IVIG Update
Learn the latest about the nationwide IVIG shortage

Nationwide IVIG shortage impacts the MGH

THE MGH HAS LAUNCHED its emergency Hospital Incident Command System to respond to a nationwide shortage of intravenous immunoglobulin (IVIG), a blood product made up of antibodies used to treat numerous medical conditions hospitalwide.

The MGH is actively working to address the situation and is implementing adaptive strategies during the shortage, which has included the cancellation or rescheduling of some patient appointments.

Frequently asked questions about the IVIG shortage:

WHO RECEIVES IVIG TREATMENTS?
If you are an MGH patient who receives care in the following departments, this shortage may affect your care.

- Oncology
- Hematology
- Neurology
- Infectious Disease
- Transplant
- Bone Marrow Transplant
- Obstetrics
- Rheumatology
- Allergy
- Immunology

WHY IS THERE AN IVIG SHORTAGE AND HOW LONG IS IT EXPECTED TO LAST?
We do not know the cause of the shortage. Companies are working hard to make more IVIG, but the shortage may last until 2020.

IS THE IVIG SHORTAGE AFFECTING MGH PATIENTS?
Yes. The MGH has had to cancel some patient appointments because there is not enough IVIG available. Some of these cancellations will likely need to continue until the shortage is over. We are looking into all possible treatment options.

WILL THIS SHORTAGE AFFECT MY TREATMENT PLAN?
The shortage will affect many patients. Care teams throughout the MGH are working to make sure you will continue to get the best possible care. We will always talk to you before we make any changes to your treatment plan.

ARE THERE ANY ALTERNATIVES I SHOULD CONSIDER?
Please talk with a member of your care team to determine if there are other options for your care.

IS THE IVIG SHORTAGE HAPPENING AT OTHER HOSPITALS?
Since the IVIG shortage is affecting the whole country, many hospitals are experiencing the same problem.

Addressing capacity:
A day in the life

ON APRIL 23, the second phase of the MGH’s bed reallocation project took place as part of the hospital’s multipronged approach to addressing capacity constraints at the MGH. Dedicated staff across a number of disciplines worked together to ensure a smooth transition for patients, and the move was captured in a special “Day in the Life” photo slideshow, available for viewing on Apollo, the MGH intranet.

6:30 am: MGH staff gather in the Phillips House 22 lounge. Its floor-to-ceiling windows overlook the city, fog draping a wet cover over the tops of the skyscrapers, red and white lights highlighting the near standstill traffic snaking in from all directions, the famed Citgo sign dark at this early hour.

The solarium lounge-turned-command center is in stark contrast to the damp spring weather. Here, neon lights are ablaze, energy is rampant, coffee flows freely. In less than three hours, the second phase of the MGH’s bed reallocation project will officially begin. Phillips 21 – a Gynecology Unit – will become a General Medicine Unit with Hospital Medicine. Phillips 22 – General Surgery, General Medicine and Orthopaedics – will become the Vincent Gynecological Service and General Surgery Unit.

The move has been carefully planned. Dozens of staff members across multiple disciplines have spent months discussing, coordinating and scheduling the relocation of patients and services. From 6 am to 3 pm, each minute has been carefully detailed. The goal is to adhere to the schedule as closely as possible to ensure there is no disruption to patient care.

But this dedicated team of (Continued on page 4)
Study identifies how mothers transfer immunity from infectious disease to their children

While vaccines have been successful in reducing the spread of infectious diseases across the globe, they have limited effectiveness in protecting newborn infants, whose immune systems are not developed enough to vaccinate safely.

Some protection from infectious disease is transferred between mother to child in utero, though it has not been clear how this process works. A study based at the Ragon Institute of MGH, MIT and Harvard has identified how a pregnant woman’s vaccine-induced immunity is transferred to her child, which could help in developing more effective maternal vaccines.

