

# LIGHTNING DATA CENTER MINUTES

October 9, 2020  
ST. ANTHONY HOSPITAL  
[www.lightningdatacenter.org](http://www.lightningdatacenter.org)

Monthly Quote: “I can’t believe you’re here with us. You shouldn’t be here with us with the injuries that you have.” What a physician said to a lightning patient. Source: U.S. News and World Report. July 5, 2020. Full citation below.

1. Members Present: Clark, Swanson, Stemple, Terry, Crow, Wachtel, and Langford. We met with a lightning survivor. Clark moderated. Meeting began at 11:45 AM and ended at 1:20 PM.
2. **VERY IMPORTANT – PLEASE READ!** Per the advice of hospital administration, this month’s meeting was held via Zoom. For the time being, we will continue to meet only via Zoom. As usual, readers are urged to pay attention to e-mails and meeting announcements, since the COVID-19 situation is highly fluid.
3. The LDC is accepting donations, either as cash or check. If you donate via check, please make your check payable to Steