject's upper respiratory tract, without substantial administration to other portions of the subject's respiratory tract, when administered as a lavage, a gargle, or as a spray,

wherein the NORS provides a median droplet size (Dv50) of greater than one or more of 100 μm, 150 μm, 200 μm, 250 μm, 300 μm, 350 μm, 400 μm, 450 μm, 500 μm, 550 μm, or 600 μm when measured a 30 mm or 60 mm distance from actuation, and

wherein the subject is a human.

2. The solution of claim 1, wherein the NORS provides a percentage of spray by volume at droplet sizes of less than 10 μm (% < 10 μm) of less than one or more of: 0.5%, 0.4%, 0.3%, 0.2%, or 0.1% when measured a 30 mm or 60 mm distance from actuation.

3. The solution of claim 1, wherein the NORS provides a percentage of spray by volume at droplet sizes of less than 5 μm (% < 5 μm) of less than one or more of: 0.5%, 0.4%, 0.3%, 0.2%, or 0.1% when measured a 30 mm or 60 mm distance from actuation.

4. The solution of claim 1, wherein the NORS provides a 10th percentile by volume of spray (Dv(10)) of greater than one or more of 100 μm, 150 μm, 200 μm, 250 μm, 300 μm, 350 μm, or 400 μm when measured a 30 mm or 60 mm distance from actuation.

5. The solution of claim 1, wherein the NORS provides a 90th percentile by volume of spray (Dv(90)) of greater than one or more of 500 μm, 550 μm, 600 μm, 650 μm, 700 μm, 750 μm, 800 μm, 850 μm, 900 μm, 950 μm, or 1000 μm when measured a 30 mm or 60 mm distance from actuation.

6. The solution of claim 1, wherein the NORS provides a droplet size distribution of about 0.5 to about 2.0, wherein the droplet size distribution is: (Dv(90) – Dv(10))/Dv(50).

7. The solution of claim 1, wherein the at least one nitric oxide releasing compound is selected from the group consisting of a nitrite, a salt thereof, and any combinations thereof.

8. The solution of claim 1, wherein the at least one acidifying agent is an acid.

9. A composition for use in treating a subject for infection with a Severe Acute Respiratory Syndrome Coronavirus (SARSr-CoV), wherein said use comprises:

a therapeutically effective amount of the nitric oxide releasing solution (NORS) of claim 1 is to be administered to the subject.

10. A composition for use in minimizing subject-to-subject transmissibility for a pathogen, wherein said use comprises:

a therapeutically effective amount of the nitric oxide releasing solution (NORS) of claim 1 is to be administered to the subject.

11. A composition for use in treating a subject for infection of a pathogen in an upper respiratory tract, wherein said use comprises:

a therapeutically effective amount of the nitric oxide releasing solution (NORS) of claim 1 is to be administered to the subject as a spray having an average droplet volume which contains treatment within the upper respiratory tract.