

Battered, Broken, and Burned: Recognizing Injuries in Suspected Older Adult Abuse

Virginia Coalition for the Prevention of Elder Abuse

26th Annual Conference | Renew, Refresh, Refocus: Elder Abuse Prevention in COVID Times

Williamsburg, VA

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3:15 p.m. to 4:45 p.m.

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Objectives:

- After attending the presentation, the participant will be able to:
 - ▣ discuss considerations in the evaluation of suspected elder abuse.
 - ▣ identify injuries concerning abuse.
 - ▣ describe characteristics of burns and fractures in the suspected abuse case.

Disclaimer

- Images will be graphic.

Definitions...

Elder Abuse (EA) Definition:

- “The mistreatment or harming of an older person” (NCEA, 2017).
- Includes:
 - ▣ Physical abuse.
 - ▣ Emotional abuse.
 - ▣ Exploitation.
 - ▣ Neglect***.
 - ▣ Sexual abuse.

“Elder” Sexual Abuse (ESA)/Violence

Definitions:

NCEA Elder Sexual Abuse

“Non-consenting sexual contact of any kind” (NSVRC, 2010).

CDC- Preliminary, Aged 60 and Older

“ Forced or unwanted sexual interaction of any kind with an older adult.” (CDC, 2021).

Includes IPSV (through use of control, fear, threats, violence)

Aging Changes...

Normal Aging Changes

Skin

- Epidermis thins
- Capillary fragility

Sensory

- Hearing decreases
- Delayed reaction time
- Visual issues (cataracts, macular degeneration, etc.)
- Decreased sensation
- Decreased pain perception-may have difficult to diagnose abdominal injury

Cardiovascular

- Changes in heart-rate and BP with changing positions
- Congestive heart failure
- Decreased microcirculation-heat in skin takes longer to dissipate (Stone, 2000).

Renal

- Decreased creatinine clearance
- Decreased medication clearance

Musculo-skeletal

- Decreased muscle mass and bone density
- Any significant, unexplained soft tissue swelling or bone tenderness must be treated as a fracture until proven otherwise.

Function

- Gait and balance changes
- Driving issues
- Difficulty with ADLs, finances, etc.
- Decreased protective reflexes
- Increased risk of accidents

Neurologic

- Increased fragility of veins in brain
- Increased cerebral atrophy
- Minor head trauma may lead to mortality
- Assessment may be more difficult

EA Risk Factors/Characteristics...

**History of Violence
(DV → Abuse in
Later Life)**

**External Factors
Causing Stress**
(stressful life events)

**Substance Abuse or
Mental Illness by
Abuser**

**Poor Health and
Functional
Impairment**

Social Isolation

**Cognitive
Impairment**
(dementia
w/aggression and
disruptive behavior)

**Shared Living
Situation**
(except with financial
abuse where most live
alone)

**Dependence by
Abuser on the
Victim**

Homelessness (Tong et
al., 2021).

Complaints, Behaviors, Characteristics/
Lab Findings, Bruising...

Complaints/Behaviors Suspicious for

EA: ** Potential markers of abuse and neglect in elderly (Dyer et al., 2003; Pearsall, 2005; Collins, 2006; Wigglesworth, 2009.)

Complaint of Abuse by Patient/Client	Unresolved Medical Issues Despite Appropriate Plan of Care	Overbearing Caregiver who Refuses to Leave Patient/Client Alone
ETOH/Drug Abuse by Patient/Client or Caregiver	Depression	Anxiety
Cognitive/Mental Health Issues*	Dehydration, Under-nutrition*, Weight Loss, Muscle Wasting	Physical Findings Inconsistent with History
Financial Exploitation *	Restraints*	Delay in Seeking Care for Illness/Injury
Frequent ED visits	Fear by Elder of Caregiver	Improper Medication Use*

Physical Characteristics Suspicious for Elder Abuse (cont.):

- No pathognomonic signs of elder abuse identified in research to date.
- Many of findings are similar to child abuse & IPV (IPV-Ziminski et al., 2013).
- Bruising*
 - Unusual areas (Inner thighs, arms, axillae, torso, soles of feet/palms, abdomen, buttocks, scalp).
 - Most of research in elder abuse has been in area of bruising.
 - Accidental bruising typically occurs on extremities (90%).
 - Bruising common in physically abused older adults. Suspicious for abuse:
 - Bruises greater than 5cm.
 - Bruises on face, side of right arm, back of torso (Wiglesworth et al., 2009).

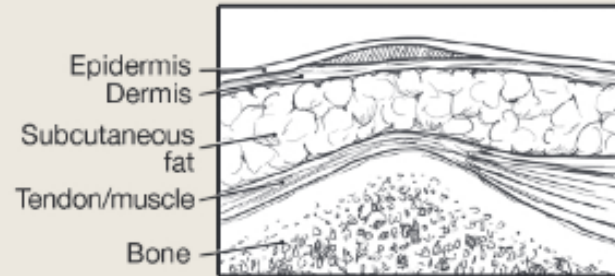
Physical Characteristics Suspicious for EA*:

Multiple Injuries	Traumatic Alopecia	Soiled Clothing
Weight Loss	Inappropriate Dress for Season	Impaired Gait
Poor Hygiene* (nails, teeth, skin; feet may be true indicator of “normal” hygiene status)	Fractures* (Multiple, various stages of healing)	Nutrition Issues (dehydration*, cachexia, weight loss, electrolyte abnormalities, fecal impaction)
Mobility Issues	Mastery of Dressing/Undressing	Cognition/Mood Response
Pressure Sores* (concerning unusual location, malodorous, multiple, multi-planar, no obvious treatment)	Incontinence	Abrasions*...

PRESSURE SORE STAGES

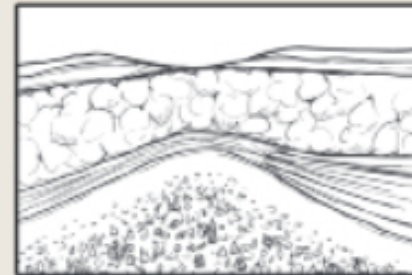
Stage I

Red area with intact skin. Redness persists even when pressure is relieved. May develop within minutes or hours.



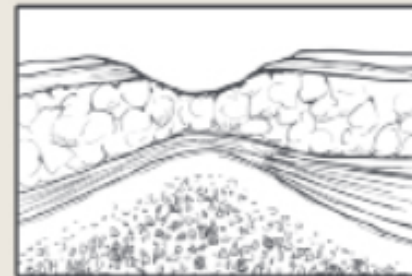
Stage II

Appears open like an abrasion or shallow crater, or there may be a blister. May develop within hours to days.



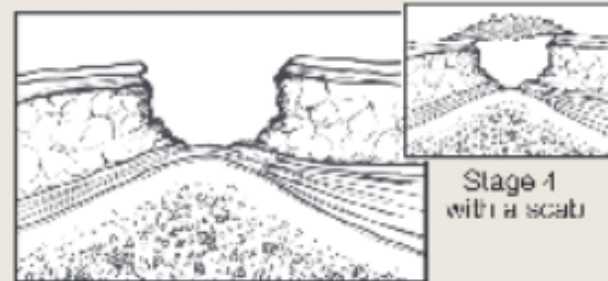
Stage III

Full thickness skin loss, deeper than a superficial wound, but not as deep as stage IV. May develop within hours to days to weeks.



Stage IV

May see bones, muscles, or tendons. May develop within days to weeks.



