

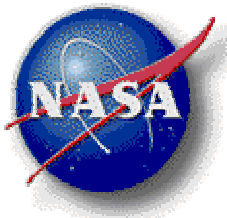
Patient Safety Reporting System Workshops

**NASA Ames Research Center
Moffett Field, California
January, 2002**

THE PATIENT SAFETY REPORTING SYSTEM OVERVIEW

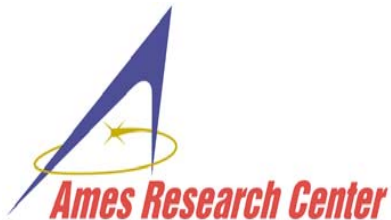
The Who, What, Where, and Why

The NASA/VA Collaboration to Improve Patient Safety



**Ms. Linda Connell, Director
NASA Aviation Safety Reporting System
NASA/VA Patient Safety Reporting System**

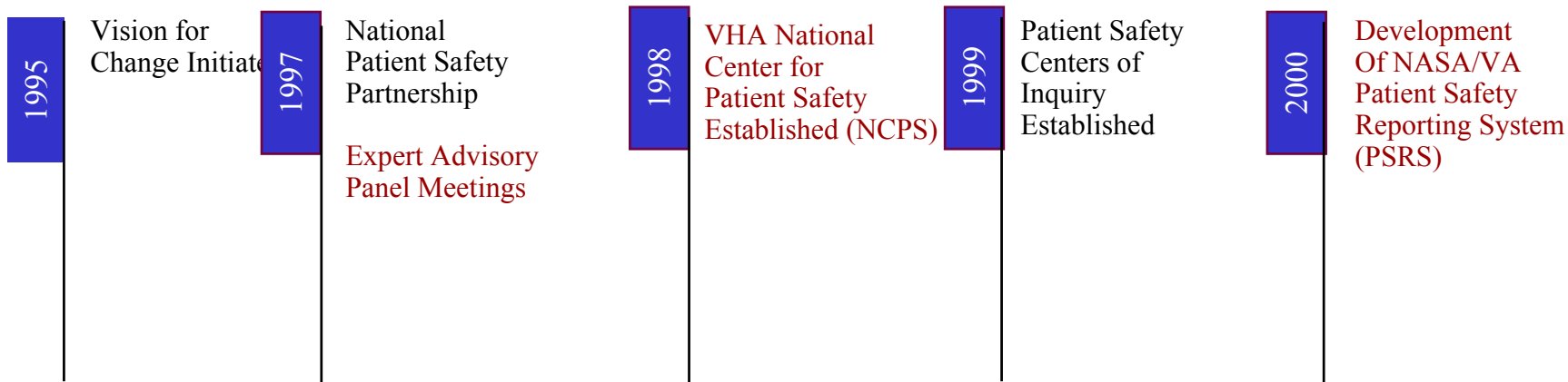




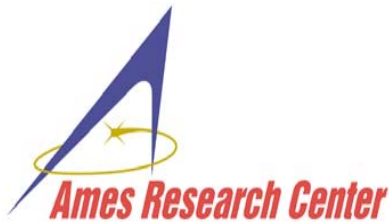
The VA's Efforts Towards Patient Safety Improvements



The VA Vision for Patient Safety Change Was Initiated in 1995



The PSRS Is An Expansion of the VA's Commitment to Quality and Safety



VA and NASA Launch Agreement for PSRS



- **May '00 - Interagency Agreement signed between NASA and Department of Veterans Affairs**
 - Dr. Thomas Garthwaite, Under Secretary of Health
 - Dr. Henry McDonald, Director, NASA Ames Research Center
- **NASA Ames Research Center, Moffett Field, CA and VA National Center for Patient Safety, Ann Arbor, MI are collaborating to maximize patient safety efforts**
 - Dr. Jim Bagian, Director of NCPS
 - Ms. Linda Connell, Director of PSRS

