

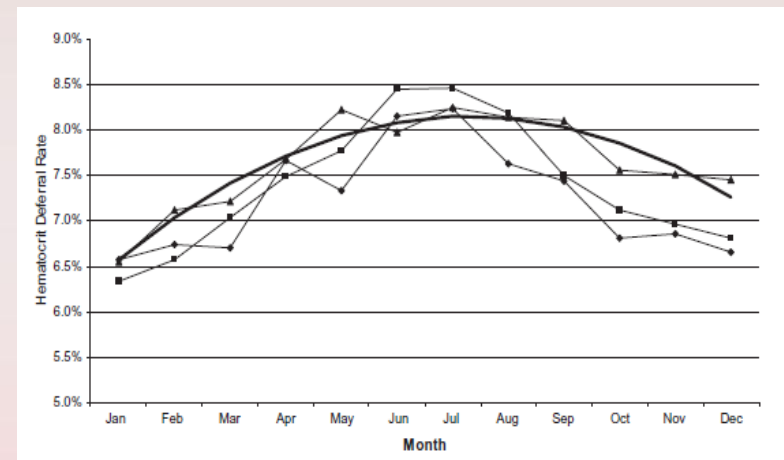
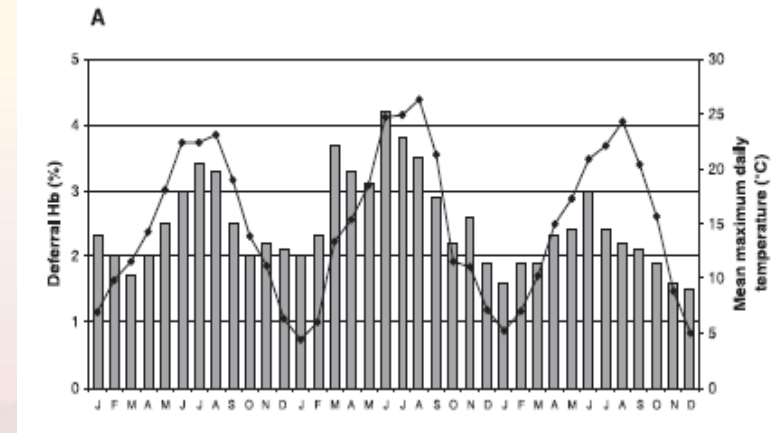
Does Seasonality Influence Adverse Events In Automated Donors?

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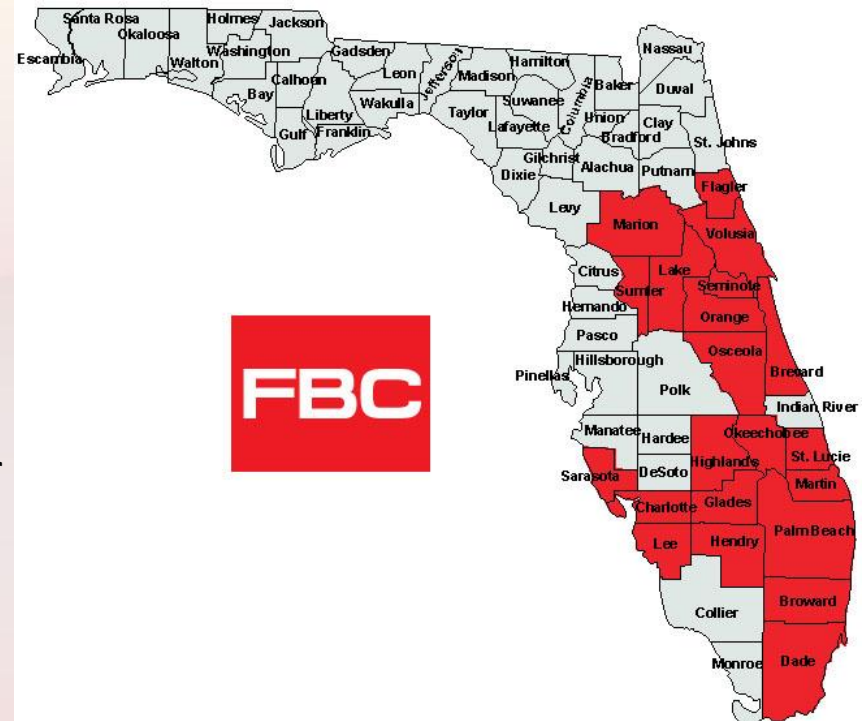
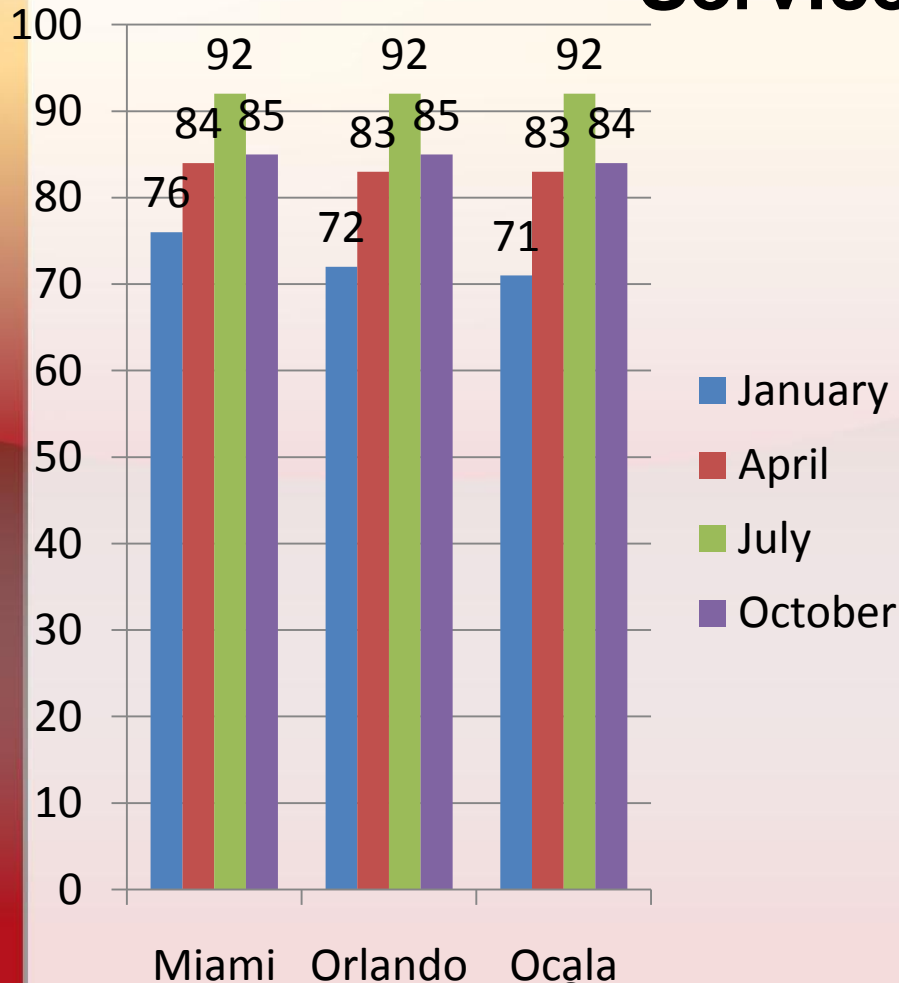
Background