Judicial Council of
California &
Mosqueda, 2012

Physical Skin Characteristics Suspicious for EA*:

Abrasions*	Lacerations*
Burns* (may leave recognizable pattern)	Patterned or Bruises (or wounds) in Various Stages of Healing
Injury to Eye, Nose or Mouth (Collins, 2006)	Abrasions or Scars (circumferential) to Ankle, Wrist or Axillae (Quinn & Tonnita, 1997)
Neck Abrasions, Contusions	Head, Neck, and Upper Extremity Injuries (Rosen et al., 2016)
	Bruising* →

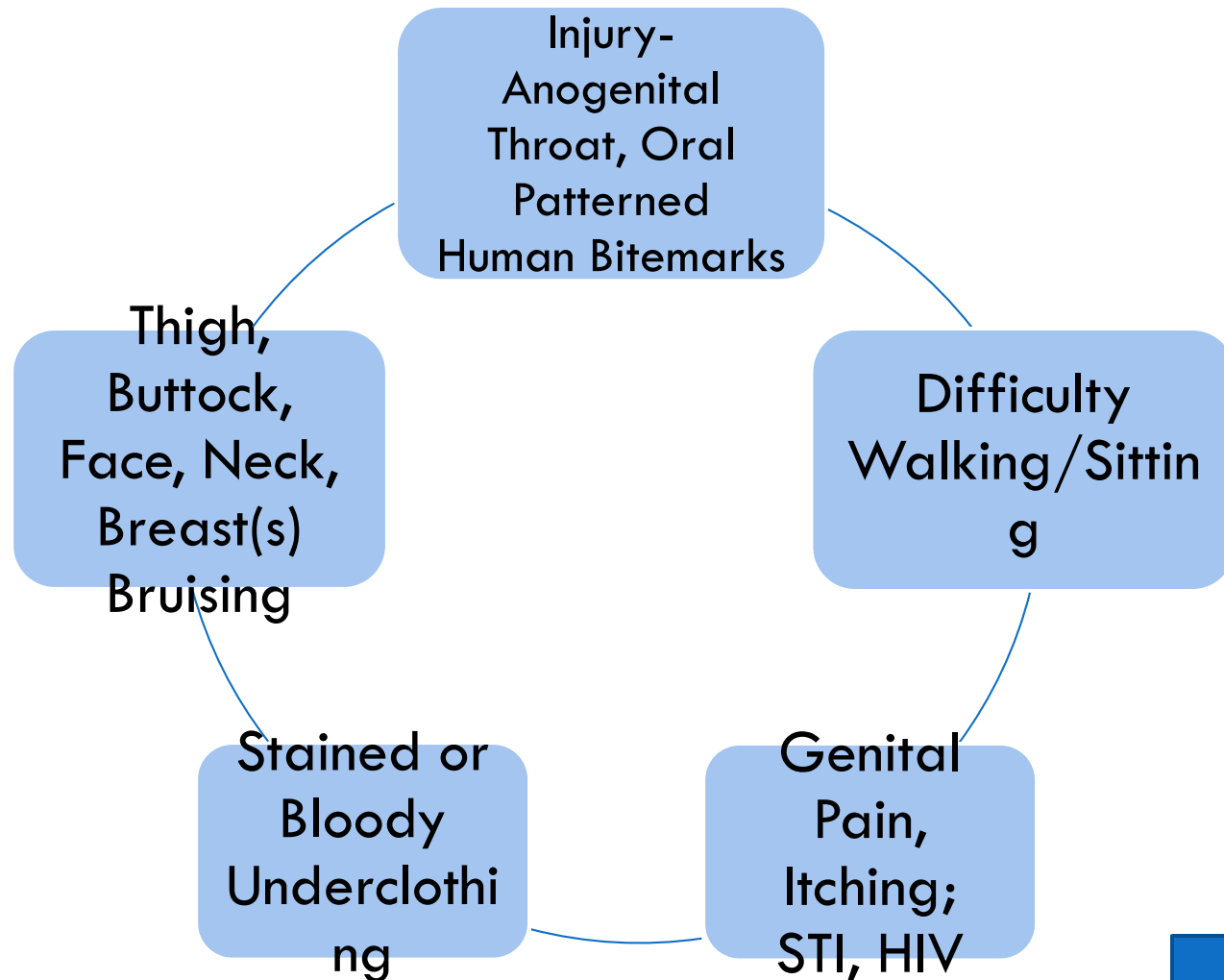
Accidental Bruising:

- Typically occurs on extremities (90%).
- Often unsure how occurred.
- Medicines altering coagulation pathways-increased likelihood to have multiple bruises (Mosqueda et al, 2005).

Concerning Bruising in Older Adults:

Multi-planar; circumferential	Bruising in Non-prominent Bony Areas, Over Soft Tissue Areas; Bruising with Sparing (Tram Track Lines); Skin Folds	Multiple Bruises from a Reported Single Mechanism	Bruising to More Protected Areas of the Body (Ears, Genitalia, Soles of Feet) <small>(Gibbs 2014)</small>
Bilateral	Clustered (finger grab, slap marks)	Patterned	Petechiae
Reported History Inconsistent with Bruising/ Injury Seen	No History of Trauma Given	Bruises Large, Greater than 5cm <small>(Wiglesworth et al., 2009)</small>	Bruises on Face/Head/Neck, Side of Right Arm, Posterior Torso (Back, Chest, Lumbar, Gluteal Areas) <small>(Wiglesworth et al., 2009)</small>

Physical Characteristics Suspicious for Elder Sexual Abuse:



Lab Findings Concerning for Possible Older Adult Abuse/Neglect:

- Anemia
- Dehydration*
- Malnutrition
 - Cachexia, weight loss, electrolyte abnormalities
- Hypo/hyperthermia
- Rhabdomyolysis (Muscle tissue breakdown) → Myoglobin (protein) released into blood → Kidney Injury
- Undetectable drug levels
 - Diversion of controlled drugs
- Increased drug levels (OD, Poisoning)...

Lofaso & Rosen, 2014; * Potential markers of abuse and neglect in elderly (Dyer et al., 2003; Pearsall, 2005; Collins, 2006; Wigglesworth, 2009)

Sorting It All Out...

Belief that Abuse Occurs and Recurs!

Recognize Own Limitations-Seek Experts

Hx of Event Change Over Time?

History Plausible to Reported Mechanism of Injury?

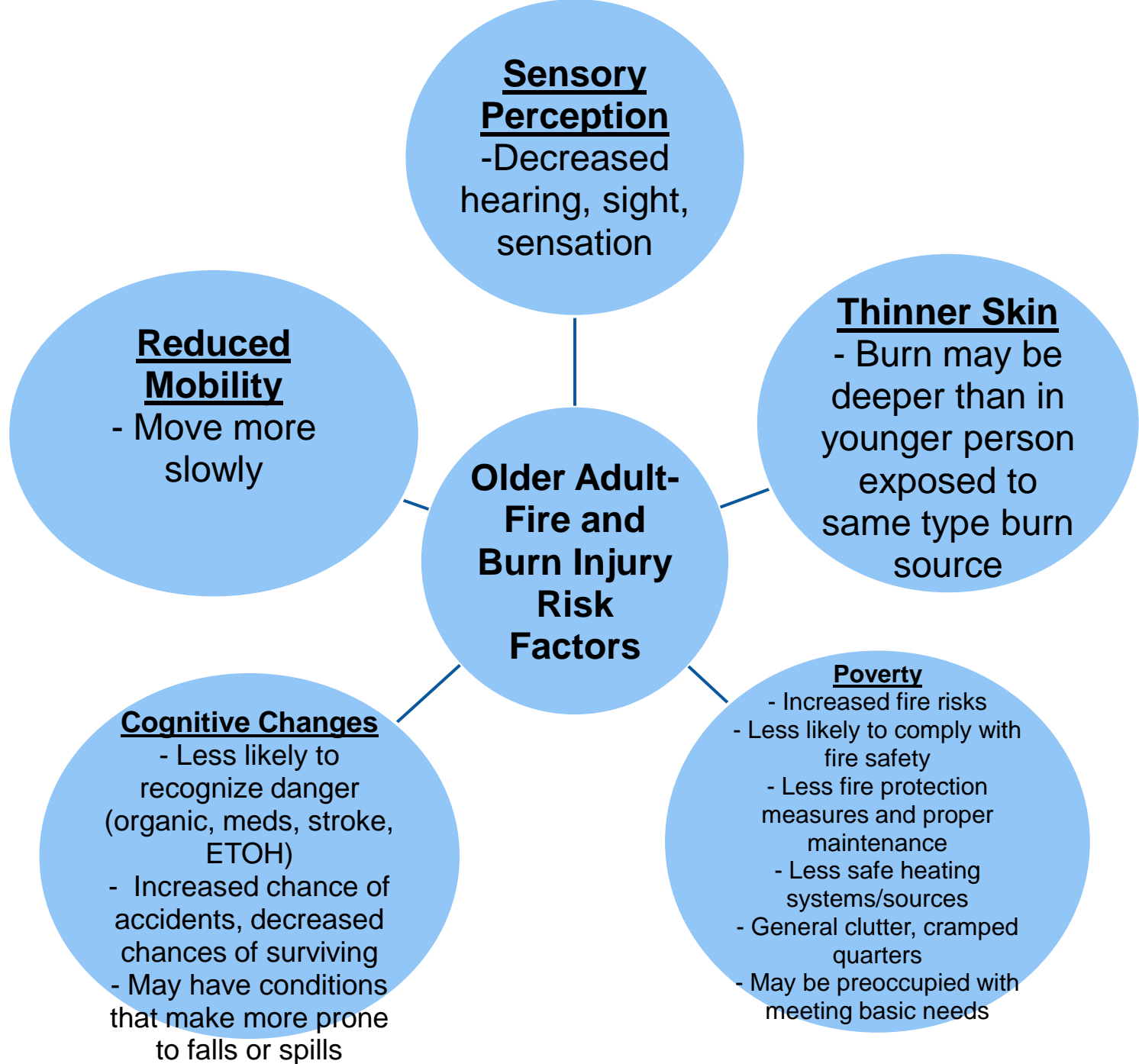
Injuries Suspicious for Elder Abuse?
Bruises on More Protected Areas of Body? Fractures-Mal-aligned?

