DIY NASAL SPRAY INSTRUCTIONS

- 1. Choose a nasal spray bottle. Opaque glass bottles are best.
 - a. If reusing a medication spray bottle (ex. saline rinse, Afrin) be sure to clearly label the bottle accordingly so folks don't accidentally use it for its original purpose.
- 2. Clean and sanitize the nasal spray bottle using antibacterial solution (ex. bleach, isopropyl).
- 3. Confirm how many mL come out per spray. If this is not listed with the manufacturer's instructions,

measure this using a volumetric measuring device, such as spraying directly into a small graduated cylinder or a syringe. Many graduated cylinders will be in the .15mL-.8mL range; using one which measures up to 1ml will make things easier.

- a. Without this measurement, you will not be able to accurately assess the dose you will be receiving per pump. This may require you to fill your spray bottle all the way with water, hold the opening of a graduated cylinder or syringe at a 45-degree angle, and place the tip of the spray bottle in at a 45-degree angle as well before spraying until you fill to the 1mL mark. This should allow the cylinder or syringe to catch the liquid and measure it accurately.
- 4. Prepare your volumetric solution (follow our <u>Volumetric Dosing Guide</u> for tips & tricks)
 - a. Make sure to choose a solution that the substance fully dissolves in. Most (but not all) common psychoactive substances are soluble in saline solution.
 - i. Saline spray is ideal for most substances due to its antimicrobial properties. If there is not an antimicrobial agent in the solution, there is a risk of dangerous bacterial contamination over time.
 - b. Note that dosing intranasally requires very different dosing than when taking substances orally. Do your research using databases such as <u>Erowid</u> or <u>PsychonautWiki</u>, and adjust your anticipated dose per spray accordingly. Most, but not all, psychoactive substances require only ¹/₃ of a typical oral dose when used nasally instead.
 - c. Substances generally dissolve better when the solution is warm, *but* may come out of solution when it cools again.
 - i. Note that a high concentration near the solubility limit may make it difficult to spray, or may cause clogging in the spray nozzle over time.
 - d. Different versions of the same substance may also dissolve differently. For example, 2CB hydrobromide dissolves more easily into saline than the more commonly available 2CB hydrochloride
 - e. Here's a sample calculation for an easy-to-titrate, start-low-go-slow 2CB bromide formulation:
 - Dose dissolved: 10 mg Total volume of liquid: 2mL Concentration: 10 mg / 2 mL = 5 mg/mL Desired max nasal dose = 10 mg Desired nasal dose (10mg) / concentration (5 mg/mL) = 2 mL for launch! Volume per pump = .2 mL / pump Volume needed for launch (2mL) / .2 mL/pump = 10 pumps
- 5. Keep the nasal spray capped and stored in a cool play when not in use to minimize risk of evaporation. Evaporation will strengthen the concentration over time.
 - a. If there is concern about loose threading, plumbers tape can be added to the threading of screw on tops.

6. Be sure to shake the bottle vigorously before use, at least 30 seconds, in case your product has come out of solution and needs to be re-dissolved. Changes in altitude and temperature may impact whether the substance stays fully in solution. Some compounds are less stable than others.