Winter 2024 1

EPIC

THE MAGAZINE OF THE GEORGIA COLLEGE OF EMERGENCY PHYSICIANS

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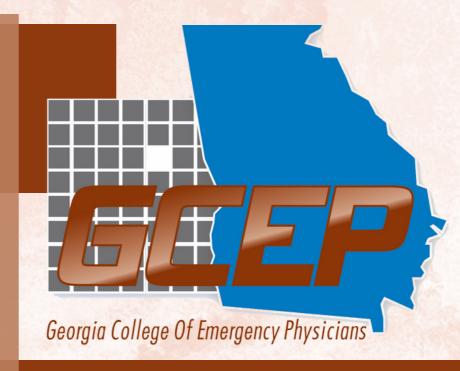
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A "New Feel" State Capitol...



The 2024 Legislative Session and second half of the two year term of the Georgia General Assembly kicked off Monday, January 8th.

The Monday morning sunrise gave shine to the freshly updated paint and lighting throughout the Gold Dome; the result of months-long refurbishment during the offseason. Additionally, new policies laid out for legislators, lobbyists, and guests with the enactment of a "no bag left unattended" policy resulted in a number of individuals losing their overcoats and briefcases to a state patrol sweep.

For the second year in a row, legislators agreed upon an adjournment resolution and set the full legislative calendar for the 40 legislative days of the session.

- Monday, January 8th: Legislative Day 1
- Tuesday, January 9th: Legislative Day 2
- Wednesday, January 10th: Legislative Day 3
- Thursday, January 11th: Legislative Day 4
- Friday, January 12th: Legislative Day 5
- Tuesday, January 16th Friday, January 20th : Joint Budget Hearings (CLICK HERE to view schedule. CLICK HERE to view the hearings)*
- Monday, January 22nd Friday, January 26th: Legislative Days 6-10
- Monday, January 29th Thursday, February 1st: Legislative Days 11-14
- Monday, February 5th Friday, February 9th: Legislative Days 15-19
- Monday, February 12th: Legislative Day 20
- Tuesday, February 13th: Legislative Day 21
- Thursday, February 15th, Legislative Day 22
- Tuesday, February 20th Thursday February 22nd: Legislative Days 23-25
- Monday, February 26th: Legislative Day 26
- Tuesday, February 27th: Legislative Day 27
- Thursday, February 29th: Legislative Day 28 (CROSSOVER)
- Monday, March 4th Tuesday March 5th: Legislative Days 29-30
- Thursday March 7th Friday March 8th: Legislative Days 31-32
- Monday, March 11th: Legislative Day 33
- Wednesday, March 13th Thursday, March 14th: Legislative Days 34-35
- Monday, March 18th: Legislative Day 36
- Wednesday, March 20th Thursday, March 21st: Legislative Days 37-38
- Tuesday, March 26th: Legislative Day 39
- Thursday, March 28th: Legislative Day 40 (SINE DIE)

*Georgia Departments of Community Health, Public Health and Behavioral Health and Developmental Disabilities all present their budgets on Wednesday, January 17th beginning at 8:00am. The Georgia Department of Insurance will follow at 2:30pm.

Governor Brian Kemp State of the State Address

Delivering his sixth State of the State address on Thursday, Governor Brian Kemp laid out a budget-heavy litany of his priorities for the 2024 Legislative Session.

Front and center among Governor Kemp's proposals was his previously announced acceleration of a state income tax cut. The Governor gave notice that he would propose legislation to take the tax rate to 5.39% this year, resulting in a \$3 billion savings for Georgians over 10 years. Notwithstanding this reduction in taxation, Kemp proposed an additional \$1.4 billion in spending for K-12 education in his AFY2024 and FY2025 budgets, making a total of \$12.8 billion allocated to K-12 education. This new spending includes \$2,500 raises for educators, as well as \$104 million in permanent, recurring funding for school safety enhancements.

Educators are not the only public employees in line for raises in the governor's spending plans. Kemp also proposed \$3,000 raises for the state's law enforcement officers and 4% raises for all other state employees. In programmatic spending, the governor highlighted an infusion of \$205 million for the Department of Behavioral Health and Developmental Disabilities to expand mental health services, increase the number of crisis beds, and expand crisis intervention services. This additional funding brings the total annual state spending on mental health to \$1.6 billion — an all-time record for Georgia.

Kemp's remarks were not just limited to announcing budget windfalls. He also staked out positions on potentially-divisive policy issues heading into the 2024 election cycle. Most prominently, he called for legislators to support and pass school choice legislation this year, suggesting schools, like private businesses, can benefit from competition.

Immediately following Governor Kemp's State of the State address, the Governor's Office of Planning and Budget released his AFY2024 and FY2025 Budget Proposals. The House and Senate Appropriations Committees will meet next week to dive into those proposals, and we will have more analysis in future editions of the report.

You can watch his annual address in its entirety HERE.

A full copy of his address is available <u>HERE</u>.

New Notable Legislation

SB 336 - Sen. Kay Kirkpatrick, MD

Behavioral Health Coordinating Council - Seeks to allow for certain officials on the Behavioral Health Coordinating Council to be represented by a delegate or agent.

SB 350 - Sen. Kay Kirkpatrick, MD

Sale of Consumable Hemp Products - Seeks to prohibit the purchase or possession of consumable hemp products by individuals under the age of 21 years.

HB 844 - Rep. Ginny Ehrhart

Practice of Nutrition and Dietetics Act - Seeks to provide for the licensure of dietitian nutritionists and nutritionists.

HB 855 - Rep. Michelle Au, MD

Safe Storage Tax Credit Act - Seeks to provide for a tax credit for certain eligible expenses incurred for firearm safe storage devices; to provide for an aggregate annual cap.

HB 856 - Rep. Michelle Au, MD

Urgent Insulin Safety Net Program Act - Seeks to make insulin accessible to individuals who are in urgent need of a short-term affordable insulin supply, provide for a pharmacy to dispense one additional short-term affordable urgent insulin supply under certain conditions and require the Department of Community Health to develop an application form, an information sheet, and satisfaction surveys regarding such program.

HB 857 - Rep. Michelle Au, MD

Continuing Insulin Safety Net Act - Seeks to make insulin accessible, under certain conditions, to an eligible individual who needs an affordable supply of insulin for up to one year, with the option to renew annually, allow the pharmacy to collect a copayment not to exceed \$75.00 for insulin dispensed through such program, and provide for re-orders and renewals; to provide for the development of an application form, an information sheet, and satisfaction surveys.

HB 872 - Rep. Lee Hawkins

Dental Student Service Cancellable Loans - Seeks to expand the service cancelable loan program for physicians and other health care providers in underserved areas to include dental students.

HB 874 - Rep. Lee Hawkins

School Automatic Defibrillators - Seeks to require automated external defibrillators in all schools, provide for the establishment of emergency action plans to address a person in cardiac arrest, provide for internal response teams, and provide for practice drills.