Medical History? Baseline Functional Ability? Meds?

Mimic of Abuse? Variant of Normal?

Delay in Seeking Care?

Injury Patterns...



Injury Patterns-Elder Abuse:

- Rosen et al., 2020 Study:
 - Abuser:
 - Spouse/companion: 17/100
 - Male: 71/100
 - Grandchild: 18/100
 - Living situation:
 - Community dwelling with abuser: 65/100

Injury Patterns-Elder Abuse (cont.):

- Rosen et al., 2020 Study (cont.):
 - Types of physical abuse/mechanism:
 - Blunt assault with hand/fist: 62/100
 - Push/shove, fall during altercation: 23/100
 - Strangulation/suffocation: 12/100
 - Multiple mechanisms: 36/100
 - Injuries:
 - 22/100 did not sustain physical injury.
 - 78/78 sustained bruising.
 - 67/78 maxillofacial/dental/neck injured.
 - 9-1-1:
 - Victim called 9-1-1: 58/100

Burns...

Time and Temperature Relationship to Severe Burns

Water temperature Time for a third degree burn to occur

155° F 68° C 1 second

148° F 64° C 2 seconds

140° F 60° C 5 seconds

133° F 56° C 15 seconds

127° F 52° C 1 minute

124° F 51° C 3 minutes

120° F 48° C 5 minutes

100° F 37° C safe temperature for bathing

Fire, Burn Death & Injury in Older Adults:

- Greater than 500,000 people receive medical treatment for burn injuries in the U.S. and Canada annually (ABASIPEG).
- Greater than 1,200 adults, aged 65 years and older die each year in the U.S. as a result of fire.
- Greater than 25% of all fire deaths, and 1/3rd of all residential fire deaths occur in adults, 65 and older.
- Leading cause of death is careless smoking.
- Leading cause of injuries is cooking related.
- May be seriously injured as a result of scalds, electrical and chemical injuries. (ABAFBS)

Fire, Burn Death & Injury in Older Adults:

- More likely (and so are children) to require hospitalization with a burn (Bessey et al., 2006).
- Burn may be intentional or unintentional (non-accidental or accidental).
- May have other injuries beyond the presenting burn.
 - 16% (148 subjects) of Parkland Burn Center study group sustained blunt or penetrating trauma (stab wounds, fractures, closed head injury)(Purdue & Hunt, 1990).



Courtesy of the

American Burn Association

Advanced Burn Life Support (ABLS)

Learn more about the ABA and ABLS at www.ameriburn.org

Burn Center Referral Criteria

A burn center may treat adults, children, or both.

Burn injuries that should be referred to a burn center include:

1. Partial thickness burns greater than 10% total body surface area (TBSA).
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Third degree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.

Severity Determination

First Degree (*Partial Thickness*)

Superficial, red, sometimes painful. **Epidermis**

Second Degree (*Partial Thickness*)

Skin may be red, blistered, swollen. Very painful. **Dermis**

Third Degree (*Full Thickness*)

Whitish, charred or translucent, no pin prick sensation in burned area.

Subcutaneous Tissue

Percentage Total Body Surface Area (TBSA)





surface area (TBSA).

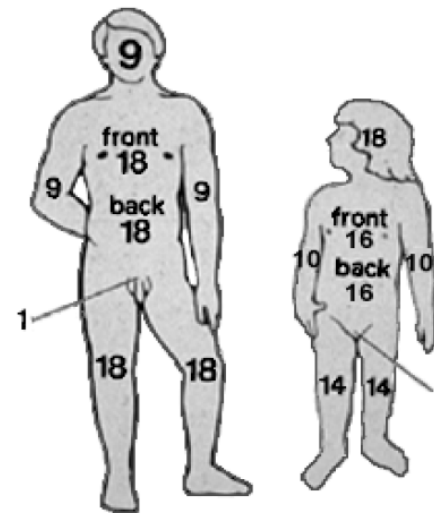
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Third degree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.
7. Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
8. Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
9. Burned children in hospitals without qualified personnel or equipment for the care of children.
10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

Excerpted from Guidelines for the Operation of Burn Centers (pp. 79-86), Resources for Optimal Care of the Injured Patient 2006, Committee on Trauma, American College of Surgeons

Third Degree (Full Thickness)

Whitish, charred or translucent, no pin prick sensation in burned area.

Percentage Total Body Surface Area (TBSA)



Assault (Abuse), Neglect and Burned Adults:

- **Krob et al., 1986 study:**
 - Descriptive, retrospective study over a two-year period, n = 423 (total), subset n = 41 (9.7%)- identified as assault victims.
 - **Smaller TBSA burned when compared to other burn victims in study.**
 - Similar age and sex distribution of victims.
 - Age range: **15-82 years** (avg. 37 years).
 - **Higher percentage of Black victims (85%).**
 - **Higher number of scald injuries (60%).**
 - **29 of cases, domestic dispute reported. →**

Assault (Abuse), Neglect and Burned Adults (cont.):

- **Krob et al., 1986 study (cont.):**
 - **Females reported to have inflicted burn(s) in 23 cases (56%).**
 - 22/23 cases, burn(s) caused by hot liquids or chemicals.
 - **Genital and facial burns more common in this subset.**
 - **Most common site of injury: Anterior trunk, upper extremity.**
 - Average length of stay (LOS) was 19 days.
 - 25 of victims required one or more operative procedures.
 - **Four victims died.**

Assault (Abuse), Neglect and Burned Adults (cont.):

- **Bowden et al., 1988 study:**
 - Retrospective review, n = 1152, acute burns, treated at Univ. of Michigan Burn Center, over 5.5y period.
 - Identified **26 (2%) adult patients with suspected abuse (8 cases) and neglect/improper supervision (18 cases).**
 - **12F, and 14M, average age 42 years (range 19-91yo), and average TBSA 18%.**
 - **7 (27%) died from injury.**
 - **All were either were very old, physically or mentally challenged. →**

Assault (Abuse), Neglect and Burned Adults (cont.):

- **Bowden et al., 1988 study (cont.):**
 - **23/26 sustained burn(s) in a healthcare facility or institution.**
 - **15-Flame injury.**
 - **11-Scalds.**
 - **10 Bathing accidents.**
 - **1 Pulled hot liquid on foot reportedly.**
 - **1-Frostbite. →**

Burn Patterns in Older Adult Abuse:

- Burn patterns similar to those seen in child abuse burns (Bowden et al, 1998).
 - Immersion (bilateral or glove and stocking type pattern) without splash marks*, uniform in depth with clear lines of demarcation (burned and unburned skin).
 - May also have splash marks* if able to struggle (Greenbaum et al., 2004).
 - Flexion pattern with flexed area spared of burn.
 - Burn involving buttocks and genitals.

Nursing Home Patients and Accidental Burns:

- Trier & Spaabaek (1987) study:
 - ▣ Retrospective, epidemiological study, $n = 39$, over 6 year period (1980-1985), median age 80yo
 - ▣ Nursing home patients admitted with accidental burns.
 - ▣ Accounted for 20% of all patients over age of 69yo admitted with burns.
 - ▣ 2/3rds suffered burns of 15% or less of TBSA.



Nursing Home Patients and Accidental Burns (cont.):

- Trier & Spaabaek (1987) study (cont.):
 - Mortality rate: 64%.
 - Burned in single-person accidents, most often in own living room, alone (74%).
 - 85% involved smoking.
 - Highest incidence on Saturdays, Sundays and holidays.
 - Six cases, smoke detectors were activated = 5 were fatal!
 - Co-morbidities included: Hemiplegia, dementia, neurological diseases...
 - Additional patients excluded from study:
 - Four scalds or contact burns.
 - Two burns R/t suicide attempts.

Morbidity and Mortality (M & M) with Burn Injury in Older Adults:

- Increased M & M with burn injuries.
- Aged 65y and older compared to 15y and younger, more likely to have:
 - Flame burns, burns to 20% or more of total body surface area (TBSA), inhalation injury, respiratory failure, death.
- Initial presentation typically with more underlying complex medical issues

(Bessey et al., 2006).

