Q: What has Houston Methodist been doing to track the Delta variant?
A: We’ve sequenced nearly 13,000 SARS-CoV-2 virus genomes this year, with our latest batch of data being from the first week of June. We saw the Delta variant (first detected in India) initially enter the Houston Methodist patient population in mid-March and, since then, the number of infections month over month slowly increased. We’ve now seen 73 patients in the Houston Methodist system who have been infected with the Delta variant. Overall, the total number is low, but it is a cause for concern and underscores the need to continue vaccination efforts.

Q: In terms of percentage, how does that compare to the total number of cases?
A: The Delta variant now represents about 20% of the infections among Houston Methodist's patient population systemwide, which we can realistically conclude would be about 1,000 infections caused by this variant throughout the Houston metropolitan area.

Q: Does the Delta variant cause more serious infections?
A: The total numbers are still relatively low, so it's difficult to make strong inferences, but there is evidence that it causes more severe disease and does seem to be causing more hospitalizations. We do know that the Delta variant is mostly infecting the unvaccinated. The key is that we’re slowly seeing it month over month gain an increased foothold, so it's something that we’re going to continue watching closely.

Q: Is the Delta variant more contagious?
A: Some studies have found the Delta variant to be roughly 60% more contagious than the Alpha variant (first detected in the U.K.). While we’ve not done any studies on that at Houston Methodist, there is some evidence that it is more infectious, meaning it’s more transmissible.

Q: Are the COVID-19 vaccines effective against the Delta variant?
A: We’re keeping a close eye on some concerning mutations and subvariants that could decrease the effectiveness of antibodies to fight the virus and possibly give it some resistance to the vaccines. Overall, though, our research has found that the vaccines are still highly protective against the Delta variant. However, individuals must have both doses for vaccination to be effective. Only having one shot is not sufficient protection against the Delta variant, so individuals must be fully vaccinated.

Q: Does this mean I should still wear a mask even if vaccinated?
A: We are waiting for the CDC to publish its opinion on this, while WHO has already recommended that you wear masks indoors even if you are vaccinated due to the variants. It’s still a good idea to take general safety precautions like wearing masks and social distancing when in situations and places where not everyone may be vaccinated, such as in grocery stores or at social events with individuals outside of your known circle of family and friends.

Q: Is the growth of the Delta variant in Houston significant? And what does this tell us?
A: It’s approximately double the number of patients compared to May, which is a modest increase. This upward trajectory is definitely a cause for concern, as it was a sharp turn upward with the additional 20 cases identified in just the first week of June. It really underscores the need for us to continue with precautions and vaccination efforts.
Q: Where are you seeing the Delta variant? Is it more prevalent in any specific areas of Houston?
A: The Delta variant is geographically widespread throughout the Houston metropolitan area, reflecting Houston Methodist's entire catchment, which is widely dispersed across the region. Our studies are facilitated by a central molecular diagnostic laboratory that comprehensively identifies and retains all COVID-19 diagnostic specimens from our eight hospitals, emergency care clinics, outpatient centers and institutions that use our laboratory services, all of which serve patients who are demographically, socioeconomically and geographically highly diverse.

Q: Dr. Fauci predicts the Delta variant will be the dominant variant in the U.S. in the next few weeks. Do you think that will be the case in Houston, as well?
A: We do have some statistical models that would suggest that. It's still a bit early to make any predictions that are too definitive, but it certainly has our attention. Right now, the Alpha variant is the dominant strain in the Houston metropolitan area. It fluctuates from day to day, but consistently accounts for 60-90% of all new COVID-19 cases.

Q: Is the Delta variant affecting more young people?
A: There is evidence from Europe that the Delta variant may cause more severe disease in younger people, many of whom have not been vaccinated. It's especially concerning, given the prevalence of longhaul COVID, which causes lingering symptoms and health complications that remain for months and possibly years following infection.

Q: What is the Delta Plus variant?
A: The so-called Delta Plus is a mutation of the Delta variant that was previously known as the “double mutant” variant first detected in India. It’s an even worse actor and thought to be more transmissible and cause more severe disease. While the original Delta variant has two mutation strains, the Delta Plus has a third mutation. We’ve not yet seen Delta Plus at Houston Methodist, but it’s just a matter of time. This is yet another reason we must increase vaccination rates, not only to protect against this more virulent variant, but also is essential to reaching herd immunity, which is the only way to stop these variants from spreading and prevent new ones from forming. The virus needs a host body to mutate into another variant, so the more individuals who are vaccinated, the fewer opportunities the virus has to mutate.