## Adverse Events- Love them, hate them, report them!

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#### Objectives

- Define and identify an Adverse Event
- Define and identify a Serious Adverse Event
- Samples of AE collection tools
- Questions/ participant samples of AE/SAE

#### What is an Adverse Event (AE)?

21CFR312.32 *Adverse event* means: "Any untoward medical occurrence associated with the use of a drug/device in humans, whether or not considered drug/device related."

Elective hospitalizations for pre-existing conditions (e.g., elective cosmetic procedures) are <u>not</u> adverse events

### What is an Adverse Event (AE)?

Adverse Events may include, but are not limited to the following:

- Worsening of conditions present at the onset of the study i.e. Hypertension requiring an increase or addition of medications
- Concurrent illness i.e. new diagnosis of pneumonia

### Why do I have to report AEs?????

- To Monitor the safety of the study
- To inform regulators , investigators and others of the risk(s) associated with certain events
- To make changes to the study if the risks to the subjects changes
- To inform the subjects of any new or additional risks

### Why report AEs?

- Detect problem products, manufacturers, and ingredients
- Identify common injuries among product types
- Determine if warning statements are needed to prevent injuries or other action
- Discover common misuses of products

#### **Black Box Warnings**

- A black box warning, also known as a "black label warning" or "boxed warning," is named for the black border surrounding the text of the warning that appears on the package insert, label, and other literature describing the medication (e.g., magazine advertising).
- It is the most serious medication warning required by the FDA.

#### **Black Box Warning Medications**

#### **Fluoroquinolone Antibiotics**

According to the FDA, people taking a fluoroquinolone antibiotic have an increased risk of tendinitis and tendon rupture, a serious injury that could cause permanent disability. The FDA warning includes Cipro (ciprofloxacin), Levaquin (levofloxacin), Avelox (moxifloxacin) and other medications containing fluoroquinolone. (Warning issued July 2008.)

#### **Diabetes Medications**

According to the FDA, people with diabetes taking Avandia (rosiglitazone) have an increased risk of heart failure or heart attack if they already have heart disease or are at high risk of suffering a heart attack. (Warning issued November 2007.)

#### **Additional Black Box Medications**

#### **Antidepressant Medications**

According to the FDA, all antidepressant medications have an increased risk of suicidal thinking and behavior, known as suicidality, in voung adults ages 18 to 24 during initial treatment (generally the first one to two months). The FDA warning includes Zoloft (sertraline), Paxil (paroxetine), Lexapro (escitalopram), and other antidepressant medication. (Warning issued May 2007

More can be found at *blackboxrx.com or* http://www.fda.gov/drugs/drugsafety/informationbydrugclass

#### **Black Box Warnings**

The FDA announced in March 2005 that two topical eczema drugs -- Elidel cream and Protopic ointment -- would get a "black box" warning about a possible cancer risk. The warning states that there have been rare reports of cancer (for example, skin and lymphoma) in patients who had been receiving the two drugs; however, the drugs haven't been proven to cause cancer.

# Unanticipated Uses for Products or Drugs

- Proscar- originally marketed to treat benign prostatic hypertrophy. After 5 years of testing, an interesting side effect was discovered- hair growth! (1990s)
- Viagra- originally was to be used to treat hypertension, angina and other symptoms of heart disease. It did not work very well at treating those diseases but it did have an interesting side effecterections!

#### Other commonly found terms

#### **Expected Adverse Events**

Those experiences that have been identified in nature, severity or frequency in the current investigator plan or protocol and in the current Informed Consent.

