Benzodiazepines are known as "anxiolytics" and are listed as a schedule IV controlled substance. Given that they are not recommended for use beyond 2-4 weeks, a benzodiazepine prescription comes with the inherent responsibility of providing patients with an exit strategy. There are those who are fortunate and will have little problem withdrawing from a prescribed benzodiazepine no matter what method of discontinuation they follow. Others, no matter how much they desire to withdraw may experience debilitating mental and physical withdrawal effects. It has been said that benzodiazepines are more "difficult than heroin" to withdraw from.

While it is unclear which patients will be able to successfully withdraw from a benzodiazepine in a few weeks, what is clear is that those who cannot may lose years of their life to an unsuccessful taper. It is imperative that doctors and patients are educated about the available methods of tapering. The methods discussed here have been developed through clinical experience and by the thousands of survivors who have successfully completed a benzodiazepine taper.

### Common Practice

One common method is to instruct the patient to cut the pill by 1/4 weekly. With this method the patient will be finished tapering in approximately 4 weeks. While some view this as a gradual reduction, many experienced researchers, physicians and patients would consider a 4 week taper to be too rapid. Research has shown that symptoms of dependence are due in part to GABA receptor alteration. Four weeks is often not enough time for these receptors (which are located throughout 70% of the brain and body) to repair, leaving the patient with intolerable symptoms. In fact, this rapid tapering method was found to be ineffective for at least 32-42% of patients who are prescribed benzodiazepines long term, with 90% experiencing withdrawal symptoms.

There are many instances of patients developing a protracted withdrawal syndrome and even seizure disorders from rapid tapers of this nature. Slower, more gradual dose reduction can reduce the severity withdrawal and the risk of protracted acute withdrawal syndrome or PAWS which can last anywhere from 18-24 months or longer.

Patients who are dependent may also have become so severely sensitized to benzodiazepines that even minute fluctuations in dosage can cause terrible suffering. Cutting pills that are not scored to evenly distribute the medication into 4 equal parts exacerbates the severity and fluctuation of symptoms throughout a taper.

Another commonly prescribed method of tapering requires the patient to continuously remove one of the daily doses throughout the week, over the course of several weeks until all doses have been removed. This protocol presents the same problems as with the 1/4 dose reduction per week method. Benzodiazepine Information Coalition has observed throughout years in online support groups representing thousands of patients that this approach more often than not causes a cluster of disabling mental and physical symptoms, which persist for months or years. Additionally, skipping doses means even greater drug serum level fluctuations, instead of a slow, steady decline of drug serum levels often leading to unnecessary pain and suffering.
Recommended Taper Rate
There are other options available to both patients and doctors. As mentioned before, it is often difficult to taper medications that are not designed for gradual reduction. The general guideline is not to exceed a 5-10% reduction of the current dose every 2-4 weeks.

Conversion Rates for Benzodiazepines
Another tricky aspect of switching to a longer acting benzodiazepine is conversion. Ashton created a guide of average conversions. This guide, as well as other charts and individual physician opinions can vary wildly. However, unlike opiates, drug equivalences are not studied or mandated by the FDA and every body will be different.

Medications to Alleviate Withdrawal Symptoms
Other issues that should be taken into consideration are the use of other medications to assist in the tapering process such as antidepressants, anticonvulsants, antihistamines and antipsychotics. Currently, there are no FDA-approved medications to alleviate the symptoms of withdrawal. Benzodiazepine Information Coalition's experience from the thousands of people in benzodiazepine online support groups have found that many patients withdrawing from benzodiazepines develop multiple sensitivities to other medications which seem to aggravate symptoms of withdrawal. With a sufficiently slow, patient-led taper, additional medications are usually not necessary.

Addressing Individual Needs
How does one accomplish a 10% reduction every 2-4 weeks from potent benzodiazepines such as Ativan, Xanax and Klonopin that are not available in very small dosages? For some, substituting the original benzodiazepine in a stepwise fashion over to Valium and making small reductions per the Ashton method is very successful. Some even utilize a jewel scale and razor blade for more accurate dose reductions. However, even these seemingly small cuts can be problematic, particularly for children and adults with seizure disorders. While Valium has the longest half life of any benzodiazepine, it must be remembered that the first metabolites break down after only a few hours. Sensitive patients may benefit from evenly dividing their dose and taking it 2 or 3 times per day.

Those who choose or are required to taper using a shorter-acting benzodiazepine may find it particularly helpful to take their dose several times per day, depending on the half life of the medication. For example, patients taking Klonopin may benefit from dosing 3-4x per day, whereas those taking Ativan may need to dose 4-5x per day. Some patients on Xanax may require 5-6 doses per day just to maintain steady serum levels. Patients who dose at regular intervals are more likely to successfully complete a benzodiazepine taper because they do not experience severe "drops" throughout the day between doses that make discontinuation intolerable. These symptoms are commonly referred to as "interdose" withdrawal.

Ashton Manual
The Ashton Manual is probably the most well known cut-and-hold method in the benzodiazepine community. While it has a 90% reported success rate, it may be too fast for many patients to taper comfortably. Additionally many patients cannot tolerate Valium, which is what the Ashton Manual requires.

