

## Caring for the Child & Family with a Preventable Injury

**NUR 2261**

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### Objectives

1. Identify major social and environmental factors
2. Describe how health promotion and health maintenance are addressed by partnering with families.
3. Apply the nursing process in evaluation of health promotion and health maintenance activities for infants, & children.
4. Discuss the main causes of injuries to children of various age groups.
5. Describe the screening and management of care for child who is a victim of poisoning.
6. Describe the screening and management of care for child who is a victim of burns.
7. Identify suspected child abuse and methods of reporting.
8. Outline appropriate nursing diagnoses & interventions as well as reporting responsibilities.

- Safety is always a priority

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### It's Always Summer in Florida

- WATER SAFETY



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**Health Promotion  
Exercise**

**Health Promotion Screening**

- Routine Screenings
- Well Child Visit
- Growth & Development
- Immunizations
- Hearing
- Vision

**Anticipatory Guidance**

- Teach Parents What to Expect Developmentally

- **Include in the Plan of Care**
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**Health History & Assessment  
Child & Adolescent**

**Nutritional Guidance**

- Infant Feeding
- Childhood Nutrition
- Dental Care
- Adolescent

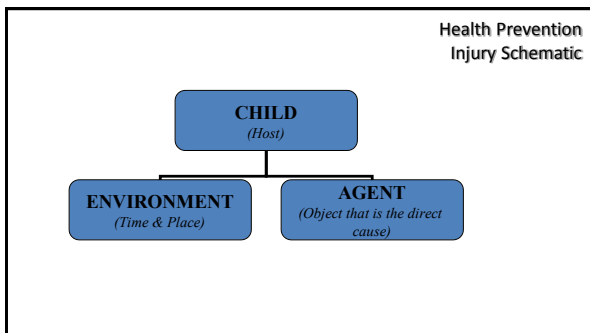
**Immunization History**

- Developmental Milestones
- Play / Activity / School
- Exercise
- Sleep

**Safety**

- Injury Prevention
- Risk-Taking Behaviors
  - Water Safety / Bicycle / Driving / Tattooing / Body Piercing
- Testing Limits

- **Healthy People 2020**
    - Childhood obesity is the primary focus
  - **Adolescents have more driving incidences**
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### Types of Injury Prevention is the Key

**ACCIDENT**

- Chaotic Random Event
- Non Preventable

**INJURY**

- Preventable With Guidance
- Responsibility
- Control

**RESULT**

- Morbidity
  - Illness
- Mortality
  - Death

**PREVENTION is the Key**

- Altering An Agent or Action

- **Prevention is Key!!**
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### Types of Neglect & Abuse


**Abuse or Neglect?**

- Drowning
- Medical Neglect
- Under nourished
- Dehydration
- Trauma
- Fires

**Healthcare Workers**

- Make Sure That the Injury is NOT a Result of Neglect or Abuse.
- Does the Mechanism of Injury Match the Injury?
- Is the Explanation of the Injury Always the Same?
- Remember if Child Abuse is Suspected

• **RNs are Legally Required to Report Suspicion of abuse.**  
Dial: **1-800-96-ABUSE**



- **Be sure abuse or injury is not attributed to neglect**
  - **RNs are legally required to report abuse or suspicion of abuse**
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### Strategy Prevention

**Parent Education**

Maintain Safe Environment


Based on Child's Age & Developmental status

Motor Vehicle Collisions

- Don't Drive While Tired
- Little Experience with Car Seat Placement
- Improper Usage of Restraints

Choking Hazards

• **Safety & Injury Prevention**




- **Educate parents on how to maintain a safe environment**
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**Types of Injuries**  
Aspiration / Suffocation

**Aspiration**  
Leading Cause of Fatal Injury in Children Under 1 Year of Age  
Rate Increases When Child Finds Their Mouth

Foreign Body Aspiration


- Inhalation of Any Object
- Objects Lodged Above Vocal Cords Expelled Easily
- Objects Lodged in The Trachea Present a Life Threatening Emergency



- Aspiration is usually located in the right bronchus due to its narrowness and is considered a life threatening emergency
- Objects lodged above the vocal cords are expelled relatively easy

**Common Causes or Objects**

Baby Powder	Latex Gloves
Bottle Propping	Syringe Caps
Pillows	Hot Dog
Blankets	Nuts
Pacifiers	Ice
Small Objects	Grapes
Buttons	Popcorn
Latex Balloons	Blinds
	Electrical Cords




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**Observe for Signs & Symptoms of Increasing Respiratory Distress:**


- Change in Breath Sounds – Noisy → Decreased → Absent
- Drooling
- Change in Respiratory Rate, Depth; Retractions
- Coughing
- Nasal Flaring

**Nursing Management**

Continuous Assessment is Essential for Positive Outcome

- ✦ Monitor VS
- ✦ Monitor LOC
- ✦ Immediately Report Changes To the Physician
- ✦ Observe Several Hours