Examples: Nausea following surgery Pain following surgery Dark colored stools (when taking iron supplements)

### **Unexpected Adverse Events**

Any adverse event, the specificity or severity of which is not consistent with the current investigator brochure or with the risk information described in the investigational plan or Informed Consent. Examples:

- Hepatic necrosis would be unexpected (by virtue of greater severity) if the investigator brochure referred only to elevated hepatic enzymes or hepatitis.
- Cerebral thromboembolism and cerebral vasculitis would be unexpected (by virtue of greater specificity) if the investigator brochure listed only cerebral vascular accidents.

http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=31 2.32CF

### **Unanticipated Problems**

- Unexpected in terms of nature, severity or frequency given (a) the research procedures that are described in the protocol related documents such as the research protocol, investigators brochure and the informed consent and (b) characteristics of the study population
- Related or possibly related to participation in the research .
   Possibly related means there is a reasonable possibility that the incident, experience or outcome may have been caused by the procedures involved in the research
- Suggests that the research places participants or others at a greater risk of harm (including physical, psychological, economic or social harm) than was previously know or recognized.

45 CFR part 46

### Relatedness of Drug/device to Product/procedure

- Not related- the adverse event is CLEARLY not related to the product /device
- Unlikely related- the adverse event is DOUBTFULLY related to the product/device
- Possibly related- the adverse event MAY be related to the product/device

#### Severity of Event

Mild: an experience that is usually transient and requires no special treatment or intervention

Moderate: an experience that is alleviated with simple therapeutic measures

Severe: an experience that requires therapeutic intervention

#### Sample of AE Tracking Log for a Device Study

						Outcome:	Actions Taken:	Device Relationship	Procedure Relationship	Device Malfunction?		
						Continuing	0 = no action	Not related	Not related	Not related		
Event #	Subject ID	Event Description	SAE (Y/N)	Start Date	End Date	Resolved	1 = medication	Unlikely	Unlikely	Unlikely	Date IRB Notified	Other
		F				Unknown	2 = surgery/procedure	Possibly	Possibly	Possibly		
						Death	3 = hospital 4 = other	Definitely	Definitely	Definitely		
							4 – other					
1												
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### **Definition of an SAE**

A serious adverse event (SAE) is defined as one that suggests a significant hazard or side effect, regardless of the investigator's opinion on the relationship to the investigation product or device.

### **Definition of an SAE**

This includes, but may not be limited to, any event that:

- Is fatal
- Is life-threatening
- Requires or prolongs inpatient hospitalization
- Is a persistent or significant disability or incapacity
- Congenital Anomaly/Birth Defect

#### **Definition of an SAE**

Is considered an important medical event.

Important medical events may be considered serious by the investigator although they may not be immediately life threatening or result in death or prolong hospitalization. Such important medical events are those that may jeopardize the patient, require intervention to prevent one of the outcomes listed above, or result in urgent investigation.

#### SAE Important Medical Event Examples

Examples include, but are not limited to:

- allergic bronchospasm
- convulsions
- blood dyscrasias

- Death needs no further definition
- Life threatening: in the view of *either* the investigator or sponsor, its occurrence places the patient or subject at immediate risk of death. It does not include an adverse event or suspected adverse reaction that, had it occurred in a more severe form, might have caused death.

#### **SAE Examples**

• Mild bronchospasm treated with epinephrine with complete recovery of subject.

• Bleeding following removal of a femoral artery sheath that is quickly controlled.

- Inpatient hospitalization or prolongation of existing hospitalization. Example: Subject in hospital for pneumonia and has a heart attack. The heart attack causes the subject to stay in the hospital longer.
- Is a persistent or significant disability or incapacity. Example: Person has a renal stent placed that failed and person now on dialysis

• Congenital Anomaly/Birth Defect.

Remember Thalidomide? Used in the late 1950s early 1960s to treat nausea in pregnant women with resultant limb malformations. The drug <u>was</u> approved in 1998 for the treatment of leprosy and multiple myeloma.

Accutane, a medication used to treat cystic acne was found to cause life threatening birth defects.

• Is considered an important medical event.

Examples of such medical events include allergic bronchospasm requiring intensive treatment in an emergency room or at home, blood dyscrasias or convulsions that do not result in inpatient hospitalization, or the development of drug dependency or drug abuse.