FIRST, DO NO HARM



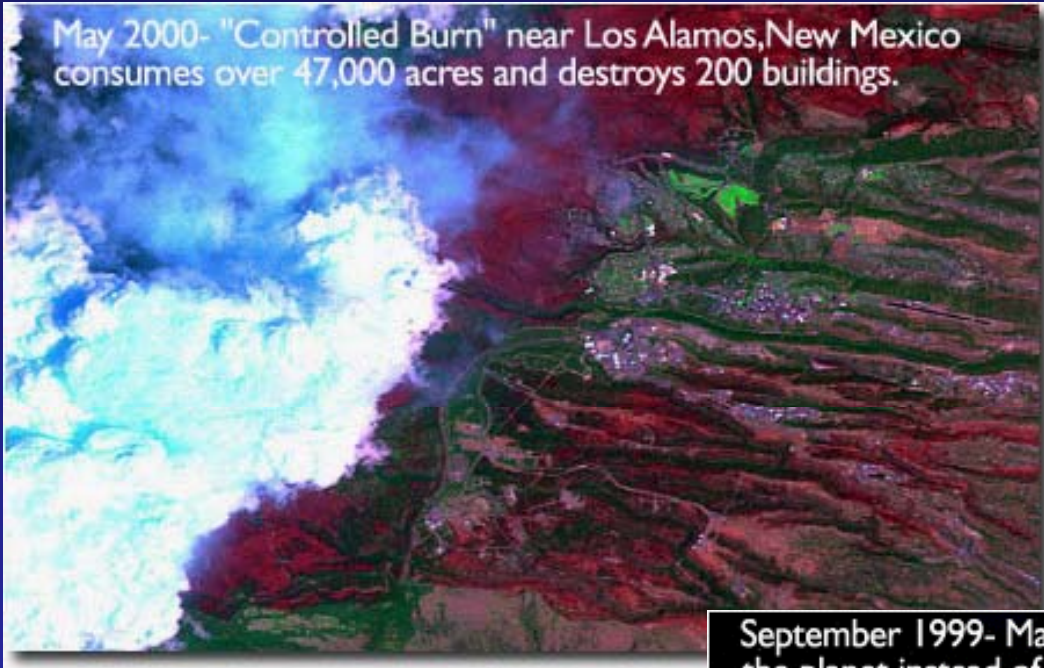
TO ERR IS HUMAN

BUILDING A SAFER HEALTH SYSTEM

I N S T I T U T E O F M E D I C I N E

HUMAN PERFORMANCE CONTRIBUTION TO ERROR

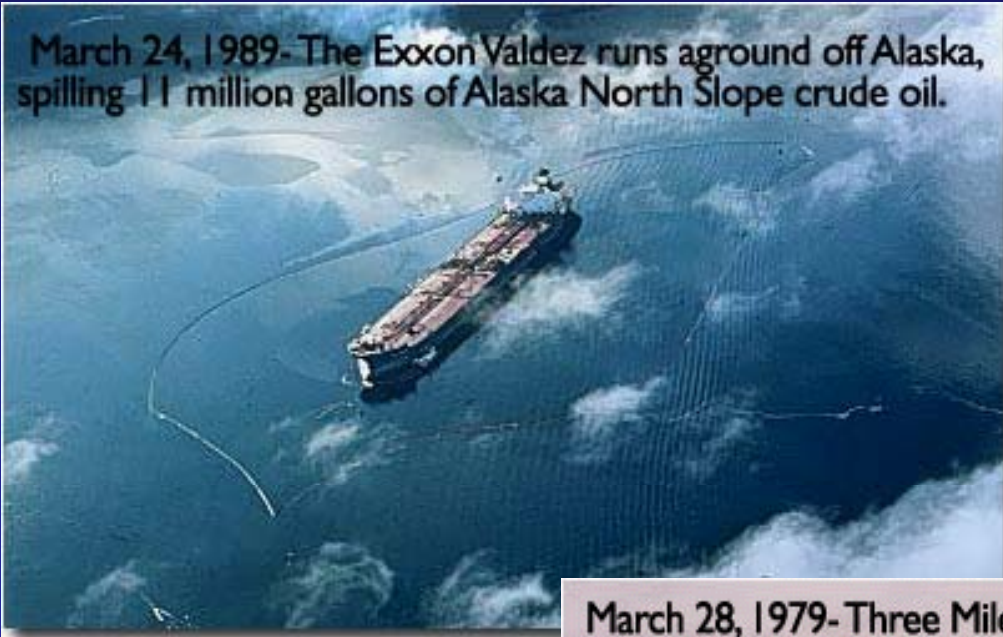
May 2000- "Controlled Burn" near Los Alamos, New Mexico consumes over 47,000 acres and destroys 200 buildings.