The Ashton protocol recommends using Valium (diazepam) to taper because it comes in much smaller doses and has a longer half life than the newer, shorter acting benzodiazepines. For example, while Klonopin (clonazepam) has a medium half life, the smallest dose available is 0.125 mg, and Xanax (alprazolam) has a short half life, the smallest dose is .25 mg. While these
may seem like small doses, when one considers it's equivalence to diazepam, 0.125mg of 
Klonopin is actually closer to 2.5 mg of diazepam, .25 mg of Xanax is about 5 mg of Valium. 
Ashton also recommends tapering no more than 5-10% every 2-4 weeks. This means that, on 
average, a taper will take about ten months or longer, depending on the patient's starting dose 
and individual response. As with any recommended guideline it is important to remember that 
the patient should be allowed to dictate the rate and pace of their taper depending on their 
individual response to dose reduction. If symptoms are severe and/or disabling, per Ashton, 
the taper may be suspended for a few weeks until symptoms subside. Oftentimes this resolves 
the problem and the patient may then resume their taper. It is not uncommon for 
benzodiazepine tapers to take longer than one might expect due to individual responses. Per 
Ashton, it matters little whether it takes 6 months or 18 months (or longer) in those who have 
become dependent due to long term, as prescribed use of benzodiazepines. 
While Ashton recommends Valium due to it’s long half-life for tapering, other guidelines 
recommend staying on the originally prescribed benzodiazepine if withdrawal symptoms are 
tolerable. As with any new medication introduced, there is a risk of adverse reaction. Some 
patients do not respond well to Valium. Substituting a longer-acting benzodiazepine can take 
weeks to adjust before patients can begin or resume their taper. This adds more time to what is 
already perceived as a life-altering and very consuming project. 
Since benzodiazepine usage and withdrawal often creates numerous complex symptoms, it 
can be difficult to know if someone is suffering from an adverse reaction to new medication, or 
is simply symptomatic due to the neuroadaptations caused by long term exposure to 
benzodiazepines.

Dry Tapering
This is a popular method due to convenience and initial intimidation of other methods. It 
involves using a pill cutter or scale and shaving off a pill following a taper plan. There are 
various methods for dry tapering, including micro-tapering and larger cut-and-hold tapers. 

Tapering Strips
A newcomer to the cessation market is Tapering Strips by Dr. Groot. These can be ordered 
from the Netherlands. Availability varies by country. These strips can have a faster taper rate 
than recommended by Dr. Ashton. We recommend, if utilizing this option, to 
consider stabilization strips to slow the taper to 5-10% per month maximum. 

Micro-Tapers
Online support communities have developed systems of "micro-tapering" to help distribute 
medication evenly throughout the day in order to avoid interdose withdrawal symptoms. Micro- 
tapering uses small daily reductions that add up to a 5-10% overall reduction every month. 
Daily micro reductions also help to avoid the physical and mental turmoil that larger weekly 
reductions may create for those who are very sensitive. Keeping track of dose reductions 
usually requires a daily log, or for some, the use of a spreadsheet. 

Some patients micro taper with a scale removing a small amount, such as 0.001 to 0.003 per 
day or every few days. This method is initially complicated to many, but videos and resources 
are available to explain it. 

Oral diazepam solution (Roxane Laboratories) can be a valuable tool in micro-tapering and 
comes as a stock 5mg/5ml (1mg per ml) solution. Using a syringe, patients can, for example, 
measure 0.1 mg less of the total dose every day or every 3 or more days. (Of course how much 
is reduced depends on the individual response of the patient, their starting mg’s and rate of 
desired reduction). For those who cannot tolerate oral diazepam solution, or cannot tolerate 
diazepam at all, a prescription for a liquid compound of the patient's benzodiazepine can be 
used. 

Suspending vehicles such as "OraPlus" or even almond oil based compounds can be made 
with crushed pills or the stock powder form of most benzodiazepines. Most compounding 
pharmacists will have access to a database that will allow them to choose the appropriate
suspending agent for each specific benzodiazepine. Liquid compounds in some cases, make it easier for the patient to control the rate of taper and require very little work on their part compared to other tapering methods. If a compounded suspension of a benzodiazepine has been decided upon, it is recommended that a compounding pharmacist associated with the International Academy of Compounding Pharmacists or the Professional Association of Compounding Pharmacists be used due to their extensive knowledge and access to databases which allow them to properly prepare consistent compounded suspensions in the appropriate suspending vehicle.

Finally, there is the method known in the online support community as "liquid titration." Some patients may not tolerate compounded liquids due to multiple factors such as intolerance to the suspending vehicle and/or inconsistencies in the preparation of the compounded suspension. Others may have a difficult time finding a doctor who is willing to prescribe Valium or a prescription for a compounded suspension of their current benzodiazepine. Many who have found themselves in this predicament have successfully tapered on their own by making a homemade suspension in water or milk. A pill is either crushed or allowed to disintegrate in, for example, 300 ml’s of liquid. One ml is removed from this suspension and discarded, the rest is ingested. More and more ml’s are reduced and discarded each day until nothing is left. This method is less difficult than it sounds and many have successfully tapered on their own using this method.

References