



Trends in IVD Compliance and Inspections

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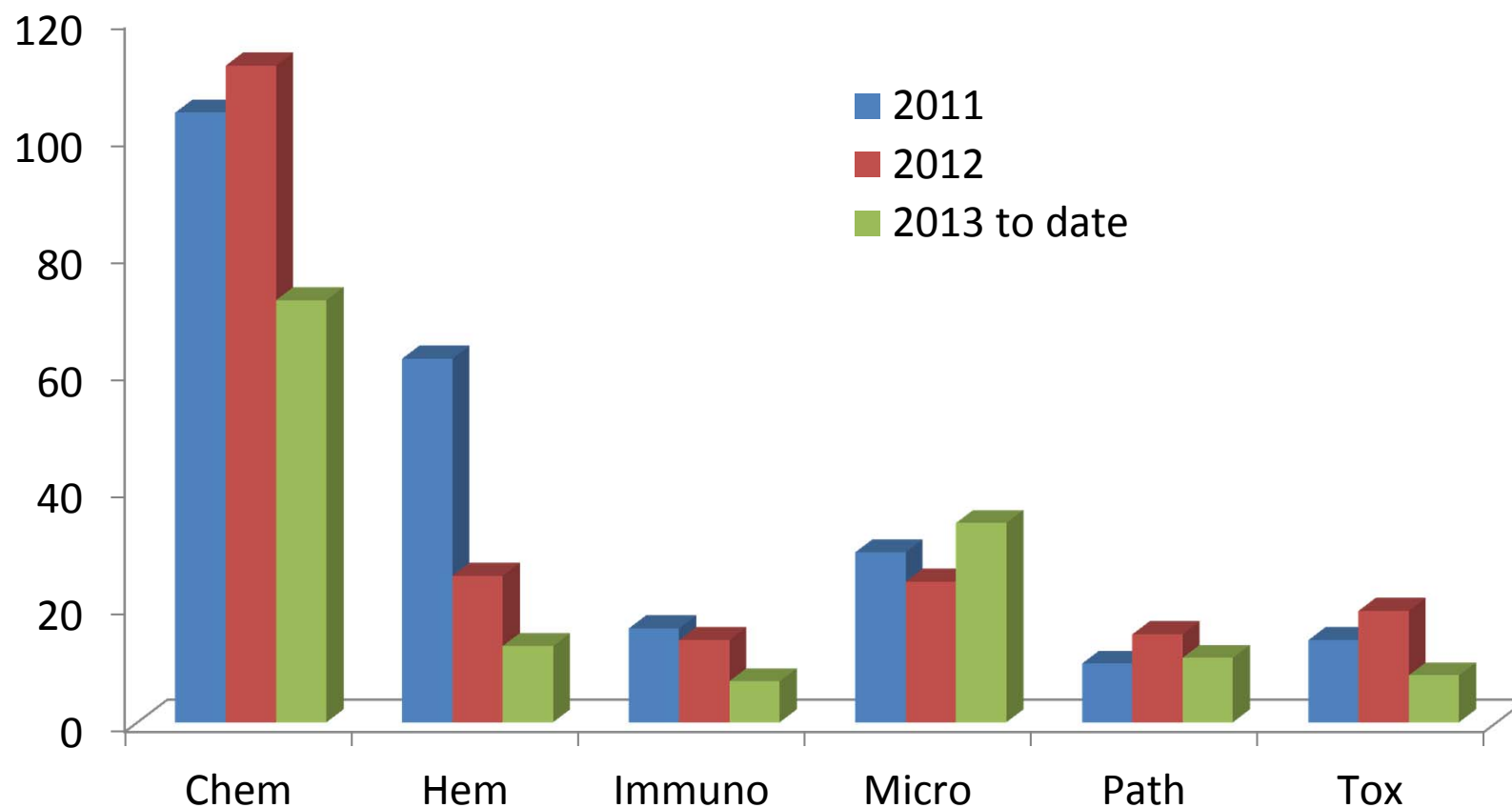
Outline of Presentation

- *IVD product recall trends*
- *IVD MDR recall by product code*
- *Trade complaint investigations*
- *Warning and Untitled Letters*





