

“Impact of Abuse Deterrent Opioids
on Drug Diversion Investigators”

OxyContin[®] Abuse

- First signs of abuse in the late 1990's
- Initial reports of abuse and diversion discovered in Maine
- Significant abuse followed for over a decade
- Pills were easily crushed and then snorted, chewed, injected, or smoked
- Street values easily reach \$1 mg.
- LE inundated with OxyContin[®] abuse issues

OxyContin[®] Reformulation

- August 2010 reformulated pills on retail market from Purdue Pharma
- New version designed to be difficult to compromise
- Indicia change from “OC” to “OP”
- Pill color and size virtually identical
- Excellent opportunity to determine success or failure of reformulation

Manual Crushing Followed by Dissolution



Crushed New Formulation



Crushed Original Formulation

Product	% released
New Formulation 10-80mg	20 - 49%
Original 10-80mg	≥ 91%

Illicit OxyContin[®] Market

- WCDTF sees significant change in OxyContin[®] illicit market by end of 2010
- Street prices plummet
- Street demand falls off significantly
- Oxycodone IR (30mg.) abuse increases
- Cheap heroin begins to dominate illicit opioid market
- WCDTF OxyContin[®] seizures drop dramatically

WCDDTF & ILLICIT OXYCONTIN

- Since 2013, no seizures or diverted dosage units of OxyContin[®] in the Warren County Drug Task Force
- This on the basis of approximately 200 undercover drug buys per year
- This in spite of many LE continue to lump all oxycodone as OxyContin[®]
- Similar results exist in other LE jurisdictions

North Carolina House Select Committee March 23, 2016 Testimony

SBI INPUT

Judy Billings, special agent in charge of the SBI's Diversion and Environmental Crimes Unit, said one of the most compelling examples of the significance of opioids with abuse-deterrent properties is the reformulation of OxyContin and its effect.

"As an investigator with the SBI in our Diversion and Environmental Crimes Unit, I personally have seen a dramatic decrease in the diversion, misuse and abuse of OxyContin after the reformulation of the medication, especially once the generic form that had no tamper resistant measure was taken off the market," Billings said in a letter to the committee. "Since 2010 our agency has seen a remarkable decrease in the diversion and seizure of OxyContin products involving street sales."

There were no seizures by the SBI in 2014, 2015 or to date in 2016, she said.

"When involved in undercover purchases of pharmaceutical controlled substances, you cannot give OxyContin away," Billings said. "Abusers and addicts do not want it due to the reformulation and their inability to design a measure to defeat the tamper resistant mechanism."

Rx Patrol®

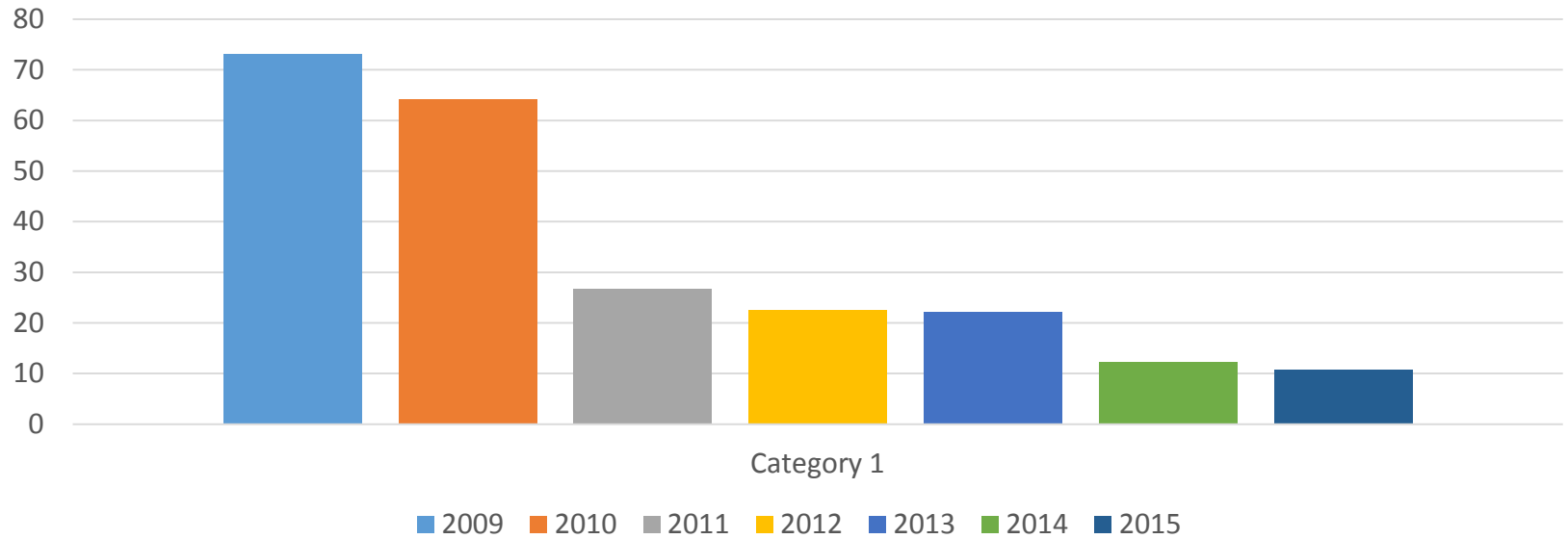
- Developed and funded by Purdue Pharma
- Tracks pharmacy robberies nationwide
- Reports indicate weapon, description, and drugs demanded by robber
- Reports track time of day, day of the week most likely for pharmacy robbery
- Provides LE ability to solve robberies occurring in multiple jurisdictions nationwide