- Association
 - Hemoglobin deferral and seasonal variation
- Association?
 - Season & # adverse donor events (ADE)
 - Automated donors



Transfusion 2007; 47: 895-900
 Transfusion 2007; 47: 890-894

Mean Temperatures Service Areas



Source: www.weather.com 06/11

Methods

- Two-year period
- Divided by quarter – approximated seasons
- Reviewed automated donor records
 - Double red blood cells (DRBC)
 - Plateletpheresis
 - Plateletpheresis – any concurrent component

ADE Categories

- Arm complaints
 - All types (e.g., hematoma, nerve irritation)
- Vasovagal (VV)
 - VV uncomplicated (VV+LOC)
 - VV complicated (VV+LOC+convulsions)
- Need for ED transport
- Other

ADVERSE DONOR EVENT REPORT

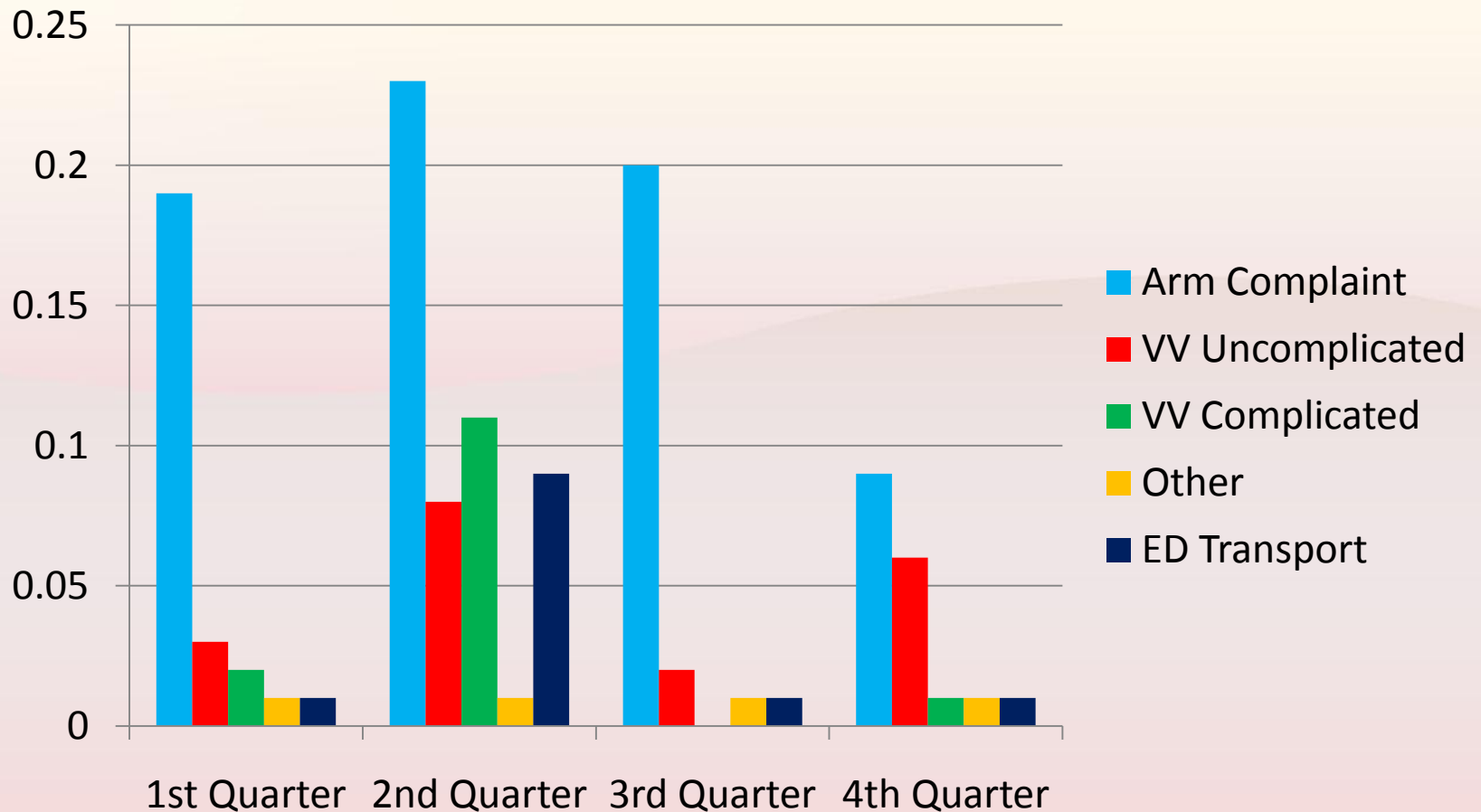
SECTION 1		IDENTIFICATION	
<i>(Complete this entire section for all adverse events)</i>			
Branch Location Code/Mobile#: _____		Date of Occurrence: _____ Date Reported to FBC: _____	
Full Name: _____ <small>(Print) Last First M.I.</small>		DID: _____	
Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female Race: _____		Date of Birth: _____ Unit #: _____	
Telephone #: _____ / _____ / _____		Home / Work / Cell	
Type of Donation: <input type="checkbox"/> Allogeneic <input type="checkbox"/> Autologous <input type="checkbox"/> Designated <input type="checkbox"/> Therapeutic <input type="checkbox"/> Samples only			
Procedure Type: <input type="checkbox"/> WB <input type="checkbox"/> PLT Apheresis <input type="checkbox"/> PLT/PLS Concurrent Apheresis <input type="checkbox"/> cRBC Apheresis <input type="checkbox"/> DRBC <input type="checkbox"/> Atyx <input type="checkbox"/> Apheresis Device # _____			
Place of Occurrence: <input type="checkbox"/> Donor Bed <input type="checkbox"/> Refreshment area <input type="checkbox"/> Elsewhere at collection site <input type="checkbox"/> Off-site (list) _____			
First-time Donor: <input type="checkbox"/> Yes <input type="checkbox"/> No Weight 115lbs or > <input type="checkbox"/> Yes <input type="checkbox"/> No UB: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If "Yes", is donor aware of UB?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No OW: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If "Yes", is donor aware of OW?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No			
Donor age: <input type="checkbox"/> 16-17 <input type="checkbox"/> 18-19 <input type="checkbox"/> 20-60 years <input type="checkbox"/> 61+ years # of phlebotomy attempts: _____ Phlebotomist: _____			