“Newborns arrive into the world on the first day of life with brand-new immune systems that need to learn to cope with both helpful and harmful microbes in their environment,” says Galit Alter, PhD, of the Ragon Institute and co-senior author of the study. “To help the newborn immune system learn to discriminate between friend and foe, mothers transfer antibodies to their infants via the placenta. The rules by which the placenta performs this essential function have been unknown, but, if decoded, could hold the key to generating more powerful vaccines to protect these most precious patients.”

While maternal antibodies against some diseases – such as measles – can be transferred from mother to infant, providing some protection until the child is old enough for individual vaccination, antibodies to other serious diseases such as polio are less efficiently transferred.

Researchers found that the placenta sifts out and delivers antibodies that activate natural killer (NK) cells. While several important immune cells are too immature in newborns to provide effective protection, NK cells are among the most abundant and functional immune cells during the first days of life.

It may be possible to improve immune protection for infants by developing new vaccines for mothers that promote the development of antibodies that activate these NK cells.

Where you live affects your heart health

An MGH research team has identified the biological process through which individuals of lower socioeconomic status have a greater risk of cardiovascular disease.

A team led by Ahmed Tawakol, MD, director of Nuclear Cardiology in the MGH Division of Cardiology, and Katrina Armstrong, MD, chief of the MGH Department of Medicine, found that individuals from neighborhoods with lower household incomes or higher crime rates had higher rates of activity in the amygdala (the part of the brain activated in response to stress), increased immune cell production and more arterial inflammation. These factors significantly increased their risk of a heart attack, unstable angina, cardiac failure or death in the four years after the study.

It may be possible to reduce these risks through lifestyle-based interventions such as sufficient sleep, exercise and meditation, using statins to reduce inflammation in the arteries and developing new drugs that target the pathway between the amygdala and the arteries, the researchers said.

“These results provide further support for considering socioeconomic status when assessing an individual’s risk for cardiovascular disease and suggest new approaches to helping reduce cardiovascular risk among those patients,” says Tawakol.

Partners HealthCare Biobank hits major milestone

PARTNERS HEALTHCARE BIOBANK has surpassed 100,000 participants, making it one of the largest biobanks in the country helping to accelerate clinical research that will allow physicians to better understand, treat and prevent diseases in patients now and in the future.

“This is a significant milestone for Partners and the research community,” said Scott Weiss, MD, principal investigator at Partners Biobank. “Greater participation in the Biobank enables us to increase the scale and scope of our research and provides our researchers with access to data and information that would otherwise take them years to source. We are already seeing tremendous results from the Biobank, for individual patients where a health concern was identified and in large studies that are helping us to identify diseases like Alzheimer’s and cancer in patients who have yet to develop any symptoms.”

Researchers and clinicians at the MGH, Brigham and Women’s Hospital, and other Partners institutions use the Biobank to study how genes, lifestyle and other factors affect people’s health and contribute to disease. Participants in the Biobank provide a small blood sample which is linked to their electronic health record data as well as a self-reported health survey and their family history information. The blood specimens are then genotyped and stored in a research sample and data repository, which is available to Partners researchers.

To learn more about the Biobank visit https://biobank.partners.org.
Summer sun care

“EVEN ON A CLOUDY SUMMER DAY, up to 80 percent of the sun’s UV rays can pass through the clouds,” says Shinjita Das, MD, MGH dermatologist and technology director in the Department of Dermatology. “We expect people to enjoy the outdoors, so here are some simple tips to help you protect your skin.”

Das encourages good sun safety, which means not only using sunscreen, but knowing how to read sunscreen labels and how often to apply. Choosing the right sunscreen can help reduce the risk of skin cancer and early skin aging caused by the sun.

READING LABELS:
The American Academy of Dermatology recommends that consumers choose sunscreens that state three things on the label:

- SPF 30 or higher
- Broad Spectrum: This means the sunscreen protects the skin from UVA and UVB rays.
- Water Resistant up to 40 or 80 minutes: After that amount of time, sunscreen can no longer claim waterproof or sweatproof.

Use caution near water or sand, says Das, as they reflect the damaging rays of the sun, which increases chances of getting a sunburn. Also know that UVA rays, which cause premature aging, wrinkles and age spots, can pass through window glass.