Source:

http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=312.32

### **Unanticipated Adverse Device Effects**

Any serious adverse effect on the health or safety caused by or associated with a device, if the event was not previously identified in nature, severity or degree of incidence in the investigational plan

Any unanticipated serious problem associated with a device that relates to the rights, safety or welfare of subjects

CFRPart812 http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm? CFRPart=812

#### **UADE Examples**

- Stent fractures occurring at higher than anticipated numbers in an IDE study.
- Hepatic necrosis would be unexpected (by virtue of greater severity) if the investigator brochure only referred to elevated hepatic enzymes or hepatitis.

#### **Unanticipated Adverse Device Effects**

- Must report the event within 10 business days to the following:
  - FDA
  - Local IRB
  - Sponsor
  - Any other participating investigators

#### **Reporting Adverse Events**

Use the following form to report study related adverse events covered by the UW Human Subjects Assistance Plan, breach of confidentiality and inappropriate access of personal health information (PHI) to the Human Subjects Division <u>within 24 hours</u>.

Use the form to report other study related problems no later than **10 business days** after becoming aware of the issue.

HUMAN SUBJECTS I				
Box 359470 Seattle, WA 9819				REPORT: Problems
Phone: 206-543-0 Fax: 206-543-021	0098			Click to reveal all branching and guidance
	-			
		For HSD Office	Use Only	Date Received:
Master Copy	APPROVED	📃 Full IRB R	eview	
IRB Working Copy		Expedited	Review	
Researcher Copy	WITHDRAWN			
Date of IRB Action:	Printed Name:			
IRB Chair or Designee Signature:				DORA MOD #
Notes:				
(PHI) MUST BE • OTHER STUD	E REPORTED TO H	SD <u>within 24 hoi</u> .Ems must be re	URS	PERSONAL HEALTH INFORMATION
instructed otherw	tudy & Contact I	nformation		
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Lead Researche	r Name:	Lead Researcher P		nown):  Lead Researcher Email:
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Lead Researcher	r Name:	Lead Researcher P		
Contact Name:	r Name:			Lead Researcher Email:
Contact Name: Contact Name: Co	Scription Sort: of event or information	Contact Phone:	hone:	Lead Researcher Email:
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Contact Name: Contact Name: Co	scription port: of event or information r problem or event repor leral audit, inspection, o hip between problem a	Contact Phone: Contact Phone:	s date: [ der of this form will b ies: D the research do not	Lead Researcher Email: Contact Email: Mod#: hidden) SKIP TO PART 4

Possibly related. This means it is more likely than not that the incident, experience, or outcome was caused by the procedures involved in the research, or that it is associated with the use of any drug, biologic, or medical device that is part of the research.

#### Related

2.2.b. If the problem is related or possibly related to the research, provide your rationale:

2.3. Was the problem or event unexpected? "Unexpected" means that harm or (potential harm) is inconsistent with risk information previously reviewed by the IRB in terms of nature, severity, or frequency as well as the characteristics of the subject population.

YES

NO

- 2.4. Was the problem within the control of the research team? Note: Inconsistency with IRB approved procedures that is the results of a study participant's own non-adherence to the protocol and research instructions is <u>not</u> considered to be within the control of the research team.
  - O YES
- NO

2.5.a. The problem did or could have (check all that apply):

Increased risk to, or jeopardized the safety, welfare, and/or rights of one or more participants or others.

Decreased potential benefits of the research (this includes the scientific integrity of the research).

2.5.b. If either of the above were checked, explain whether this was a significant increase in risk or decrease in benefits:

2.6. The problem resulted in (check all that apply):

Death

A life-threatening situation

Inpatient hospitalization or prolongation of existing hospitalization

A persistent or significant disability/incapacity

A congenital anomaly or birth defect

Risk to the subject's health that may require medical or surgical intervention to prevent one of the outcomes above

A breach of confidentiality concerning readily identifiable information that is highly sensitive or can be easily used for identity theft

2.7. Date, Time, and Location

2.7.a. Date(s) and time(s) of occurrence:

2.7.b. Date when researcher became aware of the problem:

2.7.c. Location where the problem occurred:

2.8. Additional Details



as this kind of problem occurred before in connection with this study (at this site or another study site)?
YES
NO
id the problem happen to a subject in the study?
YES
NO
d the problem happen to someone other than a subject in the study?
YES
NO
cription of the nature, circumstances, and consequences of the problem:
em Resolution
he problem resolved?
YES
NO
lain how you will prevent this problem from happening in the future:
lain whether enrolled subjects need to be informed about the problem:
the research procedures need to be modified?
YES
NO
the consent documents or consent process need to be modified?
YES NO
al Audit, Inspection, or Inquiry
nplete this section ONLY if reporting an audit, inspection, compliance-related inquiry, or safety related uiry from a federal agency.
ame of federal agency:
• •
eason for audit, inspection or inquiry:
c. Copy of agency report attached.
2. Copy of agency report attached.

5.1.a. Provide the nam	ne of the health facility where care was pr	ovided and patient medical record r	number at this facility
5.1.b. Subject's name	:		5.1.c. Subject's age
5.1.c. Subject's addre	55:		
5 1 d Copy of cor	sent form signed by subject attached.		

Last Updated 04/04/2014 Version 1.10

### **IND Safety Reporting**

Sponsor must submit an IND safety report if the event is:

- A suspected adverse reaction
- Serious AND
- Unexpected
- Report must be filed with the FDA within 15 calendar days of notification
- If the AE is fatal or life threatening, a report must be filed with the FDA within 7 days of notification

Relatedness of drug/device to product/procedure

 Probably related- the adverse event *is LIKELY* related to the product/device

• Definitely related- the adverse event *is CLEARLY RELATED* to the product/device

#### **Adverse Events forms**

- Date of onset
- Description of event Death is not an event but an outcome
- Relatedness
- Action taken
- Severity (and /or Grade)
- Outcome
- Stop date

#### Med Watch Reporting Form

#### **Mandatory Medical Device Reporting:**

The Medical Device Reporting (MDR) regulation (21 CFR 803<sup>1</sup>) contains mandatory requirements for manufacturers, importers, and device user facilities to report certain device-related adverse events and product problems to the FDA. The FDA published a final rule<sup>2</sup> on Feb. 14, 2014, requiring manufacturers and importers to submit MDRs to the FDA in an electronic format that the FDA can process, review, and archive. This rule will be effective as of Aug.14, 2015.

Information on the requirements for each mandatory reporting group follows:

**Manufacturers:** Manufacturers are required to report to the FDA when they learn that any of their devices may have caused or contributed to a death or serious injury. (Key terms are defined in 21 CFR 803.3<sup>3</sup>.) Instructions<sup>4</sup> are available for completing the required 3500A form<sup>5</sup>. Manufacturers must also report to the FDA when they become aware that their device has malfunctioned and would be likely to cause or contribute to a death or serious injury if the malfunction were to recur. For more information please see the draft guidance for manufacturers on medical device reporting<sup>6</sup>.

#### Med Watch Form 3500

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		product us	duct problems and ise errors			Triage unit sequence #			
	r Information and Reporting Program		Page 1	1 of <u>3</u>	_				
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		Female	"—— <sup>Ib</sup>	#2		-			
In confidence									
B. ADVERSE Check all that apply:	EVENT, PRODUCT PR	OBLEM OR ERF	ROR	3. Da	ites of Use (If unknown r best estimate)	, give	duration) from/to	Stoppe	t Abated After Use d or Dose Reduced?
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3. Date of Event (m	m/dd/yyyy) 4. Dat	ie of this Report (mr	n/dd/yyyy)	#2		#2			
C. Describe Swart	Problem or Product Use Erro	-			SUSPECT MEDIC and Name	AL	DEVICE		
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				2. C	ommon Device Name			2b.	Procode
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									Health Professional
6 Belguni Tashi				Ci	atalog #	E	xpiration Date (m	n/dd/yyyy	Lay User/Patient
		(Continue	on page 3)						Other:
6. Relevant Tests/L	aboratory Data, Including Da	ates		Se	erial #	U	nique identifier (L	IDI) #	1
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#### Med Watch Form 3500