SECTION 2		VITAL SIGNS	
<i>(Complete this section for all adverse events EXCEPT reactions due to needle insertion)</i>			
BP _____ / _____ Pulse _____ Time _____		BP _____ / _____ Pulse _____ Time _____	
BP _____ / _____ Pulse _____ Time _____		BP _____ / _____ Pulse _____ Time _____	
BP _____ / _____ Pulse _____ Time _____		BP _____ / _____ Pulse _____ Time _____	
NOTE: Vital signs are to be assessed approximately every 5 minutes or until donor is stable. If donor does not require urgent medical attention but does not feel well enough to leave the donation site within 30 minutes, call 9-1-1 and notify the DA Dept.			
SECTION 3		VASOVAGAL REACTIONS	
<i>(Complete this section for 2nd and 3^d degree vasovagal reactions)</i>			
<input type="checkbox"/> Second Degree (vasovagal reaction with LOC < 60 seconds, uncomplicated)	<input type="checkbox"/> Dizziness / lightheaded <input type="checkbox"/> Feeling of warmth <input type="checkbox"/> Nausea / Vomiting <input type="checkbox"/> Weakness <input type="checkbox"/> Sweating	<input type="checkbox"/> Twitching <input type="checkbox"/> LOC < 60 secs <input type="checkbox"/> LOC ≥ 60 secs <input type="checkbox"/> Convulsions <input type="checkbox"/> Loss of bowel / bladder control <input type="checkbox"/> Other _____	<input type="checkbox"/> Pre-donation <input type="checkbox"/> During Donation <input type="checkbox"/> Post Donation <input type="checkbox"/> Post Discharge
<input type="checkbox"/> Third-degree (vasovagal reaction with LOC ≥ 60 seconds, complicated)	<input type="checkbox"/> Pallor / pale skin or lips <input type="checkbox"/> Cold extremities, chills <input type="checkbox"/> Rapid or slow pulse <input type="checkbox"/> Accident or injury due to reaction		<input type="checkbox"/> Discontinue phlebotomy <input type="checkbox"/> Maintain airway <input type="checkbox"/> Cold towels to face / neck <input type="checkbox"/> Feet ↑, head ↓ <input type="checkbox"/> Fluids given <input type="checkbox"/> Initiate 9-1-1 if needed <input type="checkbox"/> Other _____
<input type="checkbox"/> With accident / injury			
Donor's last fluid and food ingestion (how many hours ago): _____ Description of fluid and food: _____			
Has donor had previous history of fainting/passing out? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, last episode? (approx.) _____			
List ALL medications Donor is taking: _____			
DSS Signature _____		/ ID# _____	