Rx Patrol % of Robberies involving OxyContin[®]

- 2009- 73.15%
- 2010- 64.24% (ADF Introduced 8/10)
- 2011- 26.68%
- 2012- 22.44%
- 2013- 22.15%
- 2014- 12.29%
- 2015- 10.7%

Rx Patrol Data-OxyContin[®] Mentions

Chart Title



Rx Patrol[®]

- Why is this significant?
- Armed robbers can demand any drug on the shelf and they are free!
- Demand for OxyContin[®] drops over 62% after the reformulation
- Addicts drug choice mirrors the street demand and reflects street values both of which have dropped dramatically

Trend Changes in Placebo OxyContin Tablets:

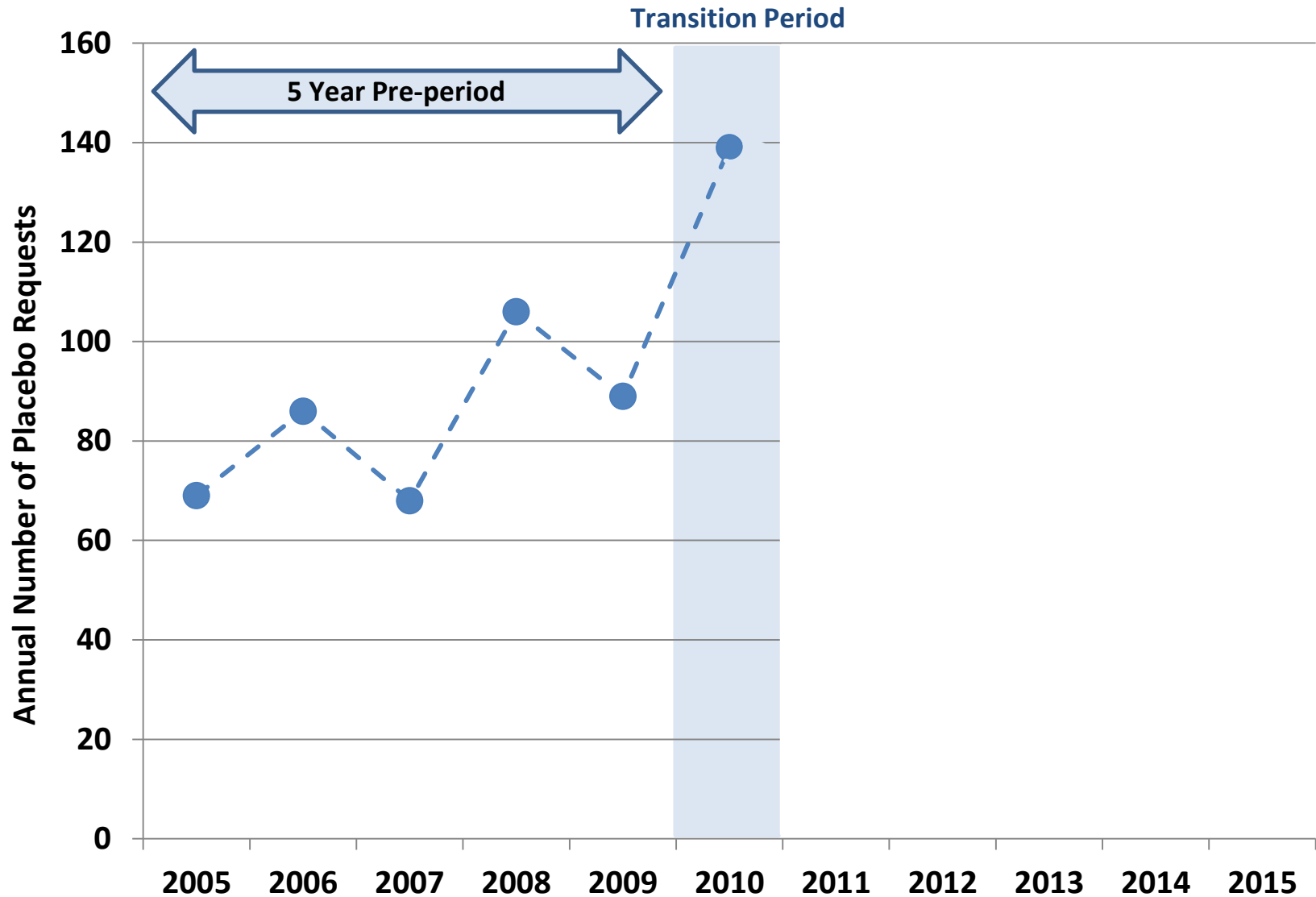
Requests from Law Enforcement Agencies
and
Tablets Supplied

