

Three compartments can be used to represent the pharmacokinetics of fentanyl: distribution (1.7 min), redistribution (13 min), and final elimination (219 min). When administered intravenously, fentanyl acts very instantly, although it may take several minutes to reach its maximum analgesic and respiratory depressive effects. As fentanyl gets more ionized, the plasma protein's binding capacity decreases. It accumulates in skeletal muscle and fat and is then progressively released into the bloodstream.