Results

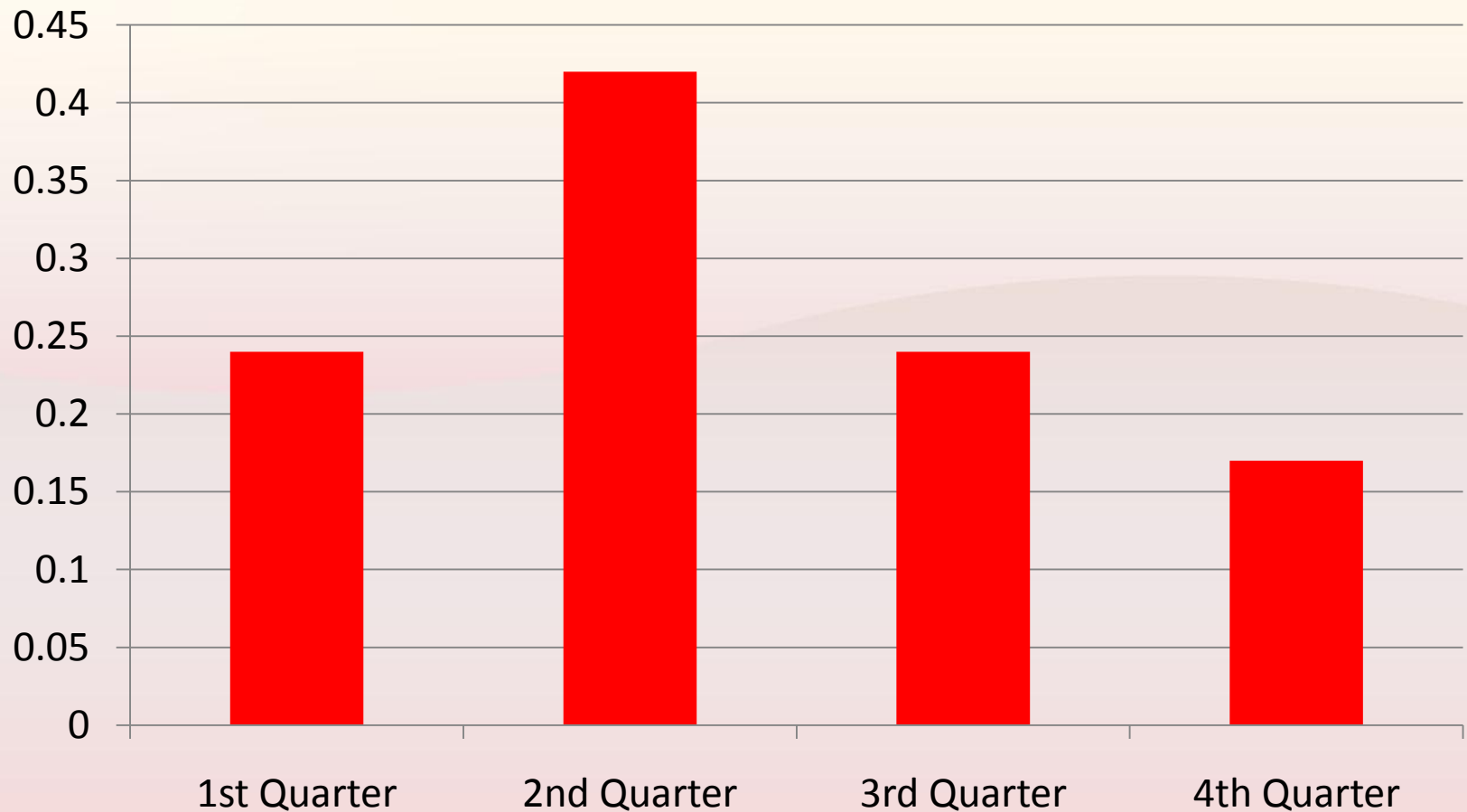
01/01/09-12/31/10, N= 104,433 Automated Donations

Quarter	Total Number Automated Donations	Reaction – Number (%)	Arm Complaints - Number (%)	VV Uncomplicated	VV Complicated	Other	ED Transport
1Q	25,937	61 (0.24)	49 (0.19)	7 (0.03)	4 (0.02)	1 (0.01)	2 (0.01)
2Q	27,373	116 (0.42)	63 (0.23)	21(0.08)	31 (0.11)	1 (0.01)	25 (0.09)
3Q	26,316	62 (0.24)	53 (0.20)	6 (0.02)	0 (0.00)	3 (0.01)	2 (0.01)
4Q	24,807	41 (0.17)	22 (0.09)	14 (0.06)	2 (0.01)	3 (0.01)	2 (0.01)