Morbidity and Mortality with Burn Injury in Older Adults (cont.):

- Lumenta et al., 2007 study:
 - Prospective study, admitted burn patients from 1990-2003- to analyze certain factors (age, gender, TBSA, inhalation injury, premorbid conditions, burn scores) and their impact on hemodynamic and respiratory complication and M & M.
 - Subset of patients (total n=265) with diabetes mellitus (DM) and > 30% TBSA burns were reviewed to determine whether increased morbidity and mortality (began tight glucose control 2002).
 - No significant influence found.
 - Increased length of stay with comorbid conditions (CV disease, alcoholism).
 - 16% of sample 65 years and older (range 65-100yo, average age 76.5y).
 - Mean TBSA burned was 17.1%.
 - 81 fatalities (30.6%).
 - 4 (1.5%)homicidal.
 - Hot water burns-82 cases (30.9%).
 - Flame burns-173 cases (65.3%).

Likelihood of Death from Burn Injuries:

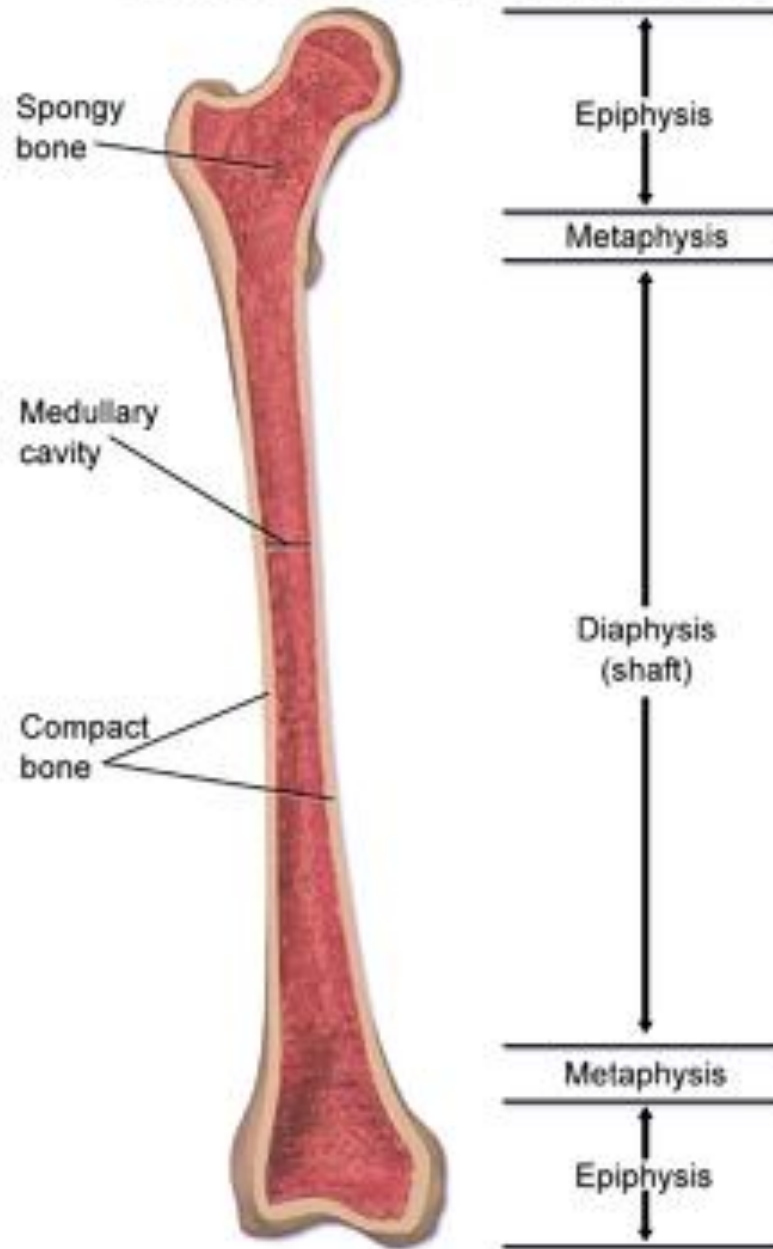
- Ryan et al., 1998 study:
 - Retrospective review of records, n=1665, all acute burn injuries to MGH (1990-1994) to determine probability of mortality, and has it changed since 1984 (did decrease between 1974-1984); tested prospectively on n = 530 burn injury patients (1995-1996).
 - Prospective group:
 - Mean age 21 ± 20 y (range 1mo-99yo).
 - Mean burn size $14 \pm 20\%$ of TBSA.
 - 1598 (96%) lived to discharge.
 - Mean LOS was 21 ± 29 days (based on burn size). →

Likelihood of Death from Burn Injuries (cont.):

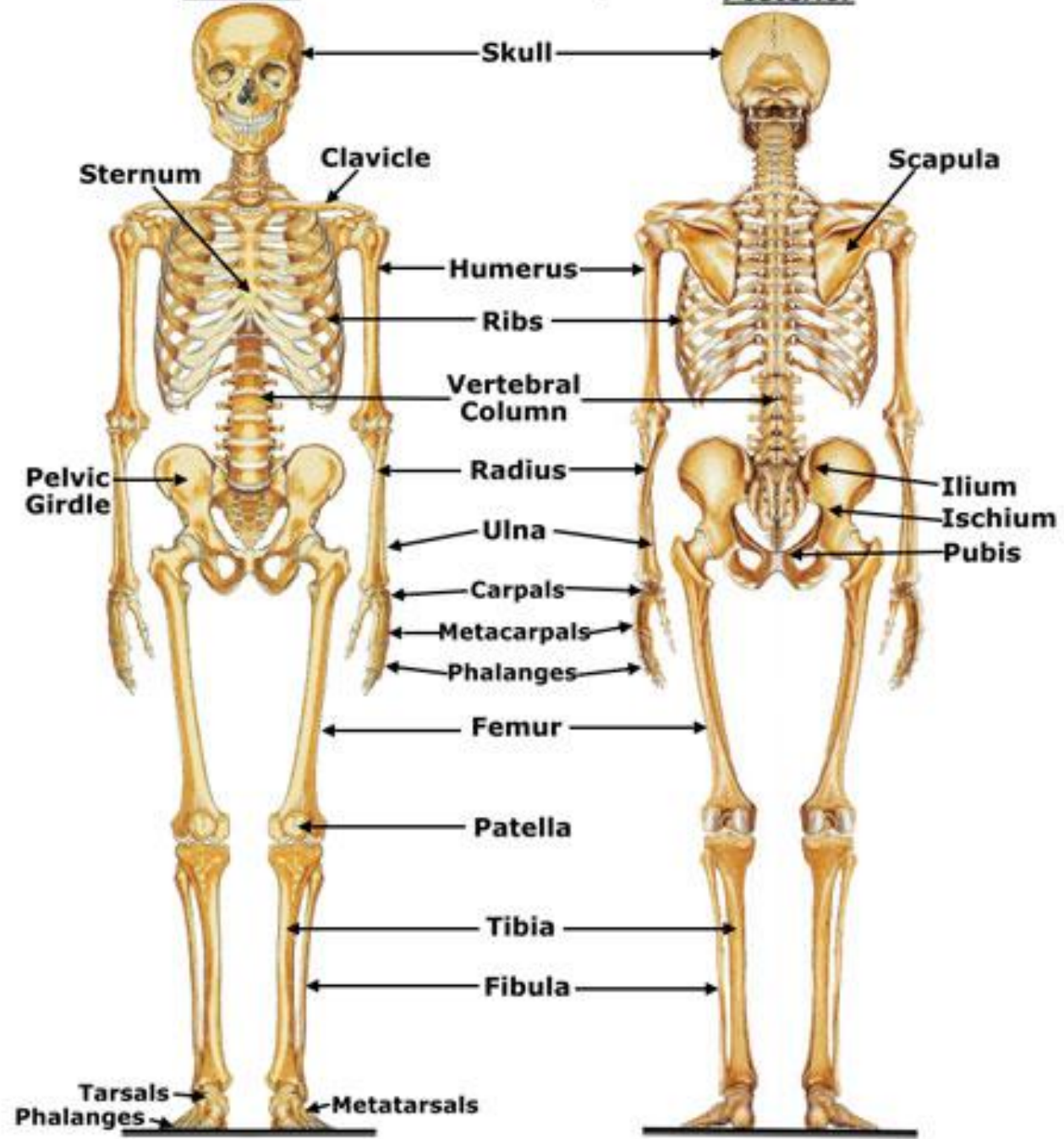
- Ryan et al., 1998 study (cont.):
 - Risk factors for death identified:
 - Age more than 60yo.
 - Greater than 40% TBSA burned.
 - Presence of inhalation injury (fire in closed space, soot below level of vocal cords, elevated carboxyhemoglobin level on admission).
 - Mortality: 0.3% with no risk factors; 3% with one risk factor; 33% with two risk factors; 90% with three risk factors.
 - Rule applicable to all patients younger than 90yo.
 - Prospective study:
 - Results similar to retrospective.
 - ? No large improvement in mortality rate.
 - Efforts must focus on prevention, field care, early transfer for burn care.
 - Must consider quality of life??