September 1999- Mars Climate Orbiter crashes into the planet instead of reaching a safe orbit. The \$125 million craft burns up in the Martian atmosphere.



March 24, 1989- The Exxon Valdez runs aground off Alaska, spilling 11 million gallons of Alaska North Slope crude oil.



March 28, 1979- Three Mile Island Nuclear Power Station experiences a partial reactor meltdown.





OOPS... Forgot to put down the landing gear!

AVIATION SAFETY REPORTING SYSTEM (ASRS)





ASRS - A National Safety Data Resource

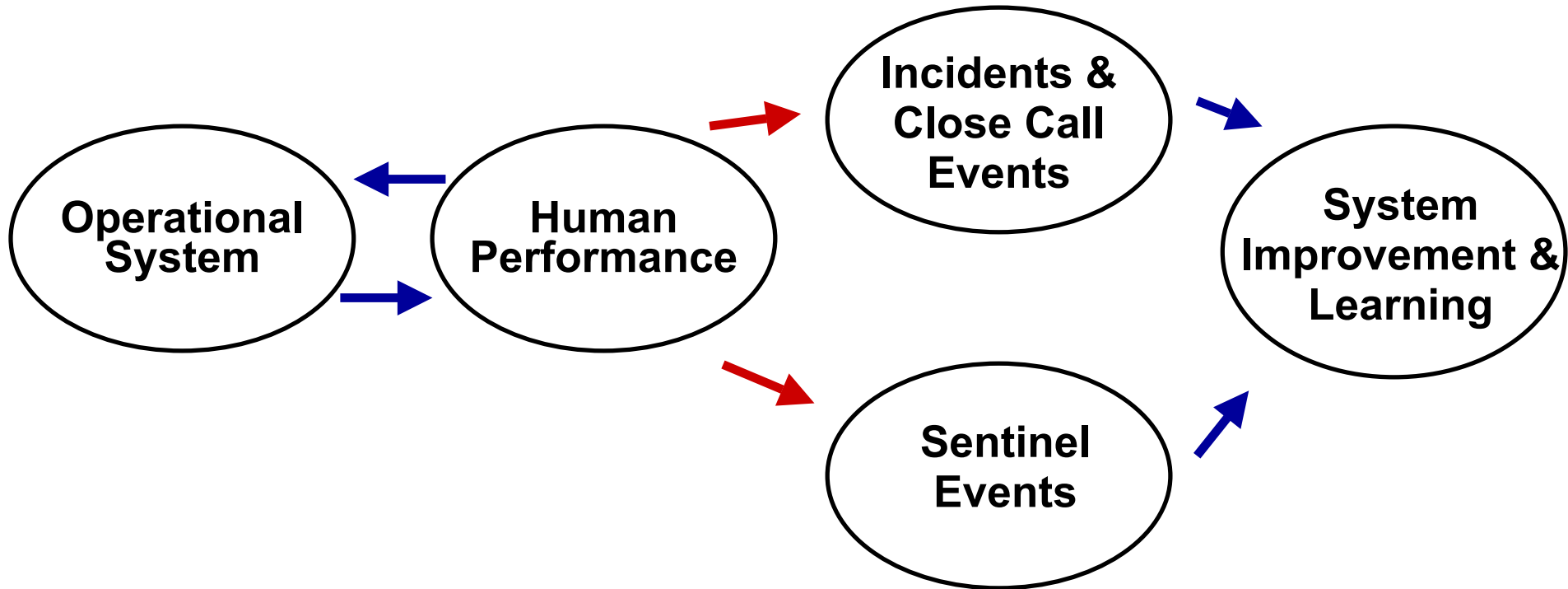
- Identifies aviation system problems and issues
- Generates research hypotheses
- Provides unique human factors and operational insights