HB 883 - Rep. Devan Seabaugh

State Boards Teleconference - Seeks to authorize county boards of health to conduct meetings via teleconference.

HB 897 - Rep. Jordan Ridley

Medical Freedom Act - Seeks to repeal the authority of the Department of Public Health and all county boards of health to require persons to submit to vaccinations against or other measures to prevent contagious or infectious diseases.

Senate Health and Human Service Committee

HB 571 - Rep. Deborah Silcox

Alzheimer's and Related Dementias State Plan - Seeks to change the reporting requirements, and the advisory council will submit a midpoint report on the state plan. This legislation received a Do Pass and moved to Senate Rules to be on the Senate Floor on Monday, January 22nd.

Senate Regulated Industries Committee

SB 172 - Sen. Bill Cowsert

Sports Betting - Seeks to establish a seven-member sports betting commission authorized to grant at least six licenses for sports betting operations. The legislation includes provisions aimed at protecting bettors from fraudulent sports betting operators as well as provisions to help problem gamblers avoid crippling financial losses. The legislation is known in General Assembly parlance as an "enabling" bill, designed to fill in the details of an accompanying constitutional amendment. This legislation additionally passed Senate Rules and is now 'laying on the table' awaiting Senate floor action.

HB 455 - Rep. John LaHood

Provider Safe Haven - Seeks to provide confidentiality protections to participants in a wellness program for health care workers. This legislation received a Do Pass and moved onto the Senate Rules Committee. Additionally, Senator John Albers will carry the legislation on the Senate floor.

House Health Committee

A hearing only was held on Rep. Karen Mathiak's upcoming proposal to amend Georgia's law on newborn screening in order to add Duchenne Muscular Dystrophy to the current listing of diseases.

HB 434 - Rep. Lee Hawkins

Radiologist Assistants - Seeks to provide for the licensing of radiologist assistants. This legislation received a Do Pass and now sits in the House Rules Committee.

HB 502 - Rep. Deborah Silcox

Georgia Cosmetic Laser Services Act- Seeks to update the definition of "cosmetic laser services" and addresses supervision requirements, eliminating the requirement for a senior cosmetic laser services practitioner to be "on-site". This legislation received a Do Pass and now sits in the House Rules Committee.

To find any bill, go to www.legis.ga.gov and use the search box at the top left of the page. There is also an advanced search option that allows you to find bills by keyword or sponsor.

Physicians Day at the at the Capitol 2024

The date is set for **Wednesday, February 7, 2024 from 7:30am - 1:00pm**Legislators and Constitutional Officers will be invited to attend the luncheon. We will be meeting with individual legislators throughout the morning hours on the House and Senate ropes.

Click **HERE** to register now!



For legislative highlights and review, watch <u>Lawmakers</u>, which airs on **Georgia Public Broadcasting** at **7PM** every night the Georgia General Assembly is in session.

We will be sending out legislative updates regularly throughout the 2024 session, so keep an eye on your inbox to stay updated on all of the happenings from under the Gold Dome.

More information: Please reach out to our office at 770.435.5586 or reach out to us personally via our cell phones.

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Financial Review

Nautilus Newsflash - December 18, 2023: Corporate Transparency Act Compliance

Starting January 1, 2024, a significant number of businesses will be required to comply with the Corporate Transparency Act (CTA). The CTA was enacted into law as part of the National Defense Authorization Act for Fiscal Year 2021. The CTA requires the disclosure of the beneficial ownership information (BOI) by specific entities defined in the act. The CTA is not a part of the Internal Revenue Code, it is a part of the Bank Secrecy Act, a federal law that requires taxpayers to keep records of, and file reports on, certain specified financial activities. Final regulations implementing the CTA were issued in September 2022. Under the CTA, BOI reports will not be filed with the IRS, but with the Treasury Department's Financial Crimes Enforcement Network (FinCEN).

Who is required to report?

The CTA is not intended to require all companies to comply with its reporting requirements. Historically, such laws have focused on larger companies and provided exceptions to the smaller ones. The CTA, however, is focused specifically on the estimated 27 million small businesses that are considered "non- employer firms" with zero employees. These domestic entities and foreign entities meeting certain requirements are defined as reporting companies. A domestic entity may be a reporting company if it is a corporation or a limited liability company (LLC) created by filling a document with a secretary of state (or similar office) of a state or Indian tribe. A foreign entity may be a reporting company if it is a corporation or LLC formed under the law of a foreign country that is registered to do business in any state or tribal jurisdiction by filling a document with a secretary of state or any similar office. The CTA includes the phrase "or other entity" in the list of entities that may be considered reporting companies. The regulations are unclear as to whether trusts and general partnerships that are created by operation of law without the filing of a formation document may be considered an "other entity" and therefore be subject to the beneficial ownership information reporting requirements.

Who is not required to report?

The CTA excludes sole proprietorships. Additionally, the CTA excludes a laundry list of companies in the financial services industry, insurance companies, public accounting firms, public utilities, and companies that are, or are involved with, tax-exempt entities. Also excluded are companies otherwise subject to a

federal regulatory regime or designated as exempt entities by the Secretary of the Treasury or the Attorney General of the United States. Finally, the CTA excludes any business concern that employs more than 20 employees full time, files tax returns showing more than \$5 million in gross receipts or sales and has a physical presence in the United States (these are identified as a "large operating company"), publicly traded entities, any entities controlled directly or indirectly by an entity that is otherwise exempt, and dormant entities.

Who is a beneficial owner?

A beneficial owner is defined under the CTA as any individual who, directly or indirectly, either:

- Exercises substantial control over a domestic or foreign reporting company, or
- Owns or controls at least 25% of the ownership interests of a domestic or foreign reporting company.

Ownership interests include those categorized as capital interests or profits interests as well as equity convertible through voting rights. The regulations further define the terms "substantial control" and "ownership interest."

Who is not a beneficial owner?

The CTA excludes from the definition of beneficial owner those who are:

- Minor children (provided the information for their parent or guardian is reported);
- Individuals acting as nominee, intermediary, custodian, or agent on behalf of another individual;
- Individuals acting solely as an employee of a reporting company (in specified circumstances);
- Individuals whose only interest in a reporting company is a future interest through rights of inheritance; and
- A creditor of a reporting company.

What information is reported?

The CTA requires reporting companies to report their full business name, trade name, or doing business as (DBA) name, business address, state or Tribal jurisdiction of formation, and their IRS taxpayer identification number (TIN). Additionally, the CTA requires companies to report information on the beneficial owners of the entity, including the owner's name, date of birth, address, and a unique identifier number from a recognized issuing jurisdiction as well as a photo of the document containing that unique number. Government-issued identification such as a passport or a driver's license would satisfy the requirement.

When must the information be reported?

The CTA requires reporting companies that were in existence prior to the January 1, 2024, effective date to report the required information to FinCEN on or before January 1, 2025. New entities created or registered after the effective date but before January 1, 2025, must file within 90 days from the day they receive notice of their formation or registration to report the required information to FinCEN. New entities created or registered after January 1, 2025, must file within 30 days from the day they receive notice of their formation or registration to report the required information to FinCEN.

Are there continuing reporting requirements?

If there are any changes to previously reported information about the reporting company itself or its beneficial owners, the reporting company is required to file an updated information report within 30 days of such change. The regulations are unclear as to what constitutes a change to previously reported information. It has been suggested that changes to a beneficial owner's information or the addition or removal of a beneficial owner will constitute a change that should be reported. However, the regulations are unclear as to whether changes like a change in the percentage ownership interest of a beneficial owner are sufficient to require an updated report.

Are there penalty provisions in the CTA?

The CTA imposes penalties on parties or reporting companies for reporting incomplete or incorrect information which can result in daily fines of up to \$500 per day until the violation is corrected. Additionally, criminal penalties may be imposed in cases of willful non-compliance or when the non-compliance is accompanied by fraudulent intent. Criminal penalties may include fines of up to \$10,000 and imprisonment for as much as two years. The CTA makes unlawful the disclosure of BOI and imposes criminal fines of \$500 per day for such disclosure up to \$250,000 in the aggregate and up to 10 years in prison. There is no clear indication that any compliance failure under the act would lead to a suspension of the company's ability to conduct business or limit the company's ability to commence an action in federal court. Finally, the CTA provides a safe harbor rule for any person that submits inaccurate beneficial ownership information if that person:

- Didn't know it was inaccurate,
- · Was not trying to evade the reporting requirement, and
- Corrected the information no later than 90 days after the initial report was submitted.

What are the next steps?

FinCEN will begin accepting beneficial ownership information reports from reporting companies that are not exempt on January 1, 2024, the effective date of the reporting requirement. The information above is preliminary and it is possible that material changes may occur in our understanding of the CTA's implementation and requirements.

In conclusion

The Corporate Transparency Act establishes a comprehensive framework of requirements that will impact small businesses. The complexities and nuances of the Act, coupled with the severe penalties for non-compliance, underscore the importance of understanding its obligations. It is important that guidance and counsel is sought from qualified financial professionals who can provide informed interpretations of the Act and its regulations, ensure accurate reporting, and aid in the timely response to any changes in beneficial ownership information.

This material is for informational purposes only and includes a discussion of one or more tax-related topics. This tax-related discussion was prepared to assist in the promotion or marketing of the transactions or matters addressed in this material. It is not intended (and cannot be used by any taxpayer) for the purpose of avoiding any IRS penalties that may be imposed upon the taxpayer. Everyone should seek and rely on the advice of their own independent tax and legal professionals before implementing any related planning strategies. Please understand that New York Life Insurance Company, its affiliates and subsidiaries, and agents and employees of any thereof, may not provide legal or tax advice to you. The Nautilus Group® is a service of New York Life Insurance Company. SMRU 6165249 exp 12/31/2025

GCEP Newsletter, January 2024

Emory University School of Medicine Department of Emergency Medicine

The Emory EM team hopes that everyone is having a good start to the New Year. The Department published the inaugural biennial EM In Review for FY 22 covering departmental milestones, achievements, awards, and appointments.

The Emory EM Residency

The residency program welcomed Dr. Annemarie Cardell as an Assistant Program Director. She moved back to Atlanta from Maimonides Medical Center in New York.

Residency Awards

- Dr. Alyka Glor Fernanadez received the 2023 Georgia College of Emergency Physicians' In Training Professionalism and Service Award in December during the Georgia Emergency Medicine Leadership & Advocacy Conference
- Dr. Danielle Andrews received the CORD Academic Assembly Travel Scholarship

Fellowship matches

o Dr. Suhaib Abaza: EMS at Mayo Clinic

o Dr. Tori Ehrhardt: Medical Toxicology at Emory University

o Dr. Brittney Gordon: Critical Care Medicine at Washington University – St Louis

The **Injury Prevention Research Center at Emory (IPRCE)** celebrated 30 years of Light and recognized its founders and leaders Dr. Deb Houry, Dr. Art Kellerman, Dr. Rick Martinez, Dr. Jonathan Rupp, Dr. David Wright, EM colleagues, the Emory Schools of Nursing and Public Health, and incredible community partners.

Recent Emory EM Distinctions

- **Dr. Jeremy Ackerman** and the ACEP Tactical and Law Enforcement Medicine Section won a 2023 ACEP Section Award for Outstanding Newsroom Content. Dr. Ackerman is the editor for the ACEP Tactical and Law Enforcement Medicine Section's Newsletter and they have won the Outstanding Newsletter award for two years in a row
- **Dr. Ingrid Bloom** was elected to serve on the CoAEMSP Board of Directors. CoAEMSP is the Committee on Accreditation for the EMS Professions and provides accreditation services for paramedic education programs nationwide
- Dr. Sheryl Heron is the Chair-elect for the AAMC Group on Diversity and Inclusion Steering Committee
- **Dr. Esther Hwang** and **Dr. Trey Robinson** passed the ABEM EMS Board Certification exam. They are both now double boarded in EM and EMS
- Dr. Alex Isakov is the Chair-Elect for the EMS Sub-Board of the American Board of Emergency Medicine
- **Dr. Yuko Nakajima** and **Dr. Phudi Buaprasert** (Emory EM international EMS fellow from Thailand) were inducted into the Academy of Emergency Medical Services (FAEMS). They are among 71 inductees from around the world this year. **Dr. Buaprasert**, Emory EM's first international track EMS fellow, completed his training at Emory. He will be presenting a poster at the upcoming meeting of the National Association of EMS Physicians in Austin, TX
- **Dr. Ricardo Martinez** has been appointed to the Executive Committee of the Transportation Research Board (TRB) of the National Academies of Science, Engineering and Medicine
- **Dr. Laura Oh** is a newly elected section officer for ACEP Ultrasound. Dr. Oh will serve as the secretary for the section
- Dr. Mike Ross was the recipient of ACEP's Lou Graff Award for Excellence in Observation Medicine

