

WALLCUR® PRACTI-POWDER VIAL™ INSTRUCTIONAL GUIDELINES

Special Notes: The yellow coloring agent used in Practi-Powder™ may cause fabric staining. Please advise students to be careful handling during practice. For Instructional purposes only. Not for human or animal injection.

Please use a 22 gauge (or smaller) needle with Practi-Powder Vial.

1. Begin by instructing the students in **reconstitution, and multiple dosage strength concepts**. Point out that Practi-Powder is a multiple use, versus a single use vial.
2. Illustrate the **multiple strength concepts** with Practi-Powder's **label and reconstitution instructions**, and ask students how much diluent must be added to obtain a variety of the listed dosage strengths. Explain that the reconstituted volume exceeds the amount of diluent added because the powder itself occupies space.
3. Have the students read Practi-Powder's label to locate the type of diluent to be used. Note that Practi-Vial sterile water or 0.9% sodium chloride will reconstitute the Practi-Powder.
4. Tell the students a 400 mg q.i.d. dosage has been ordered, and have them re-read the label to identify the amount of diluent which must be added to obtain this strength. This will be 7.1 mL
5. Instruct in vial protective cap removal and cleansing of rubber tops of Practi-Powder and Practi-Vial.
6. Point out that the 7.1 mL volume of fluid required for dilution cannot be injected into the vial without periodic withdrawal of air. Any closed fixed-volume vial will simply not allow such a large volume diluent injection.
7. The reconstitution technique suggested is as follows: Use a 3 mL capacity syringe. Have the students decide in advance exactly how the required amount of diluent will be added. One suggestion is to inject 3 mL, 3 mL, and a final 1.1 mL (to total the 7.1 mL required.) Stress that the amount of diluent added must be exact, and that reconstitution will require total concentration to achieve accuracy.
8. Draw up 3 mL of sterile Practi-Vial, and insert the needle tip into the powder vial **above powder level**, and inject the fluid slowly. **Keep the needle tip above the solution level to immediately withdraw 3 mL of air.** Repeat these steps with the additional 3 mL, and 1.1 mL. If the plunger of the syringe is pulled forcefully into the barrel insufficient air has been inserted; if the plunger is forced out not enough air was removed. With diluent added rotate the vial until the Practi-Powder is totally absorbed. Vials should not be shaken, as it adds air to the medication and can distort dosages.
9. Have the students reread the dosage label to recheck that they did indeed add the correct amount of diluent (7.1 mL), that they used the correct diluent (Practi-Vial), and determine the strength they prepared (400 mg/mL).
10. They must now check for the time the reconstituted solution will remain usable. This information is not contained on the Practi-Powder label, so inform students that if a multiple use vial label does not contain this information they must locate it in **the package insert** which comes with each drug.
11. Advise the students that reconstituted Practi-Powder will expire in 24 hours. Have them enter the **time and date the reconstituted drug will expire** on the label; **the strength they have prepared** (400 mg/mL); and their **initials** as the person who reconstituted the drug.
12. Have them draw up a 200 mg dosage. This requires that they recheck the dosage strength they added to the label. 200 mg requires 0.5 mL.
13. The students must now be instructed in the storage of reconstituted drugs. Some drugs may be kept at room temperature, others refrigerated. Some drugs have both options, with different expiration times depending on the storage method chosen. Once again students may have to refer to drug package inserts to locate this information. Practi-Powder may be stored at room temperature.
14. When proficiency has been obtained in these reconstitution skills, and this should be thoroughly tested by asking spot questions about the entire procedure, you will need to instruct the students in **variations** of reconstitution they may encounter.

Variation 1. Various powders are very thick and it is frequently necessary to direct diluent directly at the undissolved powder with the syringe and needle to hasten its dilution.

Variation 2. Many powdered drugs do not dissolve, they are simply suspended in the diluent added, and they will precipitate out between uses. Each suspension drug label **is clearly identified as a suspension**. Thorough mixing of suspensions, both oral and injectable, is necessary prior to dosage measurement. Prompt administration is a necessity to prevent their reprecipitating out.