WTEN TO APPLY:
Sunscreen should be applied early, often and enough.
- Early refers to about 20-30 minutes before going outdoors.
- Enough means making sure you are using enough sunscreen – usually about two tablespoons for adults for the entire body. Remember to rub in well.
- Often means every two to three hours while outdoors. Apply sunscreen every hour if you are going swimming. Reapply sunscreen immediately after toweling off, sweating or potentially rubbing off sunscreen.

“One in five Americans will develop some form of skin cancer in their lifetime, so limiting sun exposure is the most reliable way to reduce the risk of skin cancer,” says Das. “So while you enjoy the outdoors, remember to protect your skin – seek shade, wear sun protective clothing and apply sunscreen.”

The Blum Center will host a sun safety table Monday through Friday, from 9 am to 4:30 pm through the end of July. Stop by to learn more about safe sun habits.

Jesse’s story: Seeing beyond disability helps teen thrive

FOR THE FIRST 12 YEARS of his life, Jesse Simon lived with an undiagnosed genetic disorder that puzzled many doctors. After several tests, his parents – Monica and Phil, of Abington, Pennsylvania – were at a loss for an explanation for their son’s nonverbal behaviors, developmental delays and occasional outbursts. After some time, Jesse tested positive for Pitt Hopkins syndrome.

Jesse, now 15, is one of about 500 individuals in the world diagnosed with Pitt Hopkins syndrome, a rare genetic disorder that affects development, intellect and speech. Children and adults with Pitt Hopkins syndrome are often nonverbal and meet developmental milestones, such as walking or sitting up, much later than others. They also commonly have breathing issues, such as hyperventilation or breath-holding spells, chronic constipation and seizures.

Monica first heard of the MassGeneral Hospital for Children (MGHfC) Pitt Hopkins Clinic at a genetics conference in Texas. To better facilitate his care, they made the seven-hour drive from Pennsylvania. The difference at MGHfC was immediate, she says.

“When we arrived at the Pitt Hopkins Clinic, they knew my son,” says Monica. “I wasn’t the one educating the doctors on what he had. They knew his condition and his behaviors, and they understood him.”

Their initial appointment addressed Jesse’s breathing and sleeping issues, but discussions of Jesse’s struggles in his public high school led to what Monica says was a lifechanging consult with Amy Morgan, PhD, neuropsychologist in the MGHfC Psychology Assessment Center. Jesse found his school environment overwhelming and stressful, prompting him to become frustrated and disengaged. Morgan made suggestions to better unlock Jesse’s potential.

“Jesse is very sweet and social, even though he is nonverbal. People do not always look beyond the disabilities to see the child who is really there,” says Morgan. “He is high-functioning for someone with Pitt Hopkins syndrome. I could see he was capable of so much more than people give him credit for.”

Since meeting with Morgan, Jesse has transferred to a private school for children and teens with developmental disabilities. He excels in reading and spelling and is deeply engaged in school activities, from classroom work to feeding the horses in the barn or picking apples in the school’s orchard. With support from Morgan, he also has gained better control over his anxiety and stress levels. He works on his communication skills daily with a communication assistive device.

“Since coming to MGHfC and enrolling in his new school, Jesse is in a much more even space and we are thinking about next steps for him, like where he goes from here as different life stages and events come up,” says Monica. “Jesse is a productive member of a loving community and he is thriving because of it.”
Diversity & Inclusion in Action: James Quinlivan, patient access coordinator

James Quinlivan, a Physical Therapy patient access coordinator, is a member of the newly-formed Human Resources Diversity & Inclusion Advisory Committee – a working group that will lead the development and implementation of targeted career and professional development programs for employees. The committee also will develop programs to increase the hospital’s engagement within Boston area communities.