Awards, Events, Presentations, Podcasts, and Publications

- The **Emory EM Med Tox** team along with the **Georgia Poison Center** team led conference sessions at the inaugural Puerto Rico Tox Conference at the University of Puerto Rico Medical Sciences Campus
- **Dr. Joe Carpenter** and **co-PI Dr. Alaina Steck** were awarded \$305K from the NIH (Univ of MD prime) for the Continuum of Care in Hospitalized Patients with Opioid Use Disorder and Infectious Complications of Drug Use (CHOICE)
- Dr. Satta Emeli (EUHM faculty) wrote "Something Magical" published in JAMA
- **Dr. Candace Floyd** and **Co-I Dr. Lonnie Schneider** were awarded \$3.6M from the NIH to study the development and validation of a porcine model of spinal cord injury-induced neuropathic pain
- **Dr. Bryan McNally and the Cardiac Arrest Registry to Enhance Survival (CARES)** were awarded \$23M from the CDC for expansion
- **Dr. Brooks Moore** is studying the Assessment of Implementation of Methods in Sepsis and Respiratory Failure (AIMS) through the Society of Critical Care Medicine
- **Dr. David Wright** was on the Neurosurgery Podcast discussing the relationship between Neurosurgery and EM. IPRCE also honored Dr. Wright with the Award of Excellence In Leadership during their 30th Anniversary Celebration
- **Dr. Anna Yaffee** and **Dr. Ziad Kazzi** have been awarded funding from the Emory University School of Medicine to create a new Center of Advanced Emergency Care (CAEC) within the Department which will offer tiers of certificate training and an annual conference for professionals in the field (national and international) seeking additional subspecialty training, but who cannot commit time/funding to a full fellowship, or are not eligible due to international status

International Highlights

- Dr. Ziad Kazzi, Dr. Emily Kernan, and Dr. Anna Yaffee presented at the 3rd International Congress on EM "ICON-EM" in Turkey
- **Dr. Yuko Nakajima** is an ACEP Ambassador to Japan and is the President of Doctors Without Borders Japan (Médecins Sans Frontières -MSF). She recently served with the MSF in Gaza from September through December 2023

Emory EM and the Southern Regional Disaster Response System (SRDRS)

The Healthcare and Public Health Planning for a Chemical Emergency Webinar Series has kicked off and the next webinar is on Tuesday, Jan. 16 from 3-4 pm ET. The January webinar will focus on Prehospital Considerations in Chemical Emergencies. Registration in advance is required: https://zoom.us/webinar/register/WN_ad9cg4OoT-q4H3WvFtB3_w#/registration. You can check the SRDRS website for updates on future webinar topics.



Department of Emergency Medicine

Toxicology Case of the Month: A Family with Elemental Mercury Exposure

Afra Alsuwaidi1,2, Suad Alsulaimani1,2, Emily Kiernan1,2
Emory University School of Medicine, Department of Emergency Medicine
Georgia Poison Center

Case:

1

2

A family of five with two parents, a previously healthy 19-year-old female, 14-year-old male, and 3-month-old male were exposed to mercury. The 14-year-old brought 3 mL of elemental mercury in a test tube from a rubble at his school. The test tube was accidentally destroyed at home and spilled on the carpet. The 14-year-old decided to dispose the spilled mercury by collecting it bare-handed and 19-year-old vacuumed the rest. One day later, the 14-year-old developed a generalized pruritic, blanching, maculopapular rash over his extremities and trunk (Figure 1). He was seen by a dermatologist and started on oral prednisolone 16mg three times daily, oral bilastine (antihistamine) 20mg once daily, and topical methylprednisolone once daily.

The 19-year-old developed an isolated rash, similar to her brothers (Figure 2) five days after the exposure. The patient was seen by a dermatologist and given a similar medication regimen to her brother.

Both patients were seen in the Emergency Department six days after the exposure for a worsening pruritic rash that did not improve with medication. Both patients had a normal physical examination (except the rash), normal vital signs, chest x-ray, electrocardiogram (ECG), and blood tests. The Emory Medical Toxicology fellow was consulted and recommended symptomatic treatment for the rash and to collect a 24-hour urine mercury level. The patients were advised to avoid seafood consumption for three days prior to urine collection as this could alter the results. The patients were discharged with outpatient follow-up to review their mercury levels.

The rest of the family remained asymptomatic. However, the mother, who was breastfeeding a three-monthold infant, was concerned about her breastfeeding since her family was exposed to mercury. The toxicology team recommended continuing breastfeeding since she was asymptomatic and had no direct exposure to mercury.

Follow-up:

The patients were scheduled for a follow-up three days after the ED visit. The 14-year-old male attended the follow up and his skin rash remained the same and without improvement. His 24-hour urine mercury level was 0.61 mcg/L (reference range: < 20 mcg/L) and his mercury serum level was 0.23 mcg/L (reference range: < 10 mcg/L). The 19-year-old female did not show up for her appointment, however, her 24-hour urine mercury level was 0.41mcg/L and her serum mercury level was 0.24mcg/L. None of the patients required chelation and they were all lost to follow up.

Discussion:

The decision to not chelate the patients was based on the low levels of mercury in the blood and urine. Although they had a generalized cutaneous rash, they were still did not meet criteria for chelation. The generalized rash can be seen with inhalational exposure to mercury, causing a mild symptomatic manifestation without respiratory system involvement. The fact that the level of mercury came low possibly explains their unique presentation.

The rest of the family did not become symptomatic and screening them for mercury toxicity was not recommended since both symptomatic patients had low mercury levels. Moreover, asymptomatic patients with elevated urinary mercury concentrations do not warrant chelation.



Figure 1: 14-year-old male with diffuse blenching, maculopapular rash.



Figure 2: 19-year-old female with diffuse blenching, maculopapular rash.

What Is Mercury?

Mercury is a naturally occurring heavy metal that exists in three forms: elemental (e.g., quicksilver), inorganic (e.g., mercurous, mercuric salts), and organic (e.g., methylmercury, ethylmercury) (1). The clinical findings will vary depending on the type of mercury exposure (2).

Elemental mercury is found in thermometers, dental amalgams, fluorescent light tubes, compact fluorescent lamps, and some latex paints (3). Elemental mercury exists as a liquid at room temperature and has a moderate vapor pressure that increases if it is heated or aerosolized. The most significant route of exposure to elemental mercury is inhalation of vaporized elemental mercury, which can result in clinically significant toxicity. Upon inhalation of elemental mercury vapor, it crosses the alveolar membrane and is readily absorbed into the blood, and subsequently distributed into tissues of the kidneys, central nervous system, heart, liver, and immunological systems (1).

In acute toxicity, symptoms can be divided into three stages. The first stage is a flu-like symptoms which manifest as myalgia, pyrexia, headache, and dryness of the mouth and throat. After two weeks in the second stage, patient may develop multiorgan involvement including pulmonary manifestations such as interstitial pneumonitis, pulmonary edema, and pulmonary failure. Gastrointestinal (GI) involvement is manifested by oral metallic taste, thirst, constipation, nausea, and vomiting. Renal manifestation has been reported as well with nephrotic syndrome. The third stage is a neuropsychiatric symptom (6).

Chronic exposure to elemental mercury produces the triad of intention tremor, erethism (increased emotional excitability, personality changes, irritability, memory loss, insomnia, drowsiness, depression, decreased self-control), and gingivitis (6). Cutaneous manifestations include a blue line across the gingiva, an erythematous maculopapular eruption, and a lichenoid drug reaction (Table 2).

