CLAIMS:

1. A device for delivery of a composition to an airway of a subject, the device comprising:

in fluid communication:

a gas inlet;

a gas outlet;

a composition receptacle comprising a composition capsule containing the composition; and

a dispersion chamber;

one or more primers each comprising a cam follower and an associated pin or blade; and

a cap configured to cover the gas outlet and comprising one or more cams which are located so as to engage with and displace the respective primer to pierce the composition capsule upon removal of the cap,

wherein the composition capsule is held in place for piercing by the one or more primers between a capsule seat formed in a base of the device and one or more elongate members which extend from the cap.

2. The device of claim 1, wherein the cam followers of the one or more primers are spring-loaded.

3. The device of claim 1 or claim 2, wherein the cam followers of the one or more primers prevent the cap from being replaced once removed.

4. The device of any one of claims 1 to 3, wherein the cap comprises a cap top movable relative to the cap and the one or more elongate members extend from the cap top of the cap.

5. The device of any one of claims 1 to 4, wherein the dispersion chamber is adapted to receive the composition for delivery to the subject and to disperse the composition into gas flow between the gas inlet and the gas outlet, for delivery to the airway of the subject.

6. The device of any one of claims 1 to 5, wherein the dispersion chamber is

adapted to promote rotational movement or spinning of the composition capsule within the dispersion chamber.

7. The device of any one of claims 1 to 6, wherein the dispersion chamber is continuous with one or more chamber ports through which gas flows between the gas inlet and the gas outlet.

8. The device of any one of claims 1 to 7, wherein the dispersion chamber comprises one or more protrusions projecting from a surface thereof.

9. The device of any one of claims 1 to 8, wherein the dispersion chamber is a vortex chamber.

10. The device of any one of claims 1 to 9, further comprising a deagglomerator located substantially adjacent to the dispersion chamber and in fluid communication with the gas inlet, gas outlet, composition receptacle and dispersion chamber.

11. The device of claim 10, wherein the deagglomerator is a screen or mesh.

12. The device of any one of claims 1 to 11, wherein the gas outlet is a mouthpiece.

13. A device for delivery of a composition to an airway of a subject, the device comprising:
in fluid communication:
a gas inlet;
a gas outlet;
a composition receptacle comprising a composition capsule containing the composition; and
a dispersion chamber;
one or more primers, each of which comprises a cam follower activated by a cam on a cap of the device, adapted to pierce the composition capsule upon removal of the cap,
wherein the cam followers of the one or more primers prevent the cap from being replaced once removed.

14. A device for delivery of a composition to an airway of a subject, the device comprising:

in fluid communication:

a gas inlet;

a gas outlet;

a composition receptacle in which a composition capsule containing the composition is received; and

a dispersion chamber;

one or more primers, each comprising a pin or blade; and

a cap configured to be located over the gas outlet wherein each primer comprises a cam follower that is activated by a cam on the cap to move the pin or blade to pierce or cut the composition capsule to release the composition upon removal of the cap, and

wherein the composition capsule is held in place for piercing or cutting by the one or more primers between a capsule seat formed in a base of the device and one or more elongate members which extend from a cap top of the cap.

15. The device of claim 14, wherein the cam follower is elastically deformable.

16. The device of claim 14 or claim 15, wherein the cap top is movable relative to the cap.

17. The device of any one of claims 14 to 16, wherein the capsule seat is adapted to locate the composition capsule in the composition receptacle.

18. The device of any one of claims 14 to 17, wherein the one or more primers is two primers, each of which comprises a cam follower connected to a pin or blade.

19. The device of any one of claims 14 to 18, wherein the cam follower is biased to return to its starting position.

20. The device of any one of claims 14 to 19, wherein the one or more elongate members extend from the cap top to be adjacent the composition capsule.