#### ADVICE ABOUT VOLUNTARY REPORTING

Detailed instructions available at: http://www.fda.gov/medwatch/report/consumer/instruct.htm

#### Report adverse events, product problems or product Report even if: use errors with: · You're not certain the product caused the event Medications (drugs or biologics) · You don't have all the details Medical devices (including in-vitro diagnostics) How to report: · Combination products (medication & medical devices) Just fill in the sections that apply to your report - Human cells, tissues, and cellular and tissue-based Use section D for all products except medical devices products Attach additional pages if needed Special nutritional products (dietary supplements, Use a separate form for each patient medical foods, infant formulas) · Report either to FDA or the manufacturer (or both) Cosmetics · Food (including beverages and ingredients added Other methods of reporting: to foods) 1-800-FDA-0178 - To FAX report Report product problems - quality, performance or 1-800-FDA-1088 - To report by phone safety concerns such as: www.fda.gov/medwatch/report.htm - To report online Suspected counterfeit product · Suspected contamination If your report involves a serious adverse event with a device and it occurred in a facility outside a doctor's office, Questionable stability · Defective components that facility may be legally required to report to FDA and/or the manufacturer. Please notify the person in that facility -Food Here--Fold Here- Poor packaging or labeling Therapeutic failures (product didn't work) who would handle such reporting. Report SERIOUS adverse events. An event is serious If your report involves a serious adverse event with a when the patient outcome is: vaccine, call 1-800-822-7967 to report. Death Life-threatening Confidentiality: The patient's identity is held in strict Hospitalization - initial or prolonged confidence by FDA and protected to the fullest extent of - Disability or permanent damage the law. FDA will not disclose the reporter's identity in Concenital anomaly/birth defect response to a request from the public, pursuant to the Required intervention to prevent permanent Freedom of Information Act. The reporter's identity, impairment or damage (devices) including the identity of a self-reporter, may be shared with Other serious (important medical events) the manufacturer unless requested otherwise The information in this box applies only to requirements of the Paperwork Reduction Act of 1995 The burden time for this collection of information has been estimated to average 36 minutes per response, including the time to review instructions, search existing data sources, gather and maintain the data needed, and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Department of Health and Human Services Please DO NOT RETURN this form OMB statement: Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff "An agency may not conduct or sponsor, and a to the PRA Staff e-mail to the left. person is not required to respond to, a collection of information unless it displays a currently valid OMB control number." Paperwork Reaucuon A. PRAStaff@fda.hhs.gov U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

FORM FDA 3500 (2/13) (Back)

#### DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Food and Drug Administration Rockville, MD 20857

Official Business Penalty for Private Use \$300

#### BUSINESS REPLY MAIL FIRST CLASS MAIL PERMIT NO. 946 ROCKVILLE MD

Please Use Address Provided Below -- Fold in Thirds, Tape and Mail

POSTAGE WILL BE PAID BY FOOD AND DRUG ADMINISTRATION

NO POSTAGE

NECESSARY IF MAILED IN THE

UNITED STATES

OR APO/FPO

MEDWATCH The FDA Safety Information and Adverse Event Reporting Program Food and Drug Administration 5600 Fishers Lane Rockville, MD 20852-9787

#### Med Watch Form 3500

	Reset Form Delete Page
	U.S. Department of Health and Human Services (CONTINUATION PAGE)
	For VOLUNTARY reporting of adverse events and product problems
	The FDA Safety Information and     Page 3 of 3       Adverse Event Reporting Program     Page 3 of 3
[	B.5. Describe Event or Problem (continued)
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	B.6. Relevant Tests/Laboratory Data, Including Dates (continued)
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	B.7. Other Relevant History, Including Preexisting Medical Conditions (e.g., allergies, race, pregnancy, smoking and alcohol use, hepatic/renal dysfunction, etc.) (continued)
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#### Conclusion

#### Any questions?

Thank you!