***ASRS is trusted and has a rich 25-year history
of contributions to aviation safety***

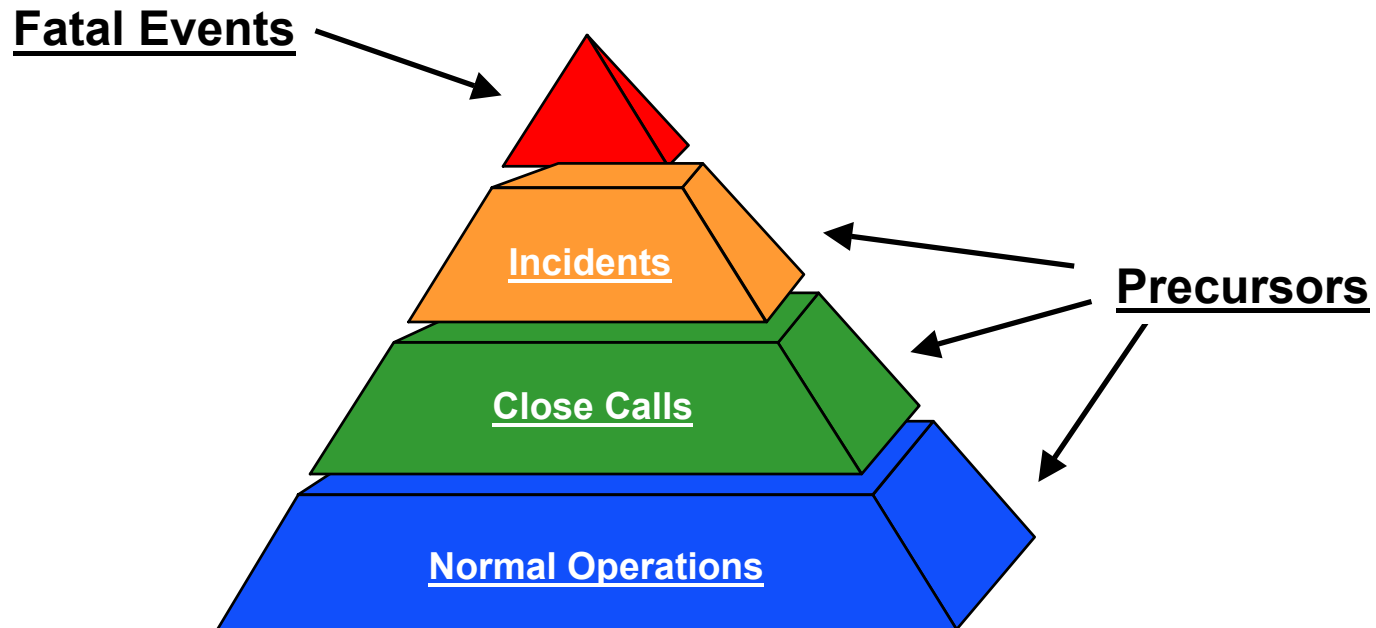
Medical Performance Factors



Event Chain

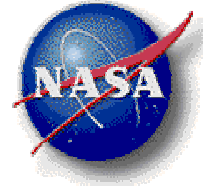


Event Occurrences



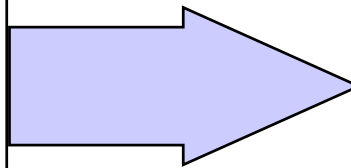
**PSRS is Complementary to
Other VA Systems of Reporting**

THE PSRS PURPOSE



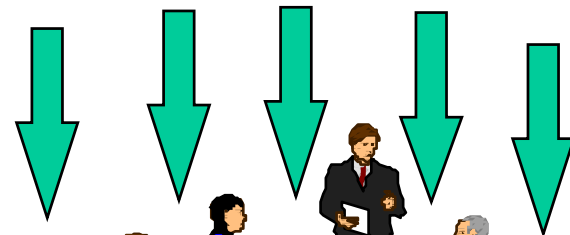
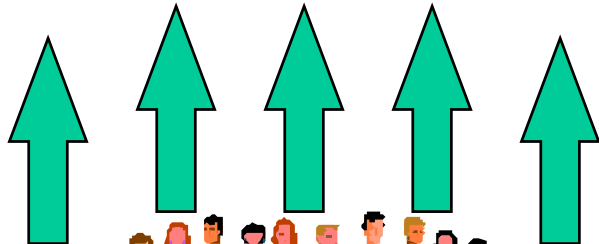
ALERTS