Composite Data 2009-10 Percent of All Automated Donors

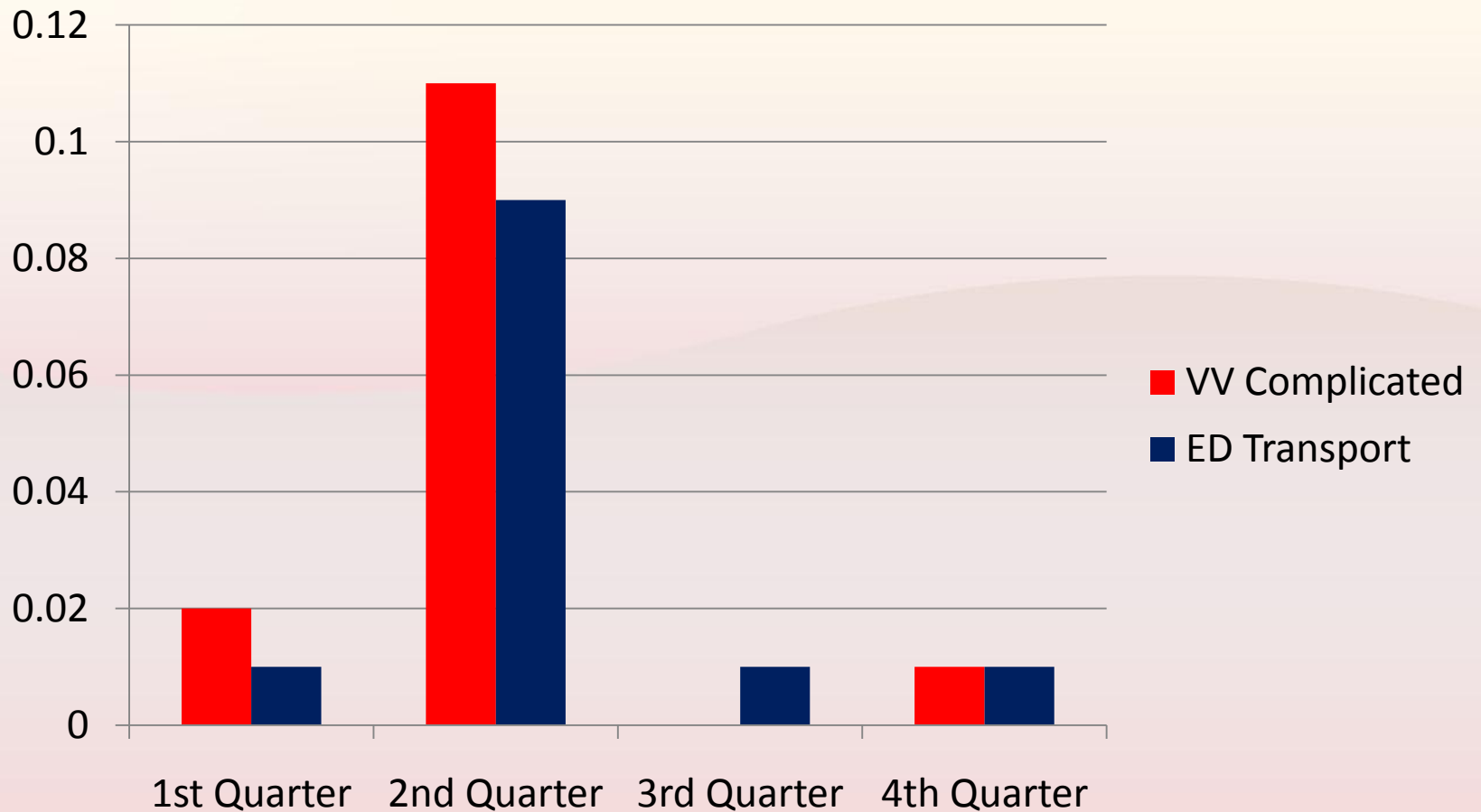


Total Reactions 2009-10 Percent of All Automated Donors



Reactions 2009-10

Percent of All Automated Donors



Conclusions

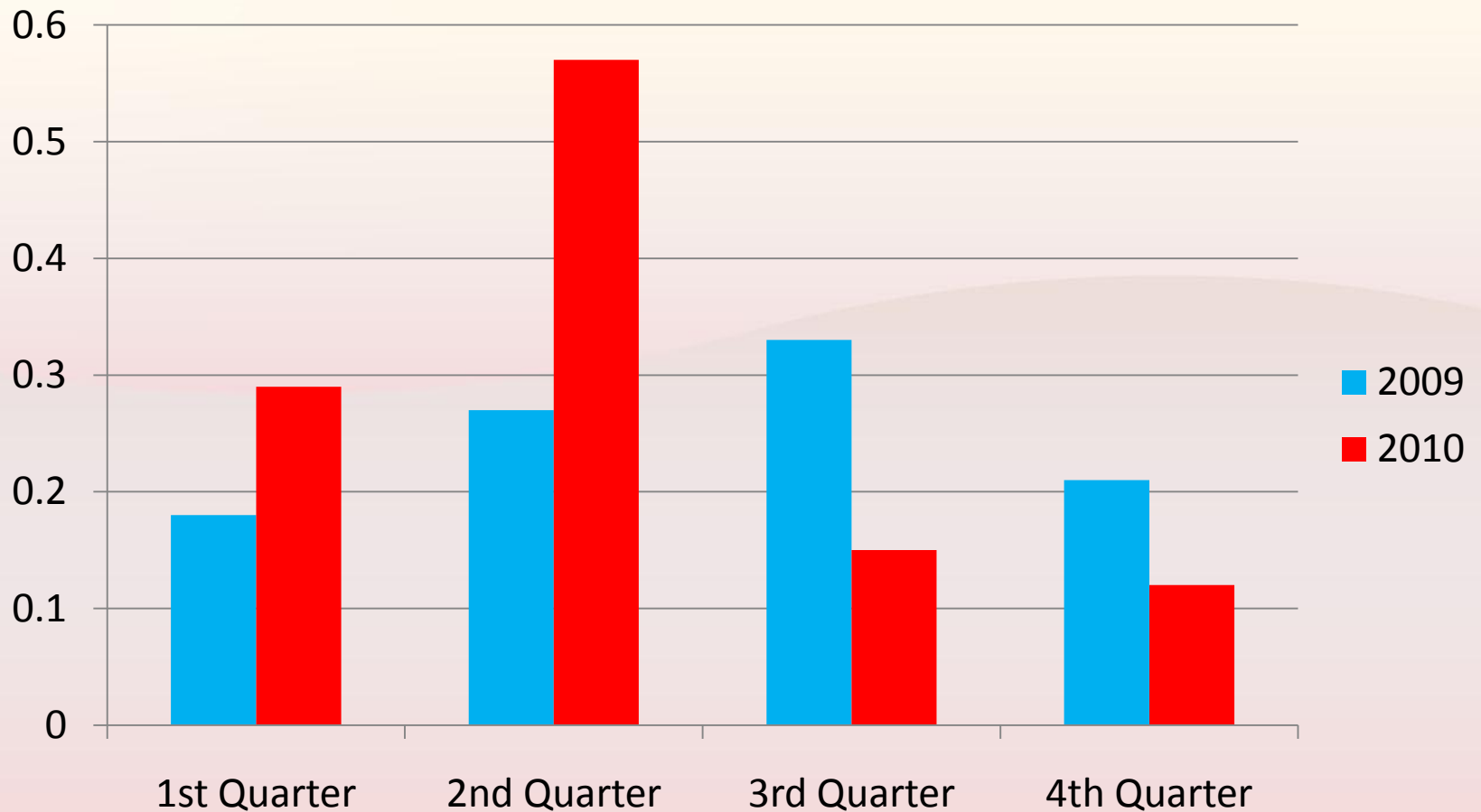
- Two-year period reviewed
- At our blood collection center
- Total number and percent of reactions
 - Highest in the second quarter
 - Lowest in the fourth quarter