Inorganic mercury is primarily absorbed in the GI tract. Approximately 10% of soluble divalent (Hg2+) mercuric salts such as mercuric chloride (HgCl2) are absorbed following ingestion and dissociation. Insoluble monovalent (Hg+) mercurous compound, such as mercurous chloride (calomel; HgCl), is less absorbable and depends on its oxidation to the divalent form. Inorganic mercury is also absorbed across the skin and mucous membranes, as evidenced by urinary excretion of mercury after dermal application of skin-lightening mercurial ointments and powders containing mercuric chloride (5).

In acute ingestion, inorganic mercury salts will produce severe caustic gastroenterology irritation, grayish discoloration of the mucous membrane, metallic taste, local oropharyngeal pain, nausea, vomiting, and diarrhea. It can produce hematemesis and hematochezia in late stages of illness (5).

Organic mercury such as methylmercury is mostly absorbed from the GI tract. Methylmercury mainly produces neurological symptoms which are usually permanent (except in mild cases). The neurological manifestations are usually delayed and can be associated with GI symptoms, respiratory distress, dermatitis, renal tubular dysfunction, and ECG changes (ST segment changes) (5).

Table 1: An Overview of the Different Mercury Forms (6).				
Different forms of mercury	Elemental (metallic)	Organic	Inorganic	
Туре	Mercury vapor Earth's crust Atmospheric	Methylmercury (converted to elemental mercury in the brain). Ethylmercury Thimerosal (49.6% ethylmercury) Alkyl mercury	Mercury vapor is the most common source. Divalent mercury salt is the most toxic source. Converted to elemental mercury in water.	
Source	Dental amalgams Seafood Thermometers Lamps Mercury-laden latex paint	Seafood (alkyl mercury) Multidose vial influenza vaccines (thimerosal) Plastics, paper Processed wood Insecticides	Skin whitening products; antiseptic facial creams; bleaching creams Lamps Wood preservatives Pesticides, germicides	
Half-life	60 days	45-70 days	42 days	
Absorption	Respiratory tract (oxidized to inorganic mercury at alveoli) Limited GI absorption	GI tract (≥95%) Respiratory tract (80%)	Respiratory tract GI tract (2%–10%) Skin (3%–4%)	
Pharmacokinetic distribution	99% circulates in the blood (plasma protein, glutathione, metallothionein bound) & RBC (Hb bound)	99% circulates in the blood (plasma protein, glutathione, metallothionein bound) & RBC (Hb bound)	99% circulates in the blood (plasma protein, glutathione, metallothionein bound) & RBC (Hb bound)	
Excretion	Predominantly urine Feces	Predominantly feces (90%) Urine (< 10%)	Urine and feces Also sweat, breast milk, saliva, tears.	

Clinical features	Acute:	Neurological:	Gastrointestinal
	Flu-like prodrome	Ataxia	Esophageal erosions
	Pulmonary, GI, renal,	Demyelination	Gingivitis
	CNS, and GU	Autonomic dysfunction	Burning tongue
	involvement	Mental retardation	Renal failure
	Neuropsychiatric	Cerebral palsy	Neurological
	symptoms	Birth defects	Tremor
	Chronic:		Dementia
	Triad: intention tremor,		
	gingivitis, erethism		
Cutaneous	Blue line across gingiva	Rare or nonexistent	Acrodynia
features	Lichenoid reaction		A blue line across gingiva
	Erythematous papular		and tongue (a marker of
	eruption		systemic poisoning);
			stomatitis
			Slate-gray pigmentation
			(exogenous ochronosis)
Principal organs	Kidney, brain, and	Brain, kidney, and	GI tract, kidney, liver
affected	placenta	placenta	(periportal area)
Treatment	Chelation	Chelation	Chelation
	• DMPS (IV/PO)•	DMPS (IV/PO)	DMPS (IV/PO)
	Succimer (PO)	 Succimer (PO) early in 	Succimer (PO)
	D-penicillamine (PO)	the course.	D-penicillamine (PO)
		 Note: no FDA approval 	
		to treat methylmercury or	
		ethylmercury poisoning	
		with chelation therapy	
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Note: μg/L, microgram per liter; CNS, central nervous system; DMPS, 2,3-dimercaptopropane sulfonate; DMSA, 2,3-dimercaptosuccinic acid; FDA, U.S. Food and Drug Administration; GI, gastrointestinal; GU, genitourinary; Hb, hemoglobin; IV, intravenous; PO, per os (oral); RBC, red blood cell.

What Are the Skin Manifestations Can Be Associated with Mercury Toxicity?

Table 2: Distinct cutaneous syndromes associated with mercury poisoning (4).

Acrodynia (pink disease) In Inorganic Mercury

Dermatological

- Pink, puffy, painful, (pruritic) paresthetic, perspiring, peeling hands.
- Involvement of the feet, the tip of the nose, and cheeks.
- "Salaam position" (sit with head between the legs while rubbing both hands).
- Cold and moist skin.
- Excoriations, lichenification.
- Trichotillomania causes alopecia.
- Erythematous and swollen gingivae from excessive salivation.
- Oral mucosal ulceration; tooth loss.
- Nail loss.

Other

Hypertension, tachycardia, photophobia, pelvic girdle, and pectoral muscle hypotonia.

Acute Generalized Exanthematous Pustulosis (AGEP)

Dermatological

Widespread non-follicular pustules with underlying edematous erythema.

Other

Pyrexia, leukocytosis.

Baboon Syndrome/SDRIFE (symmetrical drug-related intertriginous and flexural exanthema)

 Diffuse, well-demarcated, symmetrical, erythematous maculopapular eruption of the gluteal/perianal area, intertriginous/flexural folds.

Mercury Exanthema

Dermatological

- Diffuse, symmetrical erythema affecting the flexural and proximal extremities.
- Associated pruritus and burning.
- Non follicular sterile pustules.
- Purpura
- Desquamation during resolution at around 2 weeks post-exposure.

Other

Fever, malaise, polydipsia.

Contact dermatitis

Acute contact dermatitis

Swelling, vesicles, scaling, irritation.

Tattoo reaction (red pigment from mercuric sulfide)

- Localized swelling and scaling at the site of the tattoo.
- Psoriasiform verrucous reaction.

Dental amalgam reaction

Brown to violaceous papules and plaques; usually adjacent to the dental amalgam.

Hyperpigmentation

Dermatological

- Slate-grey pigmentation of the treated skin.
- Mercurialitis discoloration of the lens from prolonged peri-ocular cream application.

Cutaneous granuloma

Dermatological

Flesh-colored to an erythematous granulomatous lesion at the site of exposure.

Other

Visceral organ involvement: lungs, kidneys, liver, spleen.

What Investigation Needed to Diagnose Mercury Toxicity?

Mercury intoxication can be identified with mercury level assays from blood, hair, and urine. Serum levels are useful in acute or recent exposure, as well as in determining if the exposure was to the organic form (elevated blood-to-plasma ratio of up to 20:1) or the inorganic form (ratio of 1:1 to 2:1) (6).