Identify Hazards
and Safety Issues
“Early Warning”

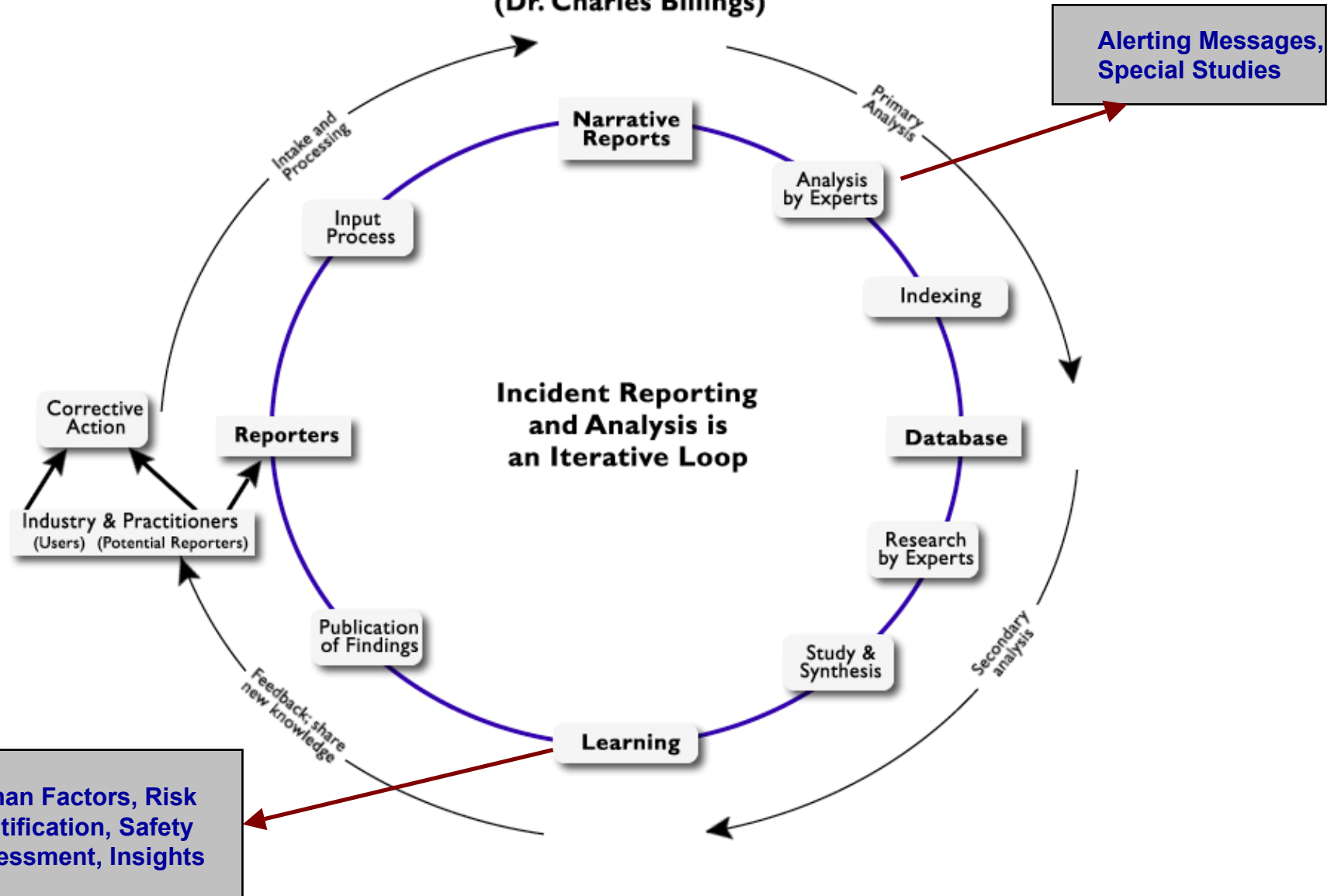


LEARNING

Provide Data
for Planning
and
Improvements



The Incident Reporting Model (Dr. Charles Billings)





The Patient Safety Reporting System (PSRS)



A confidential program that collects, protects, and uses incident data to improve patient safety in VA medical facilities

Patient Safety Reporting System (PSRS) Report Form

IDENTIFICATION STRIP: Please fill in all blanks to ensure return of strip. NO RECORD WILL BE KEPT OF YOUR IDENTITY. This section will be returned to you. (SPACE BELOW RESERVED FOR PSRS REPORT RECEIPT STAMP)

TELEPHONE NUMBERS where we may reach you for further details of this occurrence:

Area _____ No. _____ - _____ Best time _____
 Area _____ No. _____ - _____ Best time _____

ADDRESS to which you want your confirmation of report receipt mailed:

NAME _____
 ADDRESS/PO BOX _____
 CITY _____ STATE _____ ZIP _____

PLEASE SUPPLY A BRIEF DESCRIPTION OF THE EVENT OR SITUATION YOU ARE REPORTING

DATE OF OCCURRENCE _____
 LOCAL TIME (24 hr. clock) _____

ALL IDENTITIES AND OTHER UNIQUELY IDENTIFYING INFORMATION CONTAINED IN THIS REPORT WILL BE REMOVED TO ASSURE COMPLETE REPORTER ANONYMITY. THE INFORMATION SUBMITTED ON THIS FORM IS CONFIDENTIAL AND PROTECTED UNDER THE PROVISIONS OF 38 USC 5705.

PLEASE FILL IN SPACES AND CHECK BOXES BELOW THAT APPLY TO THIS EVENT OR SITUATION YOU ARE REPORTING.

REPORTER INFORMATION AND EVENT BACKGROUND

What is your current position?

- Physician
- Specialty _____
- Physician's Assistant
- Nurse Practitioner
- Nurse Anesthetist
- Registered Nurse
- Licensed Practical/Vocational Nurse
- Nurse's Aide
- Pharmacist
- Medical Technologist
- Lab Technician/Assistant
- Respiratory Therapist
- Other _____

How many years have you worked in your current position?

How many years have you worked at your current facility?

Have you had previous experience in other medical professions?

- Yes (specify) _____
- No

Type of Medical Facility where the event occurred:

- Inpatient
- Outpatient

What shift were you working when the incident occurred?

- Days
- Evenings
- Nights
- Other _____

EVENT LOCATION

Where did the event occur? (check all that apply)

- Patient Hospital Room
- Hospital Hallway
- Operating Room
- Intensive Care Units
- Service Delivery Area
- Emergency Department
- Pharmacy
- Laboratory
- Physical Therapy
- Clinic (specify) _____
- Long-Term Care / Nursing Home
- Home
- Other _____

ENVIRONMENTAL FACTORS

Environmental factors that contributed to the event (check all that apply):

- Lighting
- Noise Level
- Temperature
- Work Space Configuration
- Other _____

OTHER FACTORS

Were any of the following a factor in the event? (check all that apply)

- Medical Device
- Medications
- Procedures
- Transport
- Patient Record Documentation
- Imaging and X-rays
- Laboratory and Diagnostics
- Equipment
- Home Care
- Other _____

EVENT DESCRIPTION

Keeping in mind the topics shown below, discuss those which you feel are relevant and anything else you feel is important. Include what you believe really CAUSED the problem, and what can be done to PREVENT a recurrence, or CORRECT the situation. (Continue on the other side and use additional paper, if needed.)

CHAIN OF EVENTS

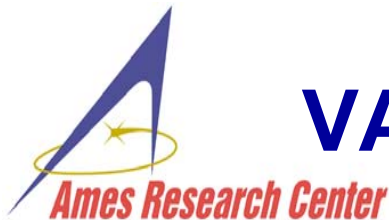
- How the problem arose
- How it was discovered
- Contributing factors
- Corrective actions

HUMAN PERFORMANCE FACTORS

- Perceptions, judgments, decisions
- Actions or inactions
- Factors affecting the quality of human performance

FIRST FOLD

FIRST FOLD

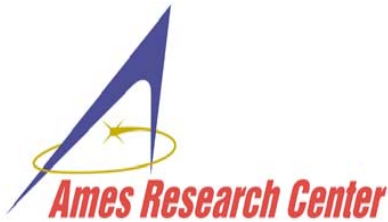


VA Staff Invited to Participate

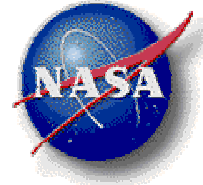


Any VA staff or personnel working in VA facilities are invited to submit voluntary reports concerning medical safety

- **Physicians**
- **Nurses**
- **Laboratory**
- **Radiology**
- **Pharmacy**
- **Rehabilitation**
- **Dietitians**
- **Support Staff**
- **Others**



PSRS Reporting Form



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PLEASE FILL IN SPACES AND CHECK BOXES BELOW THAT APPLY TO THIS EVENT OR SITUATION YOU ARE REPORTING.

REPORTER INFORMATION AND EVENT BACKGROUND

What is your current position? <input type="checkbox"/> Physician <input type="checkbox"/> Specialty _____ <input type="checkbox"/> Physician's Assistant <input type="checkbox"/> Nurse Practitioner <input type="checkbox"/> Nurse Anesthetist <input type="checkbox"/> Registered Nurse <input type="checkbox"/> Licensed Practical/Vocational Nurse <input type="checkbox"/> Nurse's Aide <input type="checkbox"/> Pharmacist <input type="checkbox"/> Medical Technologist <input type="checkbox"/> Lab Technician/Assistant <input type="checkbox"/> Respiratory Therapist <input type="checkbox"/> Other _____	How many years have you worked in your current position? <input type="checkbox"/> _____ How many years have you worked at your current facility? <input type="checkbox"/> _____ Have you had previous experience in other medical professions? <input type="checkbox"/> Yes (specify) _____ <input type="checkbox"/> No	Type of Medical Facility where the event occurred: <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient What shift were you working when the incident occurred? <input type="checkbox"/> Days <input type="checkbox"/> Evenings <input type="checkbox"/> Nights <input type="checkbox"/> Other _____
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EVENT LOCATION	ENVIRONMENTAL FACTORS	OTHER FACTORS
Where did the event occur? (check all that apply) <input type="checkbox"/> Patient Hospital Room <input type="checkbox"/> Hospital Hallway <input type="checkbox"/> Operating Room <input type="checkbox"/> Intensive Care Units <input type="checkbox"/> Service Delivery Area <input type="checkbox"/> Emergency Department <input type="checkbox"/> Pharmacy <input type="checkbox"/> Radiology <input type="checkbox"/> Laboratory <input type="checkbox"/> Physical Therapy <input type="checkbox"/> Clinic (specify) _____ <input type="checkbox"/> Long-Term Care / Nursing Home <input type="checkbox"/> Home <input type="checkbox"/> Other _____	Environmental factors that contributed to the event (check all that apply): <input type="checkbox"/> Lighting <input type="checkbox"/> Noise Level <input type="checkbox"/> Temperature <input type="checkbox"/> Work Space Configuration <input type="checkbox"/> Other _____	Were any of the following a factor in the event? (check all that apply) <input type="checkbox"/> Medical Device <input type="checkbox"/> Medications <input type="checkbox"/> Procedures <input type="checkbox"/> Transport <input type="checkbox"/> Patient Record Documentation <input type="checkbox"/> Imaging and X-rays <input type="checkbox"/> Equipment <input type="checkbox"/> Home Care <input type="checkbox"/> Other _____

EVENT DESCRIPTION

Keeping in mind the topics shown below, discuss those which you feel are relevant and anything else you feel is important. Include what you believe really CAUSED the problem, and what can be done to PREVENT a recurrence, or CORRECT the situation. (Continue on the other side and use additional paper, if needed.)