Conclusions

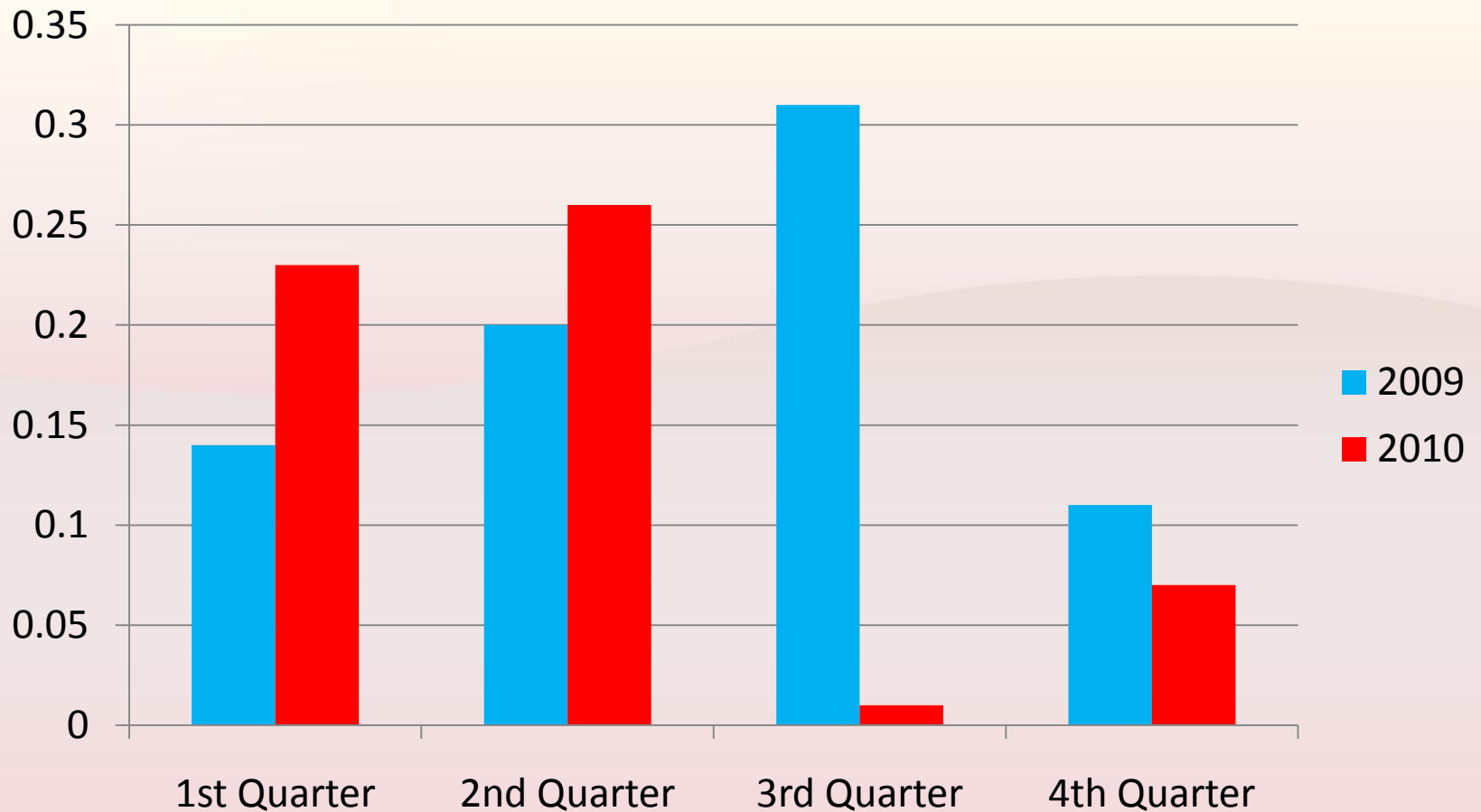
- VV complicated reactions and ED transport
 - Significantly higher in the second quarter
- Being able to establish seasonal ADE trends in automated donors may allow for adequate staffing to promptly address ADE to minimize donor injury