Total Number of Recalls by Product Area



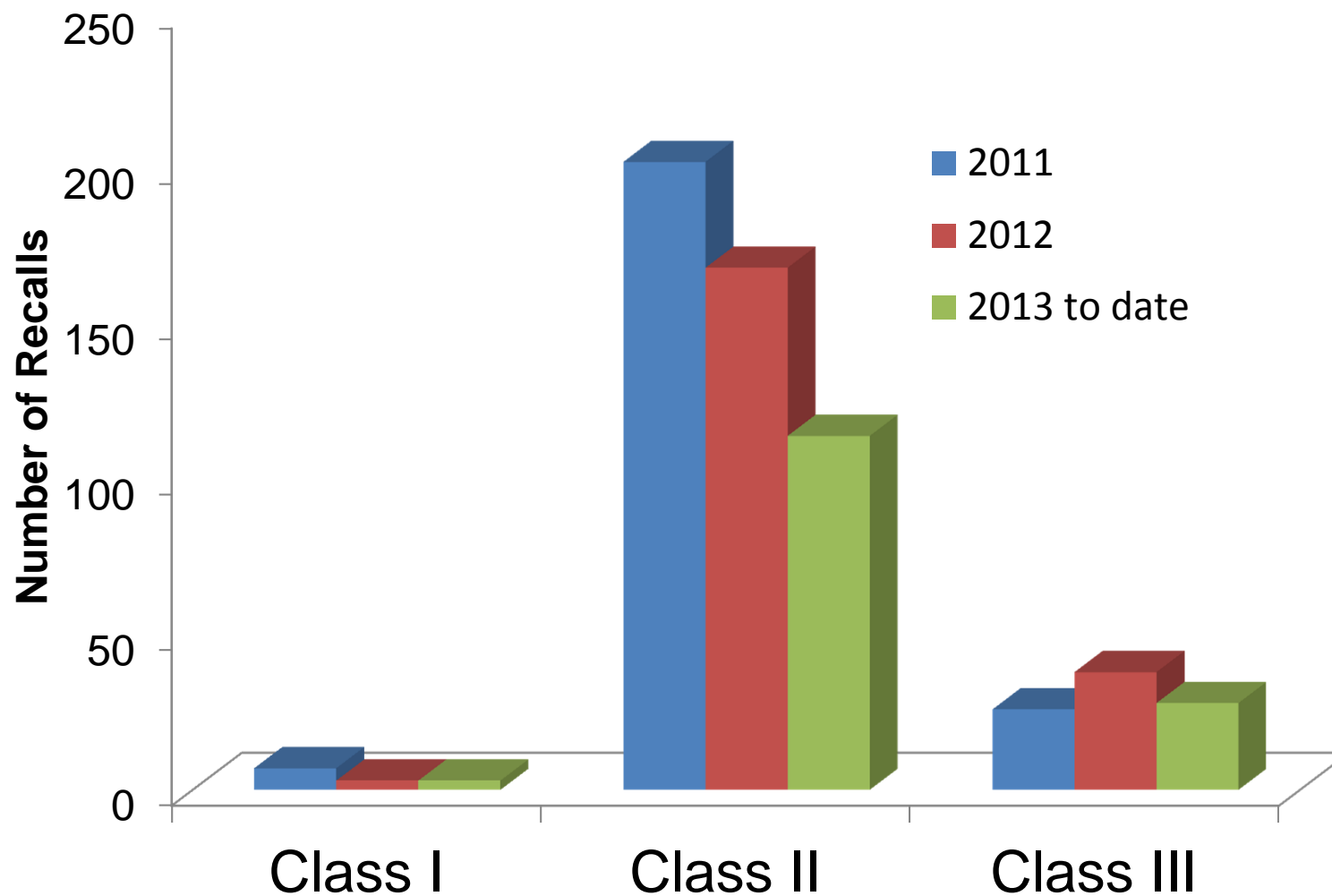


Classification of recalls

| <i>Class</i> | <i>Risk level</i> | <i>Risk to health</i> | <i>Probability</i> |
|---------------------|--------------------------|---|-------------------------------|
| <i>I</i> | <i>High</i> | <i>Serious adverse consequences or death</i> | <i>Reasonable probability</i> |
| <i>II</i> | <i>Medium</i> | <i>Serious adverse consequences or death</i> | <i>Remote</i> |
| | | <i>Temporary/ medically reversible conditions</i> | <i>May cause</i> |
| <i>III</i> | <i>Low</i> | <i>Any health consequences</i> | <i>Not likely</i> |