In chronic exposure to mercury (2-3 months), hair mercury measurement is considered the test of choice. Hair contains an amino acid group, which has high sulfhydryl content, and mercury binds with the sulfhydryl compounds (6). The World Health Organization set a limit of 1 mg/kg of hair mercury concentration to be acceptable; however, moderate mercury toxicity hair concentrations range from 200–800 mg/kg (6).

Urine mercury level can be used for both acute and chronic exposure to mercury. It has a limited clinical value when it comes to organic mercury, since organic mercury is excreted through feces mainly (Table 1). Although elemental mercury is excreted mainly in the urine, complications from oral ingestion are rare, due to its limited gastrointestinal absorption. Measurement of urine mercury concentration is useful if the patient has been exposed to inorganic mercury (6).

What is The Treatment of Mercury Toxicity?

In case of acute exposure, the initial treatment of mercury is to remove the patient from the exposure. In case of visible contamination with liquid mercury, a thorough decontamination is required by removing the clothes and cleaning the skin with soap and water (preferably under a shower). Vapor mercury exposure does not require external decontamination; however, airway and breathing should be addressed in those patients, as early respiratory symptoms may occur. Eye irrigation should be performed in case of eye involvement with water or saline (4).

In case of mercury ingestion, do not induce emesis. Internal decontamination with charcoal is not effective. If the ingested amount was significant, consider whole bowel irrigation.

Treating patient with chelating agents are reserved for the patient who is symptomatic with elevated toxic serum or urine level (4). For the chelating therapy to be considered, both criteria should be met.

There are several options for mercury chelation. The choice of chelation is determined according to the severity of the condition and the chronicity. Chronic toxicity in a patient who can tolerate oral, succimer is the primary recommended chelator. Intramuscular dimercaprol (BAL) is an option in acute toxicity. Unithiol (2,3-dimercaptopropanol-sulfonic acid, DMPS) is another option, and it can be administered intravenously in acute toxicity or orally in chronic toxicity. D-penicillamine, and N-acetyl penicillamine have also been used.

Parenteral or intramuscular BAL or intravenous DMPS should be initiated in patients with significant acute exposures.

BAL is given in decreasing doses over 10 days if the patient is unable to take oral medications in the following doses:

5 mg/kg initially, followed by 2.5 mg/kg 1 or 2 times daily for 10 days.

When patient clinically improve and able to tolerate oral medications, BAL should be replaced with succimer in the following regimen:

- 10 mg/kg orally 3 times daily for 5 days then.
- 10 mg/kg 2 times daily for 14 days.

Succimer can be used alone in chronic toxicity.

DMPS is available through compounding pharmacies in the United States. It is considered a better mercury chelator than succimer. In case of acute toxicity and when the patient is unable to tolerate oral medication, DMPS is dosed as following:

- IV: Day one 250 mg/kg every 3 to 4 hours.
- Day two 250 mg every 4 to 6 hours.
- Day three 250 mg every 6 to 8 hours.
- Day four 250 mg every 8 to 12 hours.
- Days five and six: 250 mg every 8 to 24 hours.

Depending on the patient's clinical condition, therapy may be changed to the oral route after the fifth day: 100 to 300 mg 3 times daily for up to 14 days.

In case of administrating an oral formula of Unithiol from the start, the doses will be as the follow:

Initially: 1200 mg to 2400 mg every 24 hours divided (100 mg or 200 mg every 2 hours), reduce to 100 mg to 300 mg every 8 hours as tolerated.

Patients should be treated for 14 days or until there is no mercury detected in the urine (8).

Methylmercury therapeutic option is limited compared to the other forms of mercury. The chelation therapy is more effective if it was administered in early stage of toxicity. In a rat study, both BAL and D-penicillamine effectively reduced tissue mercury and prevented neurologic toxicity if administered within the first day of a methylmercury toxicity. In the same study there was no neurological improvement if treatment was given after twelve days of exposure (5). If treatment was considered, it should be considered in early stage of toxicity. Succimer is the most reasonable treatment for methylmercury poisoning because of its apparently low toxicity and reported efficacy in animal studies (5).

How Can We Perform an Environmental Mercury Decontamination?

Elemental mercury that spills onto solid surfaces should be adsorbed to sand and the resulting mixture then swept into tightly sealed containers (Any plastic bag). Ideally, a mercury decontamination kit should be used. The kit consists of calcium polysulfide, which contains excess sulfur to convert mercury to water-insoluble mercuric sulfide (5).

Absorbent surfaces, such as carpets, should be removed. Spilled mercury compounds should not be vacuumed because this could volatilize the mercury. Recommendations for decontamination after an elemental mercury spill include opening windows to release vapor, using adhesive tape to pick up visible fragments, and discarding contaminated material in double-wrapped bags (5). Clearly label the container as "Mercury - DO NOT OPEN" (7).

All mercury containing items should be disposed of according to Environmental Protection Agency (EPA) guidelines and local requirements (refer to EPA website for details) (5). Many states and local agencies have developed collection/exchange programs for mercury-containing devices such as thermometers, manometers, and thermostats. Some counties and cities also have household hazardous waste collection programs. For information about these programs, contact your local officials or the regional poison center to find out when and where a collection will be held in your area. You can also use Earth911's Recycling Locator to find a recycling center near you (7).

References

- Atti, S.K., Silver, E., Chokshi, Y., Casteel, S., Kiernan, E.A., Dela Cruz, R., Kazzi, Z., & Geller, R.J. (2020). All that glitters is not gold: Mercury poisoning in a family mimicking an infectious illness. Current problems in pediatric and adolescent health care, 100758.
- Boyd AS, Seger D, Vannucci Sea. Mercury exposure and cutaneous disease. J Am Acad Dermatol. 2000;43:81-90.
- 3. Patrick L. Mercury toxicity and antioxidants: part I: role of glutathione and alpha-lipoid acid in the treatment of mercury toxicity. Altern Med Rev. 2002;7(6):456–71.
- Lavery MJ, Wolf R. The life-threatening rash of poisoning. Clin Dermatol. 2019 Mar-Apr:37(2):136-147.
- Sue Y. Mercury. In: Nelson LS, Howland M, Lewin NA, Smith SW, Goldfrank LR, Hoffman RS. eds. Goldfrank's Toxicologic Emergencies, 11e. McGraw Hill; 2019. Accessed July 06, 2023. https://accessemergencymedicine.mhmedical.com/content.aspx?bookid=2569&s ectionid=210261448
- Wolf R Parish LC Parish JL. Emergency Dermatology. Second ed. Boca Raton FL: CRC Press; 2016.
- "Storing, Transporting and Disposing of Mercury." EPA, 9 May 2023, www.epa.gov/mercury/storing-transporting-and-disposing-mercury.
- "Inorganic Mercury: Overview Treatment." Micromedex Products: Please Login, 15 Nov. 2022,
 www.micromedexsolutions.com/micromedex?/librarian/CS/CA620E/ND_PR/evidence

www.micromedexsolutions.com/micromedex2/librarian/CS/CA620E/ND_PR/evidencexpert/ND_P/evidencexpert/DUPLICATIONSHIELDSYNC/A8974D/ND_PG/evidencexpert/ND_B/evidencexpert/ND_AppProduct/evidencexpert/ND_T/evidencexpert/PFActionId/evidencexpert.IntermediateToDocumentLink?docId=1844.