Thank You

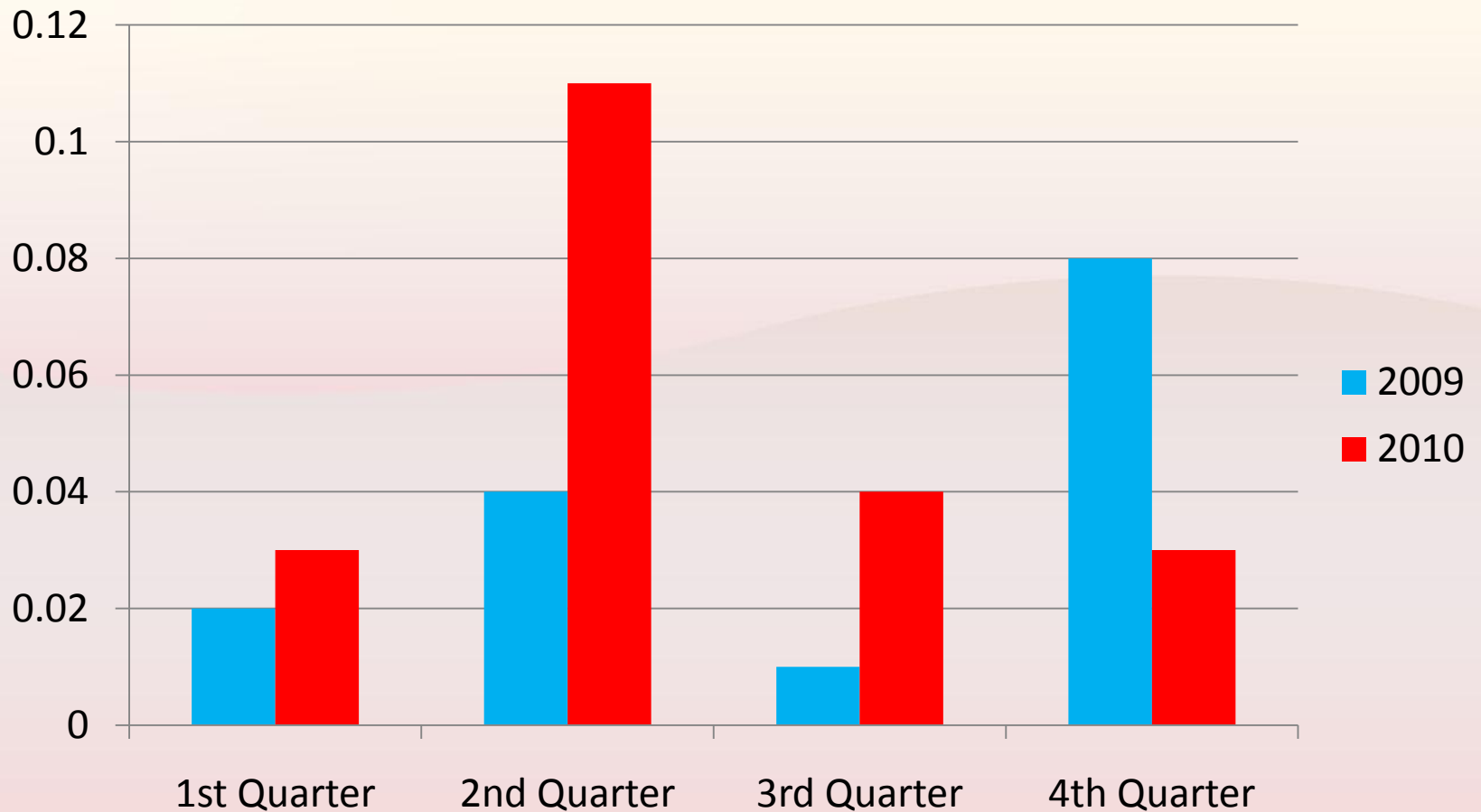
2009 vs. 2010 All Reactions



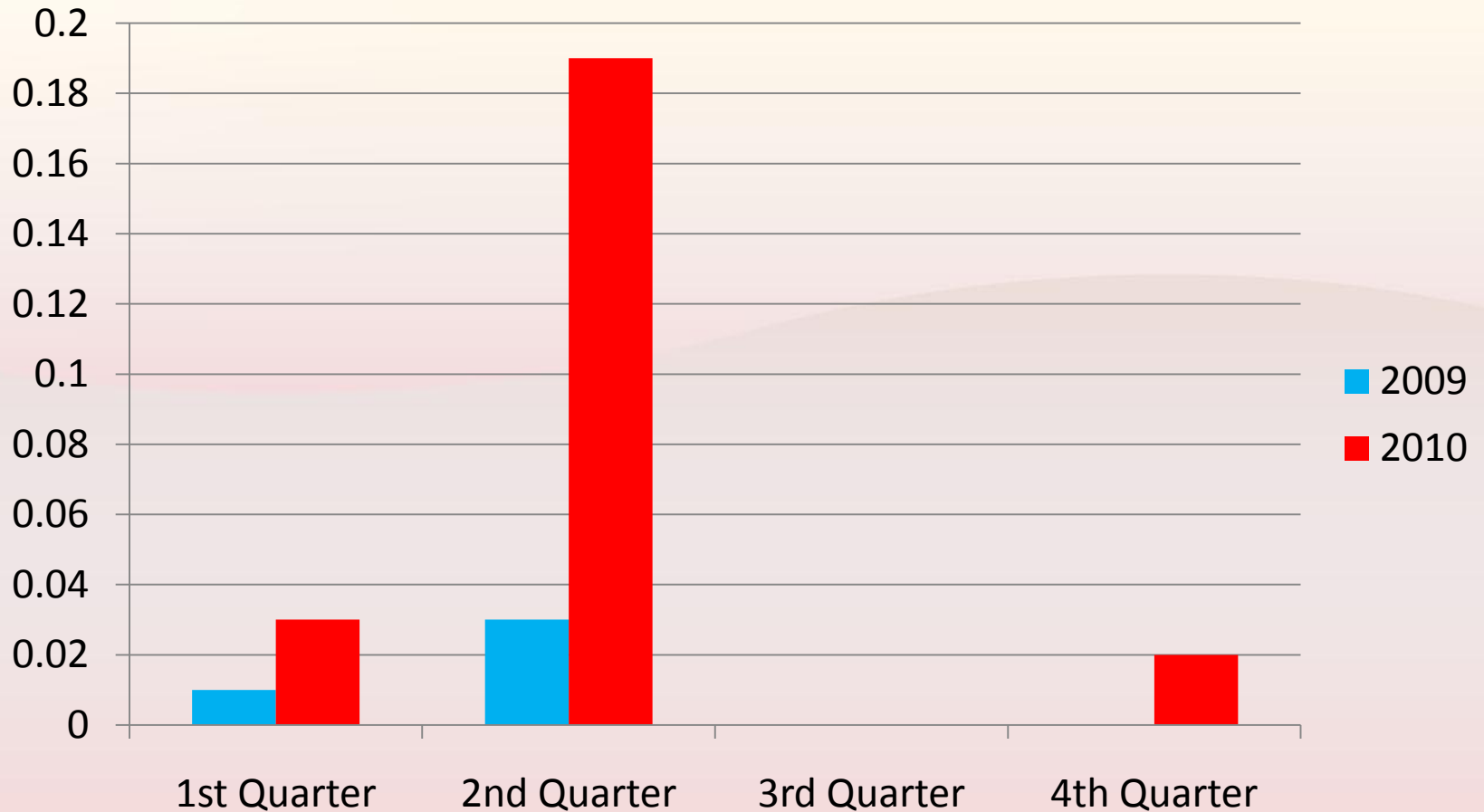
2009 vs. 2010 Arm Complaints