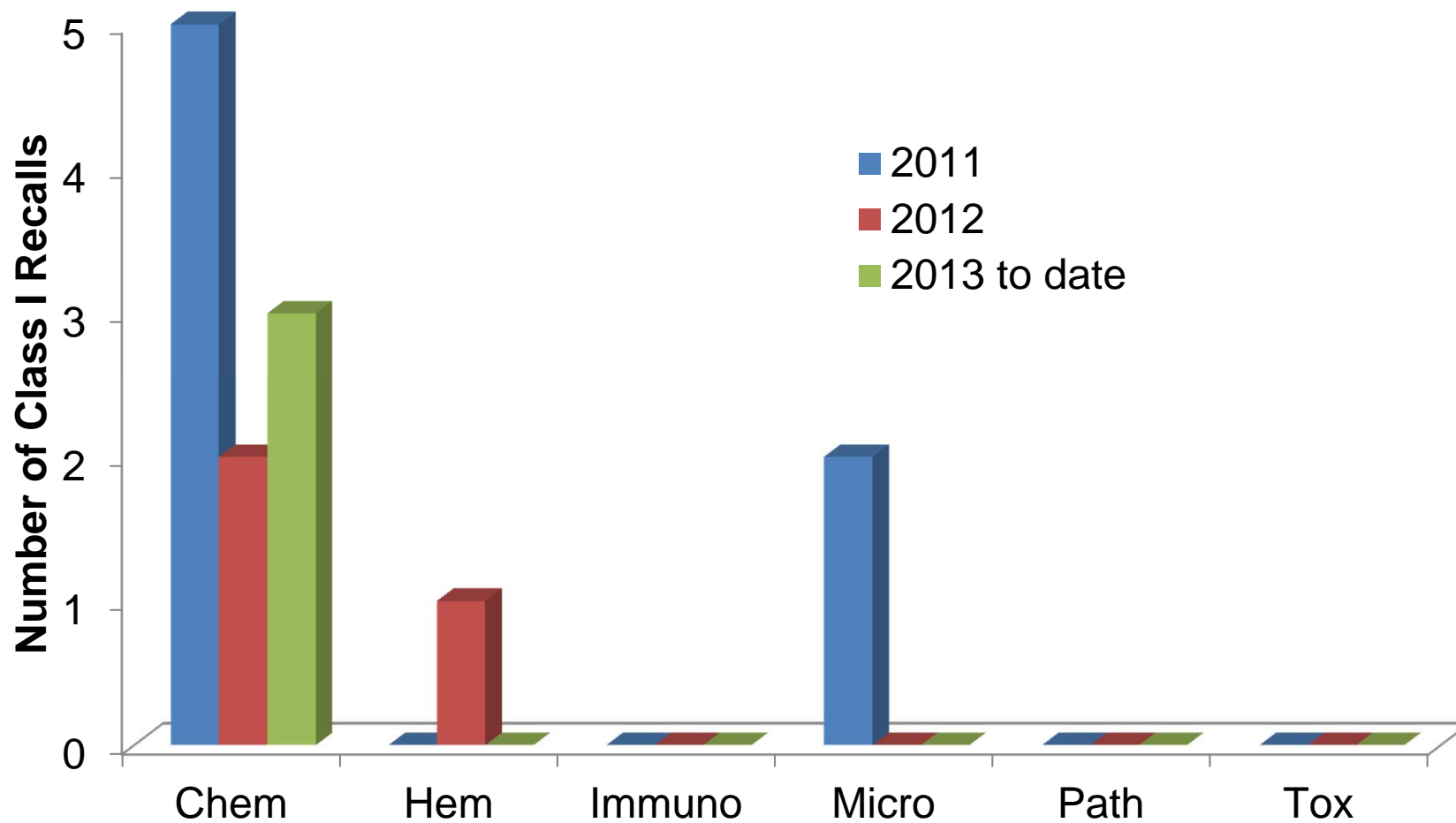


Distribution of IVD Product Recalls by Classification





Class I Recalls by Product Area





IVD Recalls – Summary

- *Overwhelming majority of IVD recalls classified by OIR are Class II*
- *No significant year-to-year trends*
- *Most Class I recalls are in the Chemistry area*
- *Five of the Class I IVD recalls in the past 3 years were for product code NBW – OTC Glucose Test System*



IVD MDR reports – top ten product codes – total events in database

| Product code and description | Total events |
|---|---------------------|
| NBW - OTC glucose test system | 78135 |
| LFR - glucose test system | 56272 |
| CFR - glucose test system | 33315 |
| JJE - clinical chemistry analyzer | 22418 |
| GJS - prothrombin time test | 7538 |
| JPA - multipurpose system for coagulation testing | 7399 |
| MMI - troponin immunoassay | 5943 |
| JTC - Microtiter diluting and dispensing device | 5915 |
| KSZ - Automated blood grouping antibody test system | 5250 |
| GKZ - Automated differential cell counter | 3843 |
| CGA - Glucose test system | 1658 |



IVD MDR reports – top ten product codes – total death reports in database

| Product code and description | Total death reports |
|--|----------------------------|
| NBW - OTC glucose test system | 60 |
| CFR - glucose test system | 30 |
| OYA – insulin pump to be used with invasive glucose sensor | 29 |
| JPA - multipurpose system for coagulation testing | 24 |
| GKT - Automated blood cell separator | 24 |
| LFR - Glucose test system | 16 |
| GJS - prothrombin time test | 12 |
| JJE - clinical chemistry analyzer | 9 |
| CHL - Blood gases and blood pH electrode measurement | 7 |
| CGA - Glucose test system | 6 |



MDR and death reports for IVD devices - summary

- *Glucose test systems (especially OTC) account for the largest number of MDRs and death reports.*
- *Other devices with a significant rate of both MDR reports and death reports include multipurpose coagulation devices and prothrombin time tests.*
- *Year-to-year trends were not analyzed.*

Investigation of Trade Complaints

- *Sources:*
 - *industry*
 - *professional groups*
 - *concerned individuals*
 - *FDA personnel*





Trade Complaint Investigations: Typical Outcomes

- *Firm agrees to website or labeling changes*
- *Firm agrees to a submission*
- *Referred to District or other Center*
- *No further action required*



IVD Warning and Untitled Letter Data - caveats

- *Most WL and UL for domestic firms issued by the District - data not readily available for CDRH*
- *Direct reference authority for District for domestic firms initiated in 2011 (for Quality System violations)*
- *Data based on entries in the agency-wide Compliance Management System*