Discharge Home or Prolonged Hospital Stay



- Continually assess patients until time of discharge

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### Nursing Diagnoses

**Ineffective Airway Clearance**


- R/T aspirated object AEB continuous coughing

**Inability to Sustain Spontaneous Ventilation**

- R/T foreign body OR respiratory muscle fatigue AEB oxygen saturation < 90%

**Fear / Anxiety**

- R/T uncertainty of diagnosis, unfamiliar surroundings, procedures AEB constant questioning of staff




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### Drowning or Near Drowning Suffocation from Submersion

Suffocation from Submersion


- Drowning
- Near Drowning

Drowning Incidence

- Swimming Pools
- Artificial Bodies
- Fresh Water

**Drown in as Little as 2 Inches of Water**

- Buckets
- Toilets
- Bathtubs



- Assess children 24 hours after a drowning incident for further damage
  - asphyxiation

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### Safety & Prevention

- Supervision
  - Everyone Thinks Someone Else is Watching
  - In Reality No One Is!
  - Buddy System
- Monitoring Devices
  - Pool Alarms
  - Gates
  - Door Locks
  - Toilet Safety Locks
  - Pool PHONE



- Make sure monitoring devices are in working order

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### Signs & Symptoms

- Anoxia
  - Major insult associated with drowning
- Anoxia leads to
  - Cerebral edema & increased intracranial pressure
- Signs and symptoms
  - Vary
  - Depends on
    - length of time of submersion,
    - temperature of water
    - initial treatment initiated at the scene.
- Prognosis
  - Individualized
- Hypoxemia
  - begins in seconds
  - Irreversible nervous system cell changes begin within 4 to 6 minutes
- Outcome
  - submersion less than 5 minutes
  - CPR for less than 10 minutes
- Key feature in outcome
  - Time frame of resuscitation initiated
  - return of spontaneous respirations.

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### Nursing Management

- Assess & maintain airway
- Provide life support measures
  - Suction
  - Administer oxygen
- Assess cardiopulmonary & neurologic function
- Assess other injuries
  - head or spinal trauma
- Admit for least 24 hours
- Provide Child & Family support



Water Safety for the Child with Special Needs

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### Falls

- Most common after 4 months of age
  - Growth & Development (Begin to roll over)
  - Parents unprepared
  - Child head is larger in comparison to body – leans over & tumbles
- Educate Family & Care Takers
  - Normal growth & development & anticipatory guidance



- Be aware of everyday objects for safety issues
- Education not only child but family as well to prevent injury

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Nursing Care  
Education is Action

Educate on Preventable Injuries

- Improper restraint or lap riding
- Airbag safety
- Improper poundage on vehicle seats

Educate Families


- Safety prevention
- Car Seats
- Booster Seats
- State Laws



- Children <2 must be in a back seat / rear facing car seat
  - Must wear seat belts at all times while in any vehicle
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Poisoning Incidences

- Highest incidence in 2 year old group
  - Growth & Development
    - Walking / Curiosity
- Approximately 500 toxic substances in an average home
- Major reason for ingestion is improper storage
  - 75% of poisons are ingested, other routes of contamination include: inhalation, transcutaneous, and ocular
  - Poison Prevention Packaging Act of 1970 mandates child-protective devices for all potentially toxic substances



- Lock all cabinets appropriately
- If ingested objects burn going down DO NOT induce vomiting due to burning while coming back up
- Assess LOC, Respiratory issues, and tinnitus
- Call Poison Control 1st unless CPR is need

Prevention & Management at Home

- **Call Poison Control FIRST** (unless CPR is necessary)
- Follow Poison Control Center Recommendation

Provide the following information:

- Telephone number, age, weight
- Name of substance
- Degree or amount of exposure
- Time of exposure
- Route
- Symptoms
- Home management

- Store chemicals in their original containers
  - Never refer medications to candy
    - risk of overdose
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**Management & Nursing Care**

- Assess the victim
- Identify the poison
- Remove poison & prevent absorption
- ABC's: Maintain patent airway
- Maintain effective breathing pattern
- Maintain Vital Signs temperature
- Gastric decompression
- Adequate fluid intake
- Family support
- Prevent recurrence (home visit)

*'Every year, there are hundreds -if not thousands -of reports associated with poison exposure among toddlers.'*

- ABCs
  - Flush Eyes
  - Flush Skin
  - Remove Clothing
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**Acetaminophen Poisoning  
Signs & Symptoms**

- Toxic dose  
150mg/kg
- Therapeutic dose  
10 – 15 mg/kg/dose
- Maximum ADULT dose is 4grams per day

**Symptoms**

- Nausea
- Vomiting
- Diaphoresis
- Pallor
- Pain in RUQ
- Jaundice

- Be alert to signs and symptoms of over dosing of Acetaminophen
  - Assess for jaundice and report to physician immediately
  - Be alert for Reyes Syndrome
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**Management of Overdose**