HOW DID YOU COME TO WORK HERE?
After completing 20 years of active duty service and retiring from the U.S. Navy in 2003, I was hired as an administrative assistant to the director of the Berman-Gund Laboratory at Mass Eye and Ear. I worked there for 14 years, but with the closing of the lab, I found myself unemployed. Following a year-long job search, I was contacted by Bulfinch Temporary Service and began working as an administrator in the Physical Therapy Office in August 2018. After a few weeks of working as a temp, I was asked if I would join the team full time, which I gladly accepted.

HAS YOUR CAREER PATH TAKEN ANY SURPRISING TURNS?
I cannot say I have had many surprising turns in regard to my career. Coming from a working middle-class family and seeing my mom retire from nursing after more than 40 years, hospitals were a part of everyday family life. My sister, Julie, also volunteers here at the MGH on Mondays and at Salem Hospital the rest of the week. It was probably inevitable that after my military service, I would find employment in the hospital environment.

WHY DO YOU THINK DIVERSITY IN THE WORKPLACE IS IMPORTANT?
Society is made up of complex microcosms of people from all walks of life, all nationalities and all faiths. The Navy, or the military in general, is one such microcosms and so is the MGH. In order to be successful and to fully meet the needs of our patients, we need to have representation at the hospital on all job fronts from as many cultures and backgrounds as possible. This provides not only a sense of community for our patients and fellow employees and staff, but also allows for ease of services to those from a diverse cultural landscape such as the one the city of Boston offers.

WHAT DO YOU SEE AS YOUR ROLE IN DIVERSITY AND INCLUSION EFFORTS AT THE MGH?
I believe that with my background in personnel classification, I can bring the skills I have honed over the years in being able to fit the right person to the right job. In this case, we must avoid overlooking those personnel who may be a great fit for the job due to possible cultural differences, language barriers, etc. There is the right person for every job and the right job for every person.

WHAT ADVICE WOULD YOU GIVE TO THOSE LOOKING TO CREATE A MORE EQUITABLE ENVIRONMENT AT THE MGH?
Be open minded. Put others before yourself. Treat others as you wish to be treated. Accept all cultures no matter how diverse from your own and embrace not only the similarities, but also the diversities in order to learn from each other. We are all God’s people and all deserve to be treated fairly and equally in the workplace and outside of the workplace.

Diversity & Inclusion in Action is a feature highlighting employee stories of inspiration, perseverance and management best practices in workforce development and diversity. If you know of someone who should be considered for the series, email Emmanuela Menard or Dianne Austin, Human Resources.

Capacity

(Continued from page 1)

nursing professionals knows first-hand the variables that come with patient care. Change is constant. Plans always tentative.

“This is no easy task, but ultimately we believe this will positively impact our hospital capacity challenges,” said Suzanne Algeri, RN, associate chief nurse and bed reallocation implementation co-lead.

The team reviews multiple spreadsheets, reading aloud directives and discussing and prioritizing each patient, each room, each and every concern.

“I have a question about my patient. He’s been ambulatory for four days and we’re watching his pain.”

“When my patient is moved, do I ride in the elevator with him? I’d like to make sure he’s settled and introduced to his new care team.”

The questions are varied, but the overarching response remains the same: “Whatever works, we can do.”

7:15 am: Roles are assigned. Red and blue vests are handed out. Nurses have offered their expertise in different leadership roles: Jessica Flynn, RN, and Heather Szymczak, RN, are unit leaders. Molly Lyltte, RN, and Maryalyce Romano, RN, serve as greeters to stay with patients during the relocation to help answer their questions and make sure they are settled. Dianne Heislein, RN, is the team’s resource nurse.

The clock ticks closer to 7:30 am. There is a collective pause and silence as they come to the last page in the packet of paperwork.

For the next hour, staff will ready their patients for the move. Breakfast is served. Medication is reviewed and dispensed. Each patient received a letter about the relocation and their family members were briefed, but the nursing staff want to be at the bedside to make sure they have answered any lingering questions.

And the Phillips 21 and Phillips 22 staff begin to complete their last tasks as staff members on the floor.

To read the full story and see more images, visit Apollo at apollo.massgeneral.org.