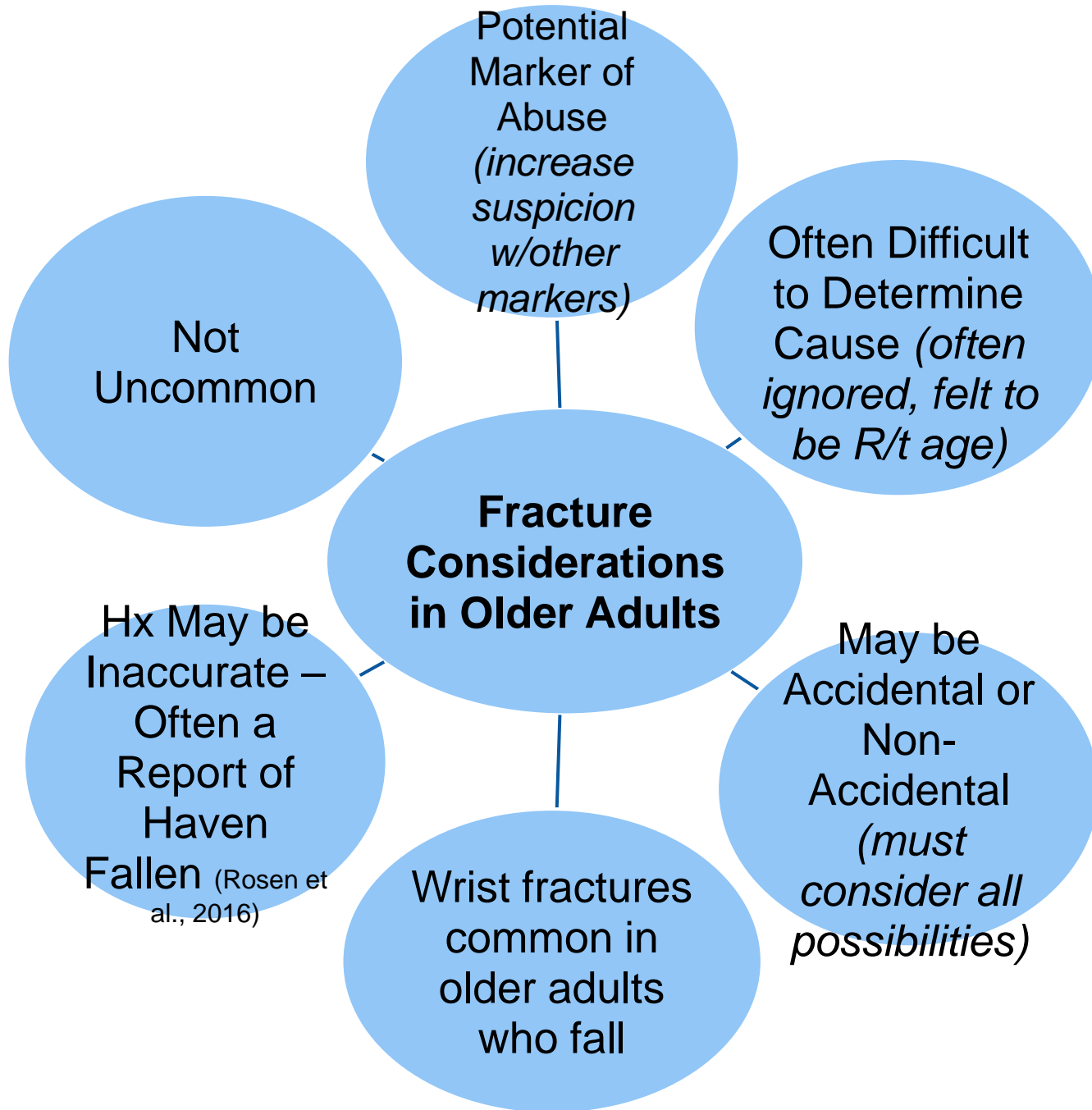
Fractures in Older Adults...

Structure of a Long Bone



Anterior **The Skeletal System** *Posterior*





Fractures/Other Injuries and Concerns for Older Adult Abuse:

Long bone fractures with a rotational component (spiral) without a mechanism of injury (MOI) to explain is concerning for abuse (Dyer et al., 2003).

Rib/thoracic fractures may occur with blunt-force to the chest.

Head/face/back fractures w/other injuries or health problems should increase suspicion for abuse (Girona et al., 2016).

Injury patterns not usually seen w/accidental injury

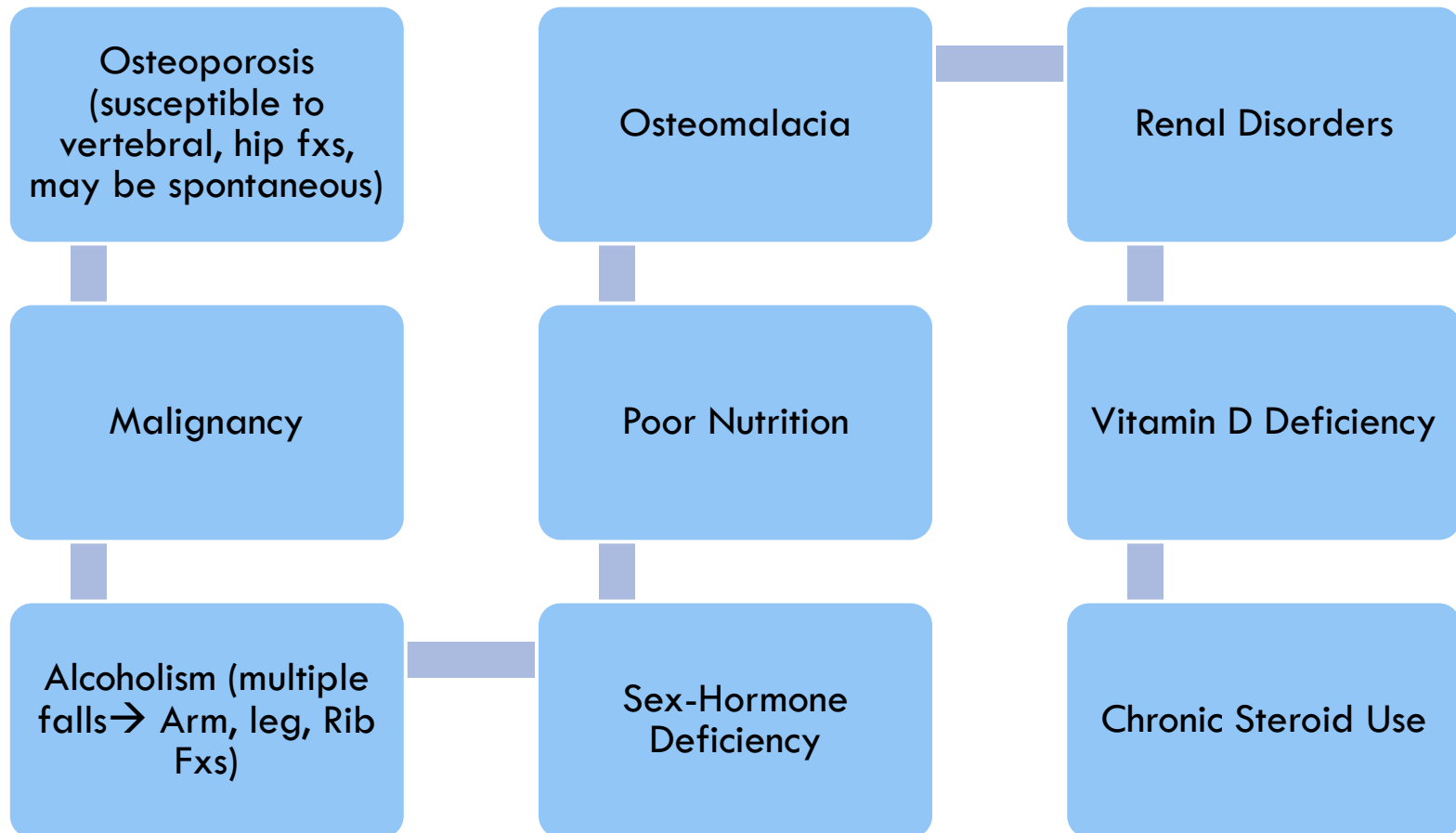
- Ulnar diaphysis fracture (usually defensive) (Wong et al., 2017).