Pediatric Emergency Medicine Update - Medical College of Georgia Winter 2024

By the time you read this, the beginning of the new year will have passed. But I will wish all readers well! The second half of the academic year seems to speed by with little time to reflect on what is in the rearview mirror.

We are now a member of a new health system and are known as Wellstar MCG Health but still maintain our Children's Hospital of Georgia name. We look forward to changes that will enhance our ability to continue teaching, research, and excellent patient care.

<u>Academic</u>

Successful onboarding in the summer led swiftly into fellow recruitment. We had a successful match. Our program welcomes Meredyth Shaffer, DO, an emergency medicine graduate who will finish at Columbia, SC Prisma Health and Sarah Hendrix, MD who will finish her pediatric residency at SUNY Upstate. We look forward to their arrival.



Meredyth Shaffer, DO



Sarah Hendrix, MD

During the new academic year, we welcomed new rotators from Northeast GeorgiaEmergency Medicine program and Fort Eisenhower Family Medicine program. We hope we are providing good training in the realm of evaluation and management of the undifferentiated acutely ill or injured child.

Research abstracts were accepted to the Southern Society of Pediatric Research to be hosted in New Orleans in February. Dr. Gary Prusky, MD, 2nd year PEM Fellow and Chijioke Ohamadike, MD, 2nd year EM resident will present a poster on <u>A rapid progression of amebic meningoencephalitis</u>. Dr. Prusky will provide an oral presentation on <u>Acute urinary retention due to hematocolpos</u>.

Dr. Natasha Bennett was chosen as one of the fellows for the National EMSC Fellows in the disaster domain for the upcoming year.



Natasha Bennett, DO

Clinical

Volumes surged over summer and well into the winter months much like the other hospitals across the state. Anticipating continued issues with surges in years to come, the department and hospital are working hard on establishing a useful crowding score and surge plan for children. A presentation is tentatively planned on a pediatric NEDOCS score at EMAG in the spring. Front end construction and changes are continuing to enhance our throughput.

Advocacy and Research

There is much work being done across the state to improve disaster and emergency preparedness statewide. Children's Hospital of Atlanta (CHOA) is a member of the GULF 7, one of the three Pediatric Centers of Excellence, and both, representatives from CHOA (David Greenky, MD) and Children's Hospital of Georgia (Natalie Lane, MD) serve as co-chairs for the pediatric work group of the Sothern Regional Disaster Surge Network in Region 4, another active grant funded preparedness group. The Georgia Pediatric Health Improvement Coalition of Georgia hospitals is working to enhance communication and closely align clinical and preparedness initiatives.

Children's Hospital of Georgia joined the National Pediatric Pandemic Network's disaster collaborative in September 2023 and will work on a quality project to better engage with health care coalitions to make pediatric patients an important population in regional planning. Members include from the ED, Natalie Lane, MD, and Natasha Bennett, DO (2nd year fellow) and other nursing, physician leadership as well as emergency managers.

There is continued work on pediatric facility recognition from the Georgia EMS-C program and is presently in the pilot phase. Dr. Natalie Lane, MD as the chair of the Georgia EMSC Advisory Council and Samantha Sindelar, NRP, the state program manager and other key stakeholders continue to facilitate this project.

We will be recruiting for new PEM Faculty this year. If you have any interest, please see our website for more description of our academic and clinical footprint. https://www.augusta.edu/mcg/em/.

Please feel free to reach out to the below contact information.

Natalie E. Lane, MD

Section Chief, Pediatric Emergency Medicine Section Fellowship Director, Pediatric Emergency Medicine Fellowship Medical Director, Children's Hospital of Georgia AF2021 Department of Emergency Medicine Augusta University

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NGHS Quarterly Update

Overview

With the recent acquisition of Habersham Medical Center, NGHS now has 5 EDs ranging in volume from 14,000 to over 100,000 visits annually. Georgia Emergency Department Services (GEDS) is the large, independent group that provides staffing for all of the emergency departments. Construction of new emergency departments for the Gainesville and Lumpkin campus sites continue as scheduled. The new Lumpkin hospital is on track to open later this Spring. The new additional wing in Gainesville is scheduled to open early 2025 with a new, expanded emergency department.

Georgia Emergency Department Services (GEDS) continues to grow with recruiting physicians to serve on faculty as well as work clinically at our EDs. Focus recently is on Pediatric EM physicians and EMS training.

One of our NGHS hospitals was recently named "Small Hospital of the Year".





Residency Updates

In GME, we are wrapping up interview season. We had a strong season, thanks in part to having achieved Level 1 Trauma status last year. We'll be hosting second looks for applicants for the next couple of months, and by June we hope to welcome out third class of residents to finally complete our cohort. This Spring we will elect our first chief residents who will accompany the PD team to SAEM for the chief development series. We also plan on taking all of our rising PGY3s to CEMC in June to introduce them to various groups and employers in the region. We are planning to host a social event for various groups to meet our residents and talk a little about job opportunities. If there are any groups hiring in the next couple of years and interested in speaking to our residents, please reach out to Josh Mugele (jmugele@gedsemergency.com).

In faculty news, we have welcomed two new core faculty — Dr. Jessica Silversmith will be our new director of mentoring, and Dr. Jason Konzelmann will be our director of administrative education. Also, congratulations to program director, Dr. Mugele who was given the NGHS Academic Award and to Dr. Leflore and Dr. Gethers who were given nursing choice awards. Dr. Andy Ball has pubished an article in Common Sense titled "An Emergency Medicine Physician's Perspective on Gun Violence and Gun Control." Dr. Ball also published an article in GEMSA with two residents, Hawa Henderson and Seth Illu, titled "Integration of Emergency Medicine Resident Physicians in 911 EMS System."

In resident news, Ziad Faramand was awarded the GCEP In-Training and Professionalism Services award. Dr. Faramand and PGY1 Nikhil Patel got posters accepted into the photo competition case at AAEM this upcoming Spring. And PGY1 resident, Romy Rahaal had two publications from previous research she had done: Increased Risk of Colorectal Cancer in Patients with Chronic Tophaceous Gout and The Impact of Non-Alcoholic Fatty Liver Disease on Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Increased Risk of Colorectal Cancer in Incre

Check out Dr. Andy Ball's article on page 34 of the November/December 2023 issue of Common Sense by American Academy of Emergency Medicine (View on Issuu)

Congratulations to Drs. Hawa Henderson, Seth Illu, and Andy Ball for having their article titled "Integration of Emergency Medicine Resident Physicians in 911 EMS System" published in GEMSA (page 31) https://files.georgiaems.net/GEMSA/GEMSA-FA23/

Congratulations to Drs. Kartik Shah and Ziad Faramand! Their photo competition cases were chosen for poster presentation at the 30th Annual AAEM Scientific Assembly (AAEM24), being held on April 27-May 1, 2024 in Austin, TX.