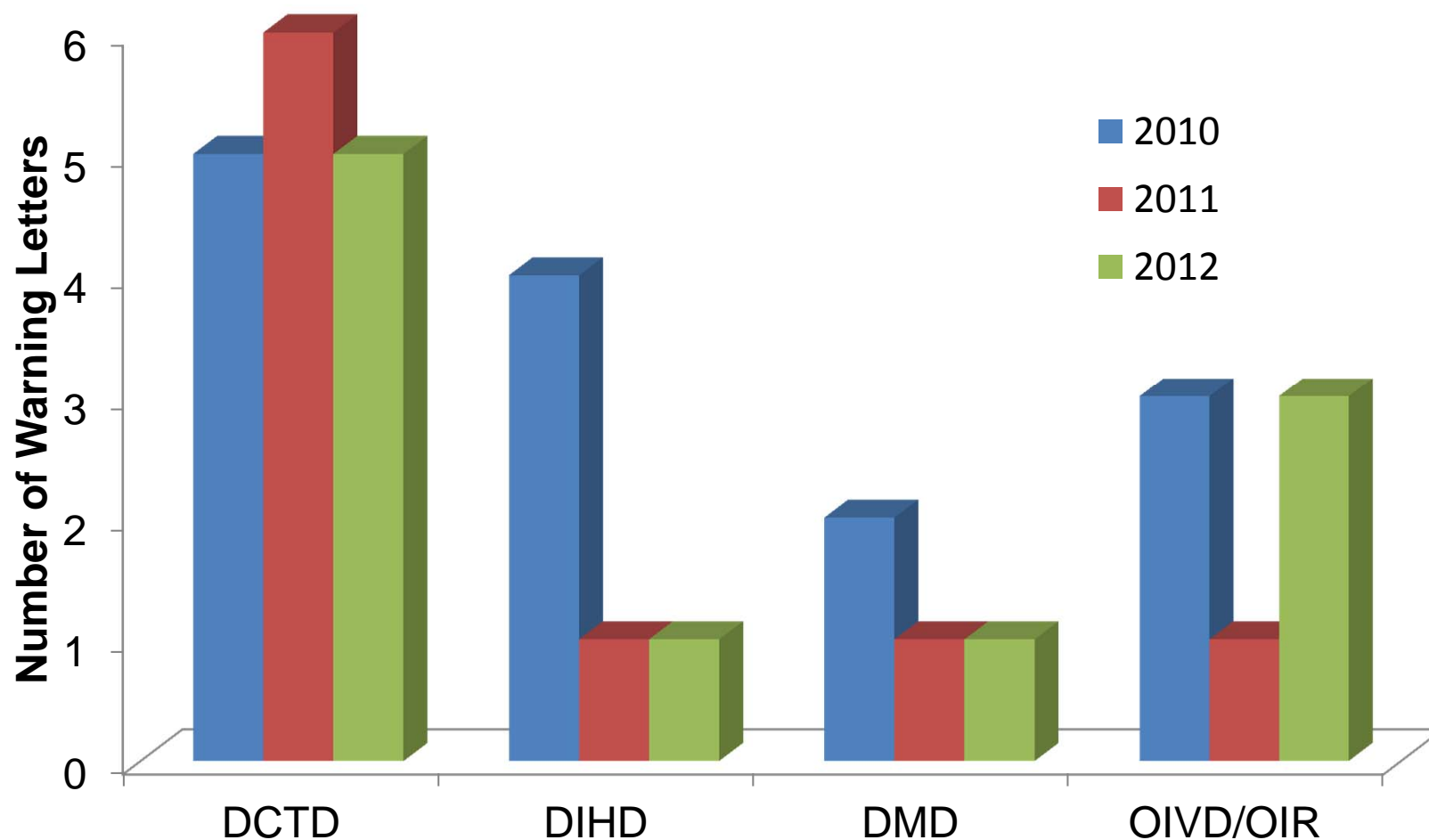


IVD Warning and Untitled Letter Data – primary subtypes

- *Quality Systems and MDR violations*
- *Promotion and advertising violations*
- *Lack of 510(k) clearance or PMA approval*