Injuries in various stages of healing, especially the maxillofacial area and upper extremities (Wong et al., 2017). Account for 2/3rd of injuries in elder abuse.

Injuries not c/w reported MOI (known hx should be included in x-ray order).

Many of the same imaging findings used to ID child abuse are present in older adult abuse cases (Wong et al., 2017).

Age-Related Changes and Fractures:



Older Adult Abuse, Fractures and Correlation with Abuse:

- Over age 80.
- Dementia.
- Seeking ED care.
- Only one visit to healthcare facility in previous three years.
- Fracture non-fall related.
- Head or face fracture (Girona et al., 2016).

Care Considerations...

Interview Considerations in the Older Adult Population:

- Similar questions regarding event history as with other adults.
- Age may impact ability to describe the incident, current symptoms, and ability to understand exam procedure.
- Sudden awareness of “vulnerability and mortality as a result of the assault” (Commission on the Standardization of the Collection of Evidence in Sexual Assault Investigations, 1998 as cited in Hammer, Moynihan and Pagliaro, 2006)...

Table 1. Forms of Elder Abuse and Clinical Procedures for Assessment by the Physician.*

Type of Abuse	Manifestations	Assessment and Notable Findings
Physical abuse	<p>Abrasions Lacerations Bruises Fractures Use of restraints Burns Pain Depression Delirium with or without worsening of dementia or dementia-related behavioral problems</p>	<p>Ask directly how injuries were sustained; note findings that are discordant with the mechanism of injury reported.</p> <p>Color of bruises does not reliably indicate their age; bruising can occur spontaneously in older adults in the absence of documented or recollected trauma.¹⁴ Older adults may bruise spontaneously or without apparent awareness of injury.</p> <p>Injuries to the head, neck, and upper arms occur in victims of physical elder abuse, but they must be distinguished from accidental injuries caused by falls and other trauma.</p> <p>Jaw and zygomatic fractures are more likely to be sustained in a punch to the face than in a fall (falls typically result in fractures to orbital and nasal bones).</p> <p>Long-bone fractures can occur spontaneously in the absence of physical abuse in patients who are confined to bed.</p> <p>Ankles and wrists should be examined for abrasions suggestive of the use of restraints.</p> <p>Multiple injuries in various stages of healing should raise the suspicion of abuse (e.g., lacerations healing by secondary intention [i.e., without sutures] and old, unset fractures detected on radiographs).</p> <p>The mouth should be examined for dental fractures and avulsion of teeth.</p> <p>A formal assessment for pain should be conducted (this may be difficult in patients with cognitive impairment).</p> <p>Screen formally for depression, ideally with the use of an instrument such as the Geriatric Depression Scale.</p> <p>The patient should be assessed for delirium (or worsening of dementia or dementia-related behavioral problems), which can result from pain or other medical problems.</p> <p>The interview should be conducted alone with the patient; it may reveal discordant histories or findings inconsistent with the history provided by the caregiver.</p>
Verbal or psychological abuse	<p>Direct observation of verbal abuse Subtle signs of intimidation, such as deferring questions to a caregiver or potential abuser Evidence of isolation of victim from both previously trusted friends and family members Depression, anxiety, or both in the patient</p>	<p>Ask specifically about verbal or psychological abuse with questions such as “Does your son or daughter ever yell or curse at you?” “Have you been threatened with being sent to a nursing home?” “Are you ever prevented from seeing friends and family members whom you wish to see?”</p> <p>Assess the size and quality of the patient’s social network (beyond the suspected abuser) with questions such as “How many people do you see each day?” “How many do you speak to on the telephone?” “Is there anyone to assist you in the event of accident or emergency?” “Who would that be?”</p> <p>Conduct standardized assessments of depression, anxiety, and cognition, directly or through referral.</p> <p>Other types of abuse are often concurrent with verbal abuse.</p> <p>Office staff (clinical and front desk) should be encouraged to report verbally abusive behavior to the physician if they observe it.</p>

Sexual abuse

Bruising, abrasions, lacerations in the anogenital area or abdomen
Newly acquired sexually transmitted diseases, especially in nursing home residents (and especially in cluster outbreaks)
Urinary tract infection

Inquire directly about sexual assault or coercion in any sexual activity.
Conduct a pelvic examination with collection of appropriate specimens or refer to emergency department for comprehensive assessment for sexual assault and collection of specimens. Ideally, forensic evidence should be collected by experienced professionals, such as nurses who have undergone Sexual Assault Nurse Examiners (SANE) training.
A common form of geriatric sexual assault involves a hypersexual resident with dementia in a long-term care facility assaulting other residents who may or may not also have cognitive impairment.¹⁵ This situation raises fundamental issues about the capacity of older persons with dementia to consent to sexual activity.
For outpatients with dementia, direct queries to caregivers about hypersexual behavior as part of a larger history regarding dementia-related behaviors. Signs of sexual abuse are similar to manifestations of sexual violence in younger adults.

Table 1. (Continued.)

Type of Abuse	Manifestations	Assessment and Notable Findings
Financial abuse	<p>Inability to pay for medicine, medical care, food, rent, or other necessities</p> <p>Failure to renew prescriptions or keep medical appointments</p> <p>Unexplained worsening of chronic medical problems that were previously controlled</p> <p>Nonadherence to medication regimen or other treatment</p> <p>Malnutrition, weight loss, or both, without an obvious medical cause</p> <p>Depression, anxiety</p> <p>Evidence of poor financial decision making provided by the patient, patient history, or others persons</p> <p>Firing of home care or other service providers by abuser</p> <p>Unpaid utility bills leading to loss of service</p> <p>Initiation of eviction proceedings</p>	<p>Ask about financial exploitation with questions such as “Has money or property been taken from you without your consent?” “Have your credit cards or automated-teller-machine card been used without your consent?” “Have people called your home to try and get you to send or wire money to them?” “At the end of the month, do you have enough money left over for food, rent, utilities, or other necessities?” Direct similar questions to caregivers who are not suspected of being the financial abuser.</p> <p>Conduct a formal assessment of cognition and mood.</p> <p>Be aware that victims may be unwilling to disclose exploitation out of embarrassment.</p> <p>Abrupt changes in the financial circumstances of the caregiver in either direction (e.g., sudden unemployment or extravagant purchases) may also herald an increased risk of financial exploitation or exploitation already under way.</p> <p>Abuse of the power of attorney is the situation in which an older person is inaccurately designated as lacking financial capacity or being unable to perform necessary financial tasks, or in which a lack of capacity is accurately designated but the person with the power of attorney is abusing the role (e.g., using the money improperly). If misrepresentation of the lack of capacity is suspected, the patient should be interviewed to determine whether he or she should be encouraged to resume personal control of financial matters. If there is concern that the person with power of attorney or health care proxy may not be acting in the best interest of the patient, the physician or other members of the interprofessional team should request the necessary documents to ensure that the assumption of fiduciary responsibilities is indeed authorized.</p>
Neglect	<p>Decubitus ulcers</p> <p>Malnutrition</p> <p>Dehydration</p> <p>Poor hygiene</p> <p>Nonadherence to medication regimen</p> <p>Delirium with or without worsening of dementia or dementia-related behavioral problems</p>	<p>Examine the skin for bedsores and infestations.</p> <p>Assess hygiene and cleanliness.</p> <p>Assess appropriateness of dress.</p> <p>Measure drug levels in serum to assess adherence and accuracy of administration of medicines.</p> <p>Measure body-mass index and albumin.</p> <p>Conduct clinical examination to assess nutrition.</p> <p>Measure blood urea nitrogen and creatinine to assess hydration.</p> <p>Conduct a directed physical examination to assess the status of chronic illnesses under treatment.</p> <p>Interview primary caregiver about his or her understanding of the nature of the patient’s care needs and how well care is being rendered.</p> <p>Neglect may be intentional or may be unintentional, stemming from an inability to provide care owing to the caregiver’s frailty, cognitive impairment, mental illness, or limited health literacy.</p>

* The table is adapted from Dyer et al.¹³

Medical and Nursing Care Considerations Overview...