November 2023

Congratulations to Dr. Mugele, Dr. Leflore and Dr. Gethers for winning awards at the 2023 Physician Banquet. Dr. Mugele won the Academic Excellence Award, Dr. Leflore won the Nurse's Choice Award: Physician of the Year 2023 for the Barrow campus and Dr. Gethers won for the Lumpkin campus. Congrats one and all!

Congratulations to Dr. Ziad Faramand for being awarded the <u>Georgia College of Emergency</u>

<u>Physicians In-Training and Professionalism Services Award</u>! Great job, Dr. Faramand!

October 2023

Congratulations to Dr. Romy Rahhal with two published papers!

- <u>Increased risk of colorectal cancer in patients with chronic tophaceous gout: A population-based study</u> in the journal: Arquivos de Gastroenterologia
- <u>The impact of nonalcoholic fatty liver disease on inflammatory bowel disease-related</u> <u>hospitalization outcomes: a systematic review</u> in the journal: European Journal of Gastroenterology and Hepatology

ACEP 2023:

Two of our faculty, Dr Kathryn West and Dr. Allison Ruch, served as alternate councilors at the ACEP council meeting as part of the GCEP leadership fellowship.

Dr Leyenet Gonzalez, PGY-2 serves as the wellness chairperson for EMRA.



From L to R: Dr Allison Ruch, EM Residency Faculty Member; Dr Mohak Dave, President of GEDS; Dr. Kathryn West, Associate EM Residency Director; Dr Leyenet Gonzalez, PGY-2

EMS Division Updates

On January 1st NGHS EMS was approved to hire a new position of EMS Quality Assurance and Continuing Education Manager to help improve patient care. This individual will review all high fidelity EMS charts with the goal of identifying areas of improvement. They will also help to improve continuing education within the various counties NGHS serves in partnership with the NGHS EMS Medical Director.

Pediatric Division Updates

Our providers are fully committed to providing great care to the children in our community and assuring our emergency medicine residents will be well equipped to do the same upon leaving residency.

One area of focus has been on pediatric observation medicine. GEDS and NGHS have a robust observation unit with more than 30 protocols in place with roughly 13,000 patients on an annual basis. In an effort to reduce unnecessary pediatric transfers out of our system, we have established pediatric observation protocols for those children who are not ready for discharge at the end of an emergency visit but do not necessarily require admission. Our initial protocols included gastroenteritis as well as head injury. Over the next several months, we hope to add undifferentiated abdominal pain, asthma, croup and pneumonia pathways. So far, patients and families have been very pleased with this addition.

Simulation Division Updates

The Simulation Division recently established a Simulation Fellowship and is recruiting 1-2 board-eligible emergency medicine graduates to participate in a one year fellowship focused on simulation education as well as using simulation for quality assurance and quality improvement processes within the medical system. Interested applicants can find more information on the website.

Kennestone Update

Like many of you, we have been experiencing record volume and acuity over the last few weeks at Kennestone, and our residents, APPs, and faculty continue to perform at an extraordinarily high-level in caring for this extremely complex population. Despite extremely difficult conditions, including unprecedented admission holds, departmental morale remains high, and our team continues to impress with their knowledge, commitment, and performance.

A few updates from some of our sections:

Fellowship matches:

Our senior residents continue to do an amazing job matching into top notch fellowships. In addition to Andrew Smith staying with us as an administrative fellow next year at Kennestone, we have two graduates that will be entering Fellowship at other institutions:

- Sahil Patel, MD successfully matched into his first-choice ultrasound program at the University of Michigan
- Chimeziri Ahuruonye, DO also matched at his top selection in EMS & Pre-Hospital Medicine at the University of Florida

We are extremely proud of both residents, as well as the rest of our graduating class. But you will have to wait until next quarter to find out where they are going...

Medical Student Education:

It was an incredible year for our students. Auditioning future potential intern rotators were up 264% compared to last year, and this is the strongest group of visiting students we have had thus far. In addition, we held virtual Townhall meetings for students who could not rotate with us, which garnered participation from around the country.

This was our first year participating in VSAS which helped streamline the application process and brought a tremendous return with visibility on a national (and international) stage.

From Portland, Oregon to Miami, Florida and from Texas to Toledo, we were privileged to have excellent fourth year medical students apply to our program, representing the strongest medical schools in the country (and world!) We are looking forward to a stellar intern class in 2024!

Division of EMS:

Despite fulfilling his role from a different state, Dr. Infanzon has been integral to our new EMS experience and is working closely with Dr. Nix in providing a first-rate education. This month we welcome our first ever dedicated medical student EMS rotator. We have designed a rotation where the student will spend four weeks with an ALS class I fire department, a transport agency, and helicopter transport. Additionally, the student will have an opportunity to experience tactical medicine by training with our paramedics during monthly SWAT training.

Division of Toxicology:

As with the emergency department in general, they toxicology services volume continues to grow at extraordinary rate. Our two toxicologists are providing invaluable consultation services at Kennestone as well as leading us in our scholarly pursuits. They have multiple book chapters and case write-ups in process. Way to go Dr. Kleiman and Dr. Punja!

Division of Ultrasound:

We're excited to announce a significant enhancement to our ultrasound services. We have finally integrated POCUS image storage and archival capabilities into our EMR and PACS systems, ensuring seamless access to crucial patient data. Our main academic focus in the back half of the year is helping our third-year residents complete their elective and graduation requirements as we prepare them to excel and be leaders in their new roles following graduation.

As mentioned last quarter, we have officially rolled out our bedside ultrasound guide to block program and are pleased to be able to offer this option for pain management to our hip fracture and other injured patients. We have had several successful utilizations of this, which has resulted in significant patient satisfaction and reduction of the need for opiates in many elderly patients.

Finally, and perhaps most exciting, we are adding an additional faculty member to our ultrasound educational group. Jordan Leumas, MD, recently completed his ultrasound fellowship at Emory and will be joining our ultrasound team and providing additional educational expertise and clinical innovation. In combination with our Director, Dr. Embertson and his compatriot and APD extraordinaire, Dr. Ashong, we have truly compiled an incredible team of ultrasound educators.

Only one more day of interviews to go, and then the eagerly anticipated and dreaded rank list meeting in a couple of weeks. I very much look forward to announcing our newest class of residence in our next update. In the meantime, just remember that flu season ends, and at some point our volumes will return to normalcy.

Ted Stettner, MD Emergency Medicine Program Director Kennestone Regional Medical Center Associate Professor, Augusta University

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