



Tolerance, Physical Dependence & Addiction

The following three concepts are often misunderstood or erroneously interchanged, leading to misdiagnosis, inappropriate treatment, and harm:

1. **Tolerance**
2. **Physical/Physiological Dependence**
3. **Addiction** (sometimes termed 'Substance Use Disorder')

According to the FDA, what does each term mean?

Tolerance is a physiological state characterized by a reduced response to a drug after repeated exposure. (In other words, a higher dose of a drug is required to produce the same effect that was once obtained at a lower dose.)

Physical Dependence describes the changes that occur in the body in response to repeated medication or drug use. If physical dependence has developed, withdrawal symptoms emerge after reducing the dose or abruptly stopping it.

Addiction describes a cluster of behavioral, cognitive, and physiological phenomena. It may include: a strong desire to take the drug; difficulties in controlling drug use despite harmful consequences; giving a higher priority to drug use than other activities and obligations; and can include tolerance or physical dependence.

Facts that Patients and Medical Providers Must Know

- **Physical dependence** can occur alone, in the absence of addiction, or in individuals with no personal or family history of addiction.
- Drugs do not necessarily have to induce a sense of pleasure or a high to lead to physical dependence. For instance, beta blockers, steroids, and antidepressants can and do cause physical dependence, resulting in subsequent withdrawal syndromes.