Full Head-to-Toe Physical Exam Including Skin Assessment

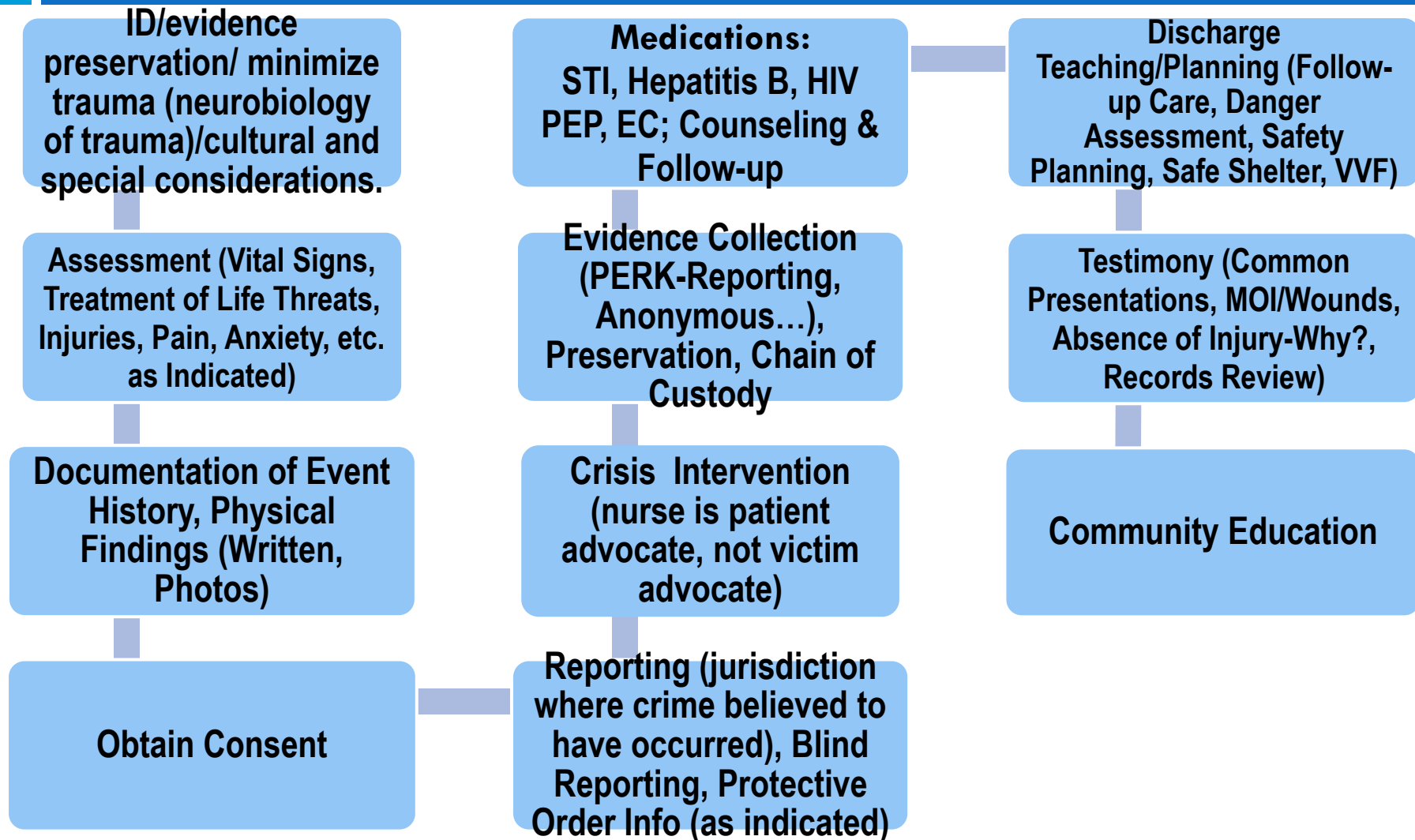
Labs (CMP, CBC, Clotting Times, TFTs, Urine, Med Levels... as appropriate)

Imaging (CXR, Areas Injured, Skeletal Survey may be indicated if Multiple Injury Sites, Cognitive Issues, Strong Suspicion for EA (Chen & Koval, 2002).

Documentation-History of Event, Written, Photographic

Reporting, Safety, Assessment of Danger (Imminent, Serious Medical Issues, Threats by Caregiver, Increase in Severity or Frequency of Abuse?)
Resources, Referral, Prevention...

Role of the Forensic Nurse in Caring for Patients with Complaint of Violence:



Identification and Preservation of Evidence:

- Once identified, patient should be referred immediately for care by appropriately trained/educated SANE/FNE, MD, etc.
- ▣ Victim should be discouraged from bathing/showering, wiping with urination, smoking, drinking, eating, changing clothes (should bring clothes to hospital if changed, bed sheets if appropriate-police should collect the scene), brushing teeth, etc.
- Motile spermatozoa more likely to be identified the sooner a patient is evaluated and evidence collected.

Identification and Preservation of Evidence (cont.):

- In the Ramsey-Klawnsnik & Teaster (2008) study:
 - N = 429 reported sexual abuse cases investigated by APS and/or licensing facilities in 5 states over 6 months.
 - 6 days = Mean time elapsed between the reported SA (by pt.) and the report of abuse (to authorities).
 - 10.7 days = Mean time elapsed between the reported SA and beginning of investigation.
 - 18-101 years = Age range of victims.
 - 59% = Female.
 - 29% = 60 and older.
 - **11% = Physically examined by HCP not employed by the involved facility.**
 - Most common intervention = No intervention, then case management and mental health.
 - 182 = Disclosed abuse to investigator
 - 18% (78) = Substantiated
 - Half of these cases occurred in nursing homes.
 - 74% = Male perpetrators
 - 5 = Number of arrests

Case Substantiation:

- Abner et al., 2019 Study:
 - Vulnerable adults living in facility settings.
 - n = 410 reports from APS and state licensure agency in five U. S. states over 6mo period.
 - 18% were substantiated.
 - More likely to be substantiated if nursing home resident, female, older victim and report of physical contact between RO and victim and resident offender (25%).
 - 51% of ROs were facility staff.

Collaboration with Community Partners:

9-1-1	EMS	Emergency/Forensic Staff	Hospital Staff
Wound-Care Specialists	Pharmacist/ Pharmacologist	Pathologist	Mental Health, Counseling
Geriatric Physicians, Nurses, Other Medical Specialists (Radiologist, etc.)	Psychologist, Neuro- psychologist, Gero- psychiatrist	Attorneys	Public Guardians
Clergy	Animal Welfare Organizations	Hospital Ethics Committees	Caregivers/Family/ Friends
Multidisciplinary Teams	Law Enforcement	Hospital/Medical Social Workers	Long-term Care Ombudsman
Community Advocates	Dentist	Meals on Wheels Area Agency on Aging	Other (Housing, etc.) / APS Agencies...

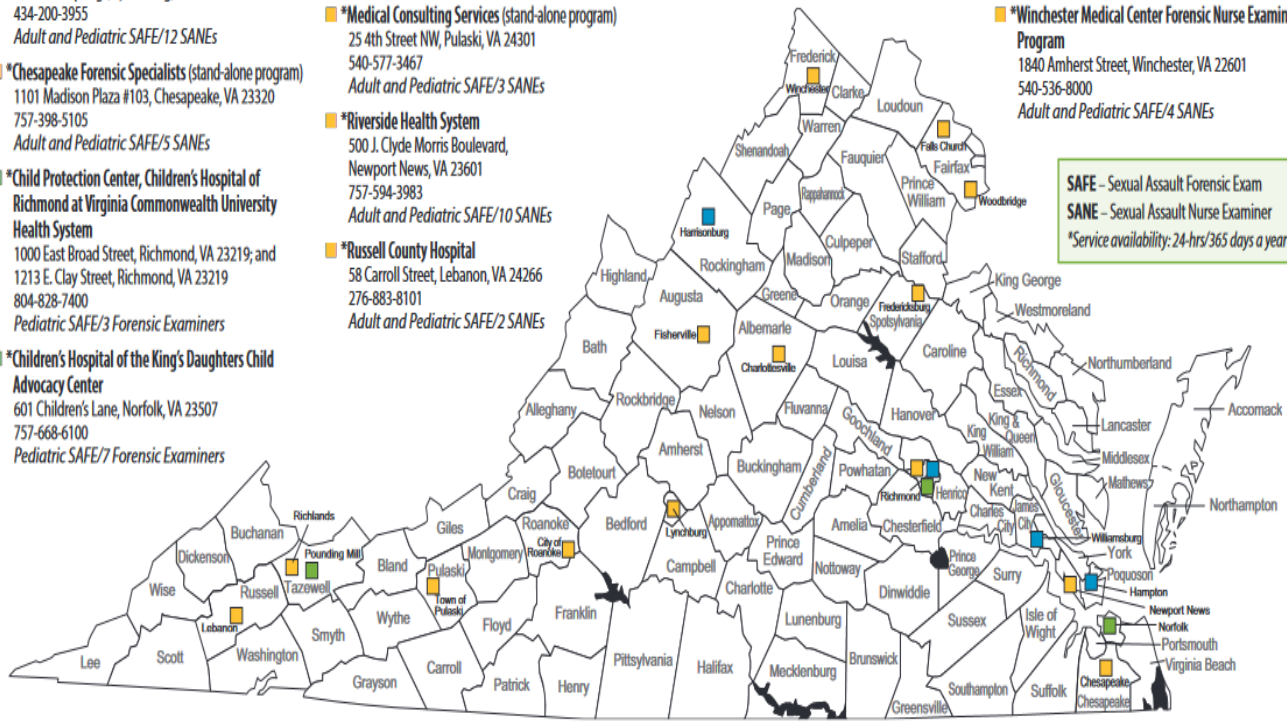
Collection Time Periods for Physical Evidence Recovery Kit (PERK) Samples Based on Commonwealth of Virginia Department of Forensic Science February 2019 Guidelines*