CHAIN OF EVENTS	HUMAN PERFORMANCE FACTORS
<ul style="list-style-type: none"> How the problem arose How it was discovered 	<ul style="list-style-type: none"> Contributing factors Corrective actions Perceptions, judgments, decisions Actions or inactions Factors affecting the quality of human performance

PSRS/NASA Form, March 2001
 Continued other side...
 Version 01

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REPORTER INFORMATION AND EVENT BACKGROUND

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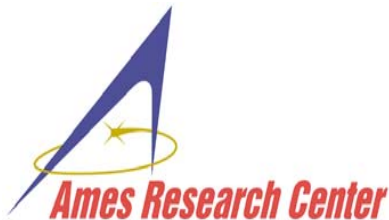
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PSRS/NASA Form, March 2001
 Continued other side...
 Version 01

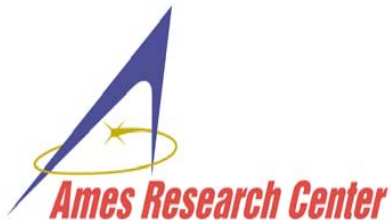
“order for 2mg IV morphine was available for pain. Patient post-op approximately 5hr and requesting pain med. Took pharmacy supplied injectable to bedside. Discovered it was double the ordered dose at 4mg. Pharmacy was out of 2mg stock and sent 4mg injectables with a note to ‘waste’ 2mg. Did not see note in med room. Possibility of serious overmedication was barely avoided!”



Examples of Potential Reports to PSRS



- **Patient almost receives 100 units of insulin instead of 10.0 units of insulin**
- **Patient receives wrong side surgery prep due to failure to properly identify site**
- **Elderly patient is over-medicated and falls**
- **Needle is found in clean laundry**
- **Unsecured X-ray arm falls on patient's abdomen**
- **Patients and staff slip and fall after a change in floor waxing product**



PSRS GUIDING PRINCIPLES



VOLUNTARY PARTICIPATION

VA staff voluntarily submit reports concerning events related to safety for the purpose of understanding and learning

CONFIDENTIALITY PROTECTION

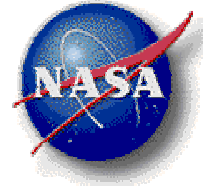
Protection of identity is provided by NASA through de-identification of persons, facilities, and any other information

NON-PUNITIVE

“VA/VHA will not use, nor will NASA provide, any report submitted for inclusion under PSRS guidelines or information derived therein for use in any disciplinary or other adverse action.”



Patient Safety Reporting System (PSRS)

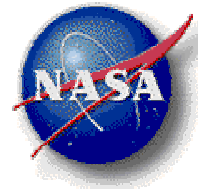


The PSRS is being initiated progressively throughout the VA Networks nationwide

- PSRS is a ***prototype*** system for confidential reporting of actual and potential adverse events related to patient safety
- PSRS is a ***proof-of-concept*** system for the medical community



Patient Safety Reporting System (PSRS)



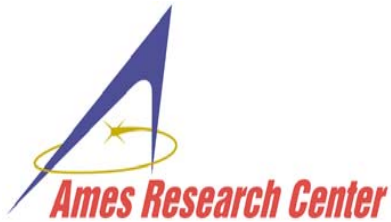
- PSRS is ***independent***. It will be managed and operated by the NASA Ames Research Center.
- PSRS is ***modeled*** after the successful aviation incident reporting program that has been a collaboration between NASA and the FAA called the ASRS (Aviation Safety Reporting System).



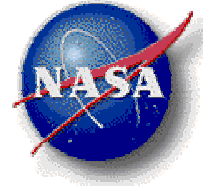
PSRS Executive Committee



- NASA will establish PSRS Executive Committee of representatives from stakeholder groups within the VA (unions, safety, quality, physicians, nurses, NCPS, etc.) that will:
 - Advise NASA on policies, procedures, and products of the PSRS
 - Provide consultation on safety issues
 - Assist in dissemination of safety information



SUMMARY



- **Confidential** reporting provides rich, dynamic safety information.
- **Narratives** written by event reporter's express a first-hand view from the unique perspective of the frontline user.
- **Realistic descriptions** of human performance enhances Human Factor Learning in diverse concept areas in order to improve patient safety.



The Flying Hospital at Moffett Field, August 2001