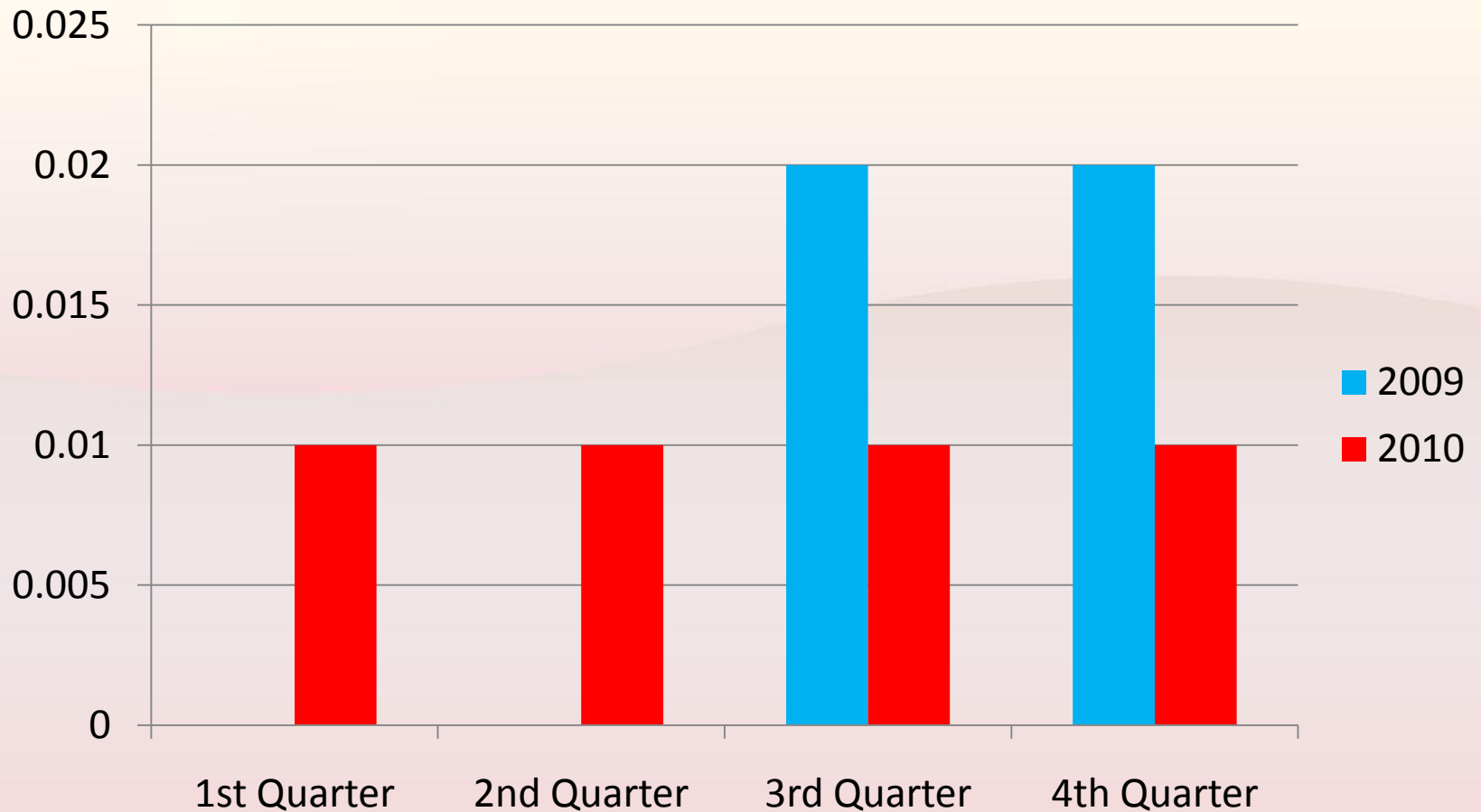
2009 vs. 2010 VV Uncomplicated



2009 vs. 2010 VV Complicated



2009 vs. 2010 Other



2009 vs. 2010 ED Transport