Counts by Year for OxyContin Placebo Requests from and Tablets Supplied to Law Enforcement Agencies

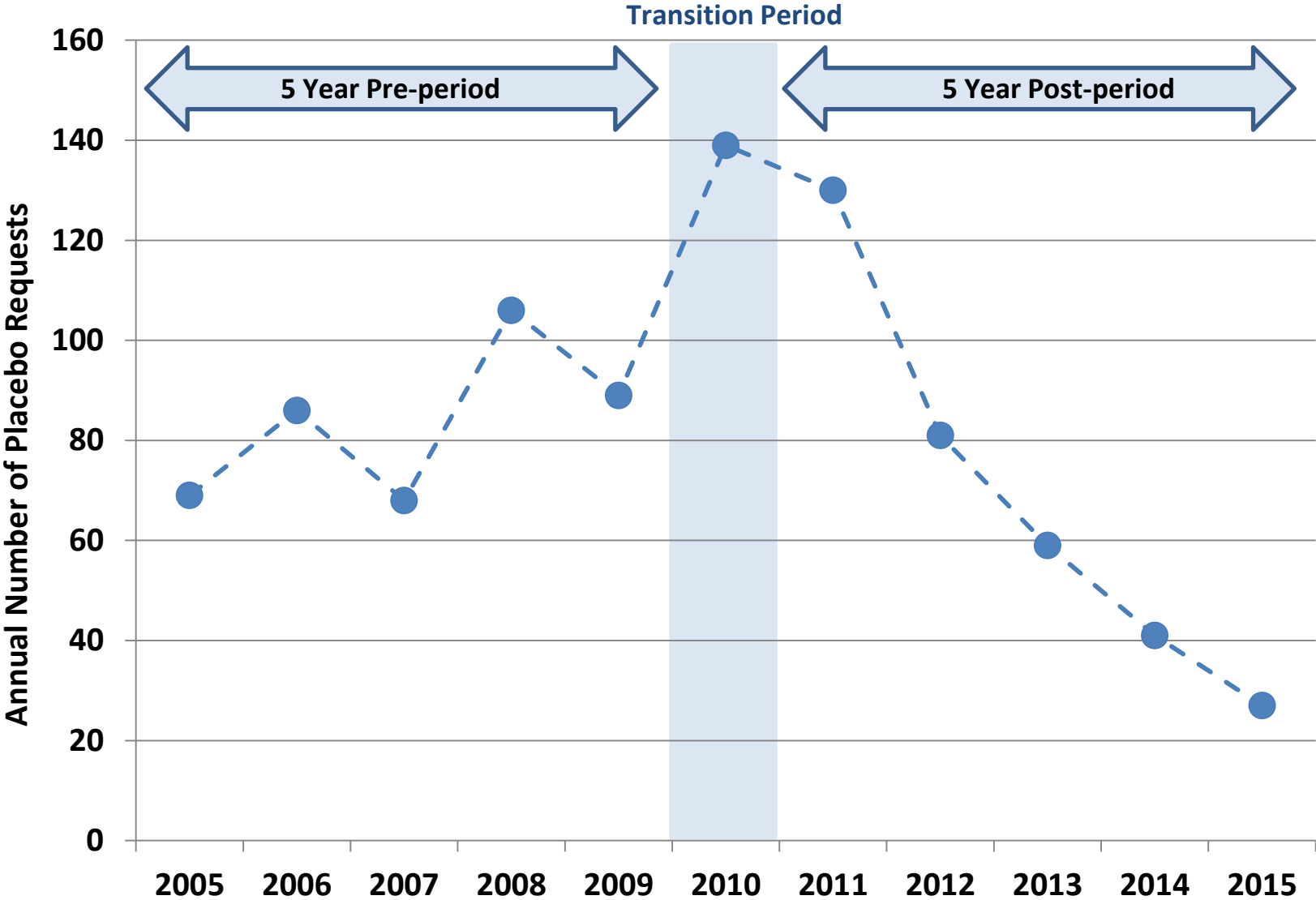
Year	Requests	Placebo Tablets Supplied
2005	69	62,400
2006	86	143,000
2007	68	54,000
2008	106	106,900
2009	89	296,000
2010*	139	143,400
2011	130	132,900
2012	81	61,000
2013	59	32,900
2014	41	18,700
2015	27	10,800

* Reformulation replaced original formulation beginning in August 2010

Requests for OxyContin Placebo Tablets from Law Enforcement Agencies (2005 – 2015)



Law Enforcement Requests for OxyContin Placebo Tablets (2005 – 2015)



OxyContin[®] Abuse 2016

- Reformulated OxyContin[®] can be abused
- Must swallow multiple pills intact to achieve “high”
- Hardened addicts most likely to OD and die will not use intact
- They need the jolt of injection or snorting
- Difficult and time consuming to accomplish this with the ADF OxyContin[®]