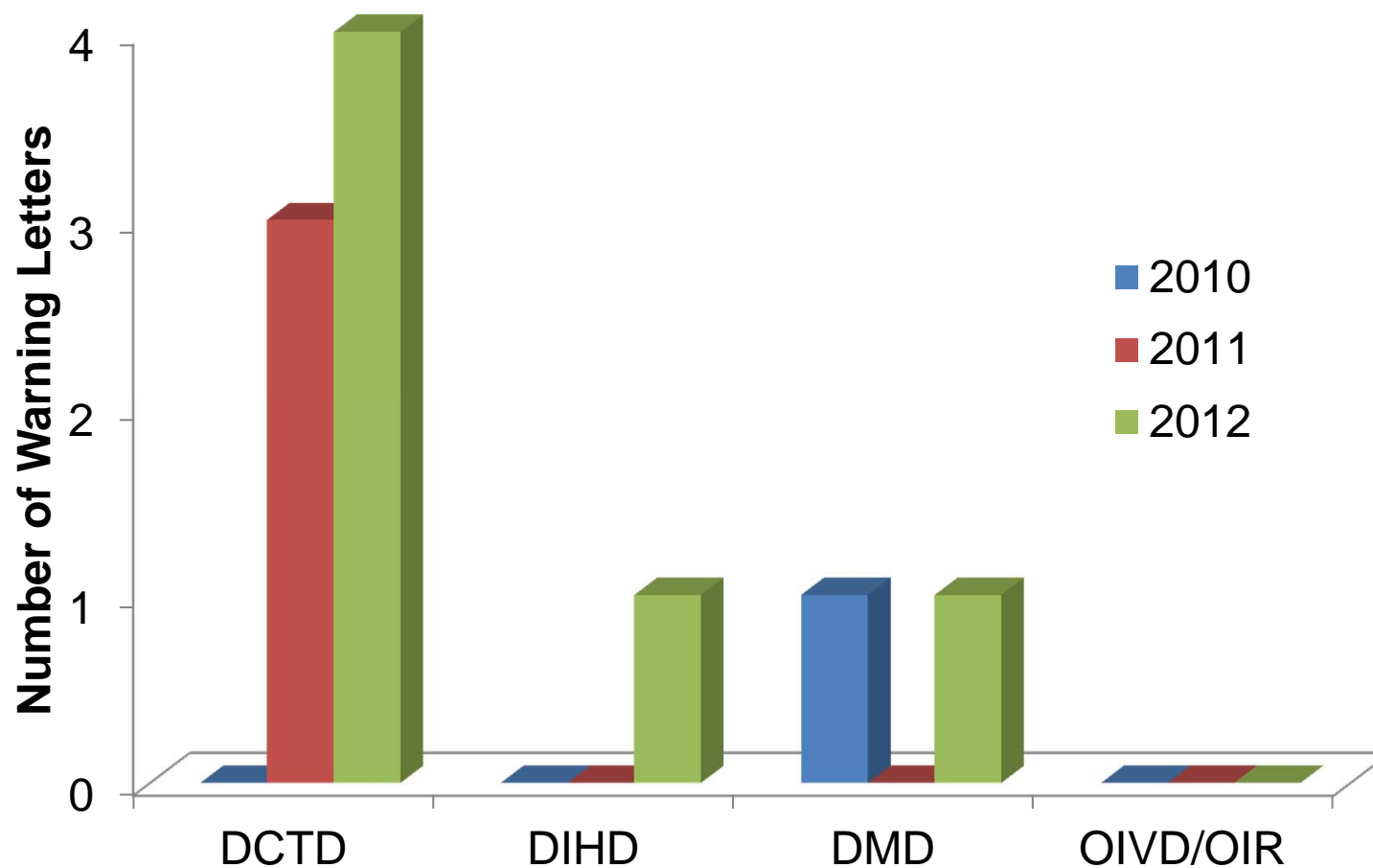


Domestic Untitled and Warning Letters Issued by OIVD/OIR – by Product Area



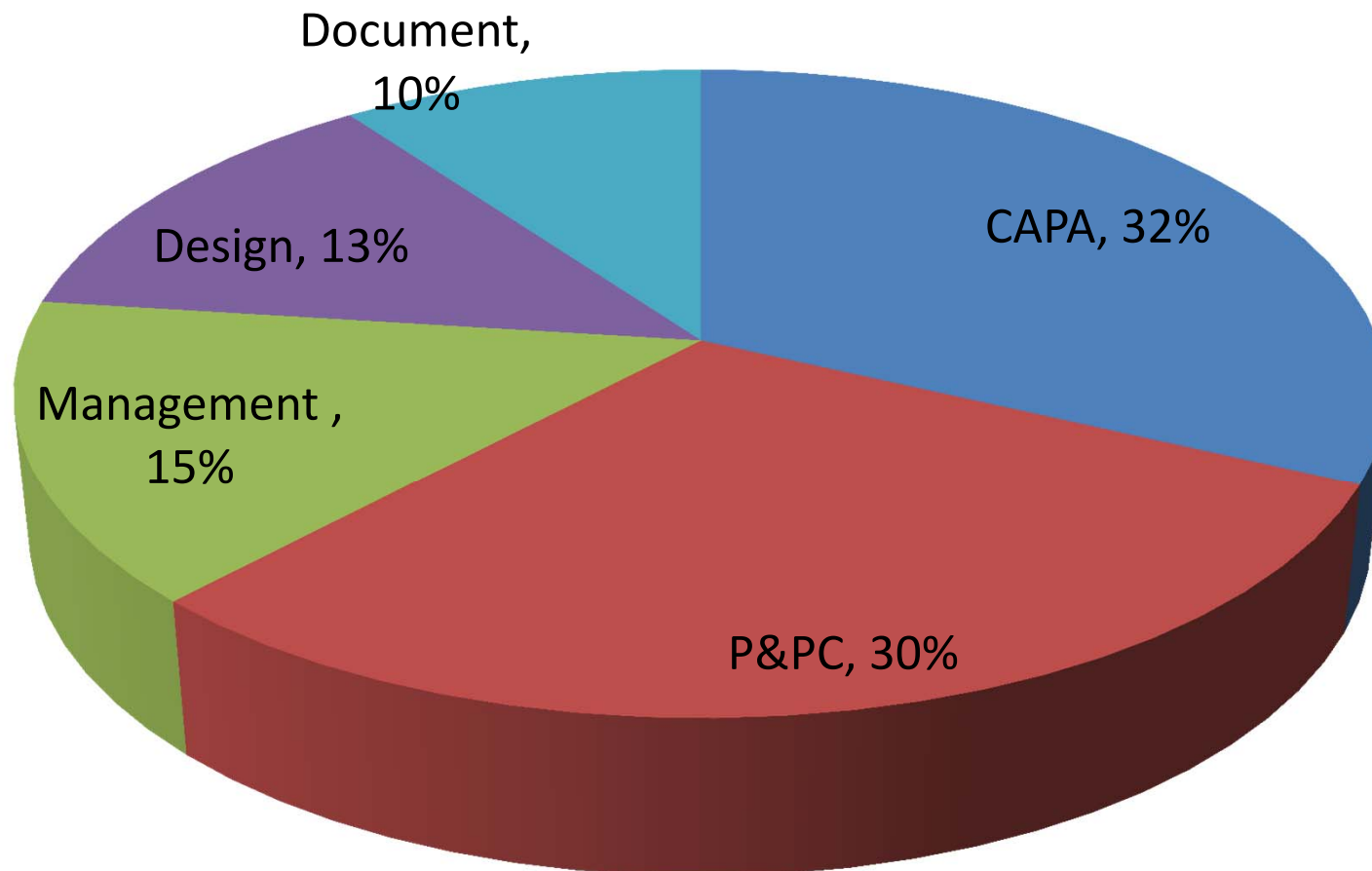


Foreign Untitled and Warning Letters Issued by OIVD/OIR – by Product Area





Analysis of 2010 FDA 483 Observations*



****source: AAMI Corrective and Preventative Action, Requirements and Industry Practice course, 2011***



IVD Warning Letter Data - Summary

- *Foreign inspection oversight increasing – 6 foreign UL/WL issued by OIR/DIHD for 2013 to date*
- *In 2010, CAPA and P&PC were responsible for the largest number of FDA-483 cites– this is likely to continue*



Guidance documents – 510(k) device modifications

Deciding When to Submit a 510(k) for a Change to an Existing Device

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm080235.htm>

Guidance for Industry and FDA Staff; Replacement Reagent and Instrument Family Policy

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm079185.htm>

Class II Special Controls Guidance Document: Instrumentation for Clinical Multiplex Test Systems - Guidance for Industry and FDA Staff

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm077819.htm>



Guidance documents – PMA device modifications

*Quality System Information for Certain Premarket Application Reviews;
Guidance for Industry and FDA Staff*

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm070897.htm>

*Guidance for Industry and FDA Staff: Modifications to Devices Subject to
Premarket Approval (PMA) - The PMA Supplement Decision-Making Process*

<http://www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/UCM089360.pdf>

*Guidance for Industry and FDA Staff - 30-Day Notices, 135-Day Premarket
Approval (PMA) Supplements and 75-Day Humanitarian Device Exemption
(HDE) Supplements for Manufacturing Method or Process Changes*

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm080192.htm>



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Thank you!

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