Syrup of ipecac or Mucomyst or Activated Charcoal


- Depending on ingestion period & ingestion levels
- Poison Control will manage overdose

Activated charcoal will inactivate Mucomyst

- Mucomyst prevents liver toxicity
- Offensive odor
  - Rotten eggs smell

Give Anti-emetic

- Q4h x 72 hrs via Nasogastric Tube



- Be aware of antidotes if possible
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**Nursing Education**

Assess for contributing factors:

- Inadequate support systems
- Behavior problems
  - acting out


Teach anticipatory guidance

- based on child's developmental level
  - child proof home

Teach proper dosing

- Different concentrations

Poison control phone number by phone;  
Educate babysitters



- Educate care givers
  - they will need emotional and spiritual support if accidents arise

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**Lead Poisoning Exposure & Assessment**

Decline since mid 1970's

- decrease in exposure & increase in screening

Source:

- Paint chips
- Window sill
- Furniture
- Contaminated food
- Soil and water from old lead pipes

Lead dust from home remodeling


Ceramics (unglazed pottery)

Paint now lead free

Routine screening with well-child visits

- Questionnaire to determine risk level
- Blood level

Poisoning is determined by 2 consecutive elevated blood levels



Lead Poisoning in Kids

- If lead levels increase then Iron levels decrease

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**Signs & Symptoms**

Body Systems Affected

- Abdominal Pain
- Hematologic: anemia
- Renal: kidney damage
- Neurologic:
  - Irritability
  - Headaches
  - Fatigue

Often, no symptoms

**Screening is key!**



- Lead poisoning can damage every body system
  - often no symptoms until child is very ill

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**Planning & Goal Setting**


- Fluid replacement
  - prevent hypovolemic shock
  
- Temperature maintenance
  - Heat is lost rapidly through burned skin
  
- Prevent infection
  - Provide antibiotics intravenously
  
- Pain Control
  - Aggressive pain management



- Fluid Replacement to prevent hypovolemic shock - Lactated Ringers
- Pain Control is Essential via IV opioids
- H2 Blockers to avoid stress ulcers
- Monitor I&Os

**Grafting & Wound Site Care**

- Dressing changes
- Hydrotherapy
- Antibiotic therapy
- Skin grafting
- Whirlpool therapy
- **Silvadene** to prevent bacterial infection
- **Hydrotherapy** to increase vasodilatation
- **Pain management**
- Prevent complications
- Provide emotional support



**Goal of wound management**  
Speed wound debridement to protect granulation tissue and prevent scarring contractures

- Long Term Care
  - Require emotional support not only to patient but for families as well
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**QUESTION OF THE DAY**

- **Which nursing intervention should take place prior to all vaccination administrations?**

1. Document the vaccination to be administered on the immunization record and medical record.
2. Provide the vaccine information statement handout, and answer all questions.
3. Administer the most painful vaccination first, and then alternate injection sites.
4. Refer to the vaccination as "baby shots" so the parent understands the baby will be receiving an injection.

- Provide VIS (vaccination information sheets) to patients and family prior to vaccinations being given
    - Printed from CDC website
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**Answer to the Question of the Day**

2. Written information about the vaccine should always be given prior to any immunization administered as well as allowing time for questions.

1. Written information about the vaccine should always be given prior to any immunization administered as well as allowing time for questions. Accurate documentation should always occur after immunizations are given.
3. Administer the most painful immunization last.
4. The word "shots" has a negative connotation to parents and should be avoided.

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References

Ward, Susan L. and Hisley, Shelton M. (2009). *Maternal-Child Nursing Care: Optimizing Outcomes for Mothers, Children, & Families*. Philadelphia: F.A. Davis. ISBN-13: 978-0-8036-1486-4

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**Medications and chemicals** – store in a high shelf away from child’s reach, in a sealed area, safety child locks on cabinets. Poison-proof and child-proof the home. Put locks on cabinets, use child safety containers. Do not place poisonous materials in other, nonsafe containers. Discard unused medications. Make sure child is always under adult supervision. Post phone number for local poison control center next to telephone. Examine the environment from the child’s viewpoint. Poisonings particularly by ingestion is a common cause of childhood injury and illness. Most poisonings occur in children under the age of 6, with a peak at age 2.

**Other safety reminders:** Have fire extinguisher easily available, ensure you have the appropriate size car seat for the child, crib safety, never use microwave oven to heat breast milk, never prop a bottle in infant’s mouth.

Changing tables – keep one hand on the infant at all times, never leave the infant alone on the table. Powder should never be shaken close to infant’s face to prevent aspiration.

During bath – parent keep both hands on infant, one hand to wash, the other to hold infant.

Gates – top & bottom of staircases at all time (accordion gates not recommended.)