Refer to USDOJ NBPSAK for Evidence Collection Guidance

Type of Assault	Maximum Collection Time
<p>External</p> <ul style="list-style-type: none"> ● Cunnilingus (thighs/ext. genitalia sample only) ● Saliva on skin ● Strangulation (neck sample only) 	<ul style="list-style-type: none"> ● Within 96 hours (4 days) ● Within 96 hours (4 days) ● Within 48 hours (2 days)
<p>Vaginal</p> <ul style="list-style-type: none"> ● Penile penetration (vaginal and thighs/ext. genitalia samples) ● Digital penetration (vaginal and thighs/ext. genitalia samples) 	<ul style="list-style-type: none"> ● Within 120 hours (5 days) ● Within 48 hours (2 days)
<p>Anal</p> <ul style="list-style-type: none"> ● Penile penetration (anal and perianal/buttocks samples) ● Digital penetration (anal and perianal/buttocks samples) 	<ul style="list-style-type: none"> ● Within 72 hours (3 days) ● Within 48 hours (2 days)
<p>Oral</p> <ul style="list-style-type: none"> ● Fellatio 	<ul style="list-style-type: none"> ● Within 24 hours (1 day)
<p>Unknown</p>	<p>Collect respective samples within the timeframes listed above.</p>

Virginia Sexual Assault Forensic Examiner Programs

- ***Augusta Health Forensic Nurse Team**
78 Medical Drive, Fishersville, VA 22939
540-332-4492
Adult and Pediatric SAFE/4 SANES
- ***Bon Secours Forensic Nursing Services**
5801 Bremo Road, Richmond, VA 23226
804-281-8574
Adult and Pediatric SAFE/15 SANES
*On-site staff 24-hrs/365 days a year
- ***Carilion Clinic Forensic Nurse Examiner Program**
1906 Bellevue Avenue, Roanoke, VA 24014
540-266-6025
Adult and Pediatric SAFE/11 SANES
- ***Centra Forensic Nurse Examiners**
1901 Tate Springs, Lynchburg, VA 24501
434-200-3955
Adult and Pediatric SAFE/12 SANES
- ***Chesapeake Forensic Specialists (stand-alone program)**
1101 Madison Plaza #103, Chesapeake, VA 23320
757-398-5105
Adult and Pediatric SAFE/5 SANES
- ***Child Protection Center, Children's Hospital of Richmond at Virginia Commonwealth University Health System**
1000 East Broad Street, Richmond, VA 23219; and
1213 E. Clay Street, Richmond, VA 23219
804-828-7400
Pediatric SAFE/3 Forensic Examiners
- ***Children's Hospital of the King's Daughters Child Advocacy Center**
601 Children's Lane, Norfolk, VA 23507
757-668-6100
Pediatric SAFE/7 Forensic Examiners
- ***Cinch Valley Medical Center**
6801 Governor George C. Peery Highway,
Richlands, VA 24641
276-596-6153
Adult and Pediatric SAFE/1 SANE
- ***Inova Ewing Forensic Assessment and Consultation Team**
3300 Gallows Road, Falls Church, VA 22042
703-776-3821
Adult and Pediatric SAFE/13 SANES
- **MWHC Forensic Services**
Mary Washington Hospital
1001 Sam Perry Boulevard, Fredericksburg, VA 22401
540-741-1285
Adult and Pediatric SAFE/7 SANES
- ***Medical Consulting Services (stand-alone program)**
25 4th Street NW, Pulaski, VA 24301
540-577-3467
Adult and Pediatric SAFE/3 SANES
- ***Riverside Health System**
500 J. Clyde Morris Boulevard,
Newport News, VA 23601
757-594-3983
Adult and Pediatric SAFE/10 SANES
- ***Russell County Hospital**
58 Carroll Street, Lebanon, VA 24266
276-883-8101
Adult and Pediatric SAFE/2 SANES
- ***Sentara Northern Virginia Medical Center**
2300 Opitz Boulevard, Woodbridge, VA 22191
703-523-1504
Adult and Pediatric SAFE/4 SANES
- **Sentara Peninsula SANE Program**
Sentara Careplex Hospital
3000 Coliseum Drive, Hampton, VA 23666; and
Sentara Williamsburg Regional Medical Center
100 Sentara Circle, Williamsburg, VA 23188
757-984-7155
Adult SAFE/3 SANES
- **Sentara Rockingham Medical Hospital SANE Program**
2010 Health Campus Drive, Harrisonburg, VA 22801
540-214-8855
Adult SAFE/4 SANES
- **Ultra Health Pediatric Forensic Nursing Department**
13401 Gov George C. Peery Highway,
Pounding Mill, VA 24637
276-385-1183
Pediatric SAFE/1 SANE
- ***UVA Forensic Team**
University of Virginia Medical Center
1215 Lee Street, Charlottesville, VA 22903
434-924-3627 (page #1542)
Adult and Pediatric SAFE/5 SANES
- **Virginia Commonwealth University Health System Adult Forensic Examiner Team**
57 N. 11th Street, Richmond, VA 23298
804-628-0623
Adult SAFE/4 SANES
- ***Winchester Medical Center Forensic Nurse Examiner Program**
1840 Amherst Street, Winchester, VA 22601
540-536-8000
Adult and Pediatric SAFE/4 SANES



■ Adult and Pediatric SAFE

■ Adult SAFE

■ Pediatric SAFE



Elder Abuse Screening Tools:

- <http://eldermistreatment.usc.edu/wp-content/uploads/2016/10/Elder-Abuse-Screening-Tools-for-Healthcare-Professionals.pdf>

CDC STI Treatment Guidelines (2021) and CDC NPEP Guidelines (2016):

<https://www.cdc.gov/std/treatment-guidelines/toc.htm>

<https://www.cdc.gov/std/treatment-guidelines/sexual-assault-adults.htm>

<https://www.cdc.gov/reproductivehealth/contraception/mmwr/spr/emergency.html>

<https://www.cdc.gov/hiv/pdf/programresources/cdc-hiv-npep-guidelines.pdf>

COVID-19

COVID-19 and Impact on Elder Abuse Cases (and Other Disasters):

- Increased risks:
 - Older adults: Highest risks of serious illness and death (co-morbid conditions) from COVID-19 (Wu & McGoogan, 2019).
- Measures to mitigate spread of COVID-19 are all risk factors for elder abuse: Isolation, difficulty or inability to access care, financial issues, anxiety related to contracting/avoiding exposure and caregiver stress, lack of caregivers.
- Older adults more often affected and more likely to die in natural disasters (Gutman & Yon, 2014).
- Family (Curtis et al., 2000) and intimate partner violence (Parkinson & Zara, 2013) found to increase following disasters.

COVID-19 and Impact on Elder Abuse Cases (and Other Disasters) (cont.):

- Prevalence of elder abuse during Covid-19 pandemic: 1 in 5 persons (21.3%), 83.6% increase compared to pre-pandemic (Chang & Levy, 2021).
- Maintenance of continued team/community agency relationships, remote team meetings, delivery of services (food, etc.) to clients, virtual protective order and guardianship hearings, etc. must be maintained to help ensure safety of older adults and to support staff.

Training Resources:

- <https://trea.usc.edu/>
- <https://ncea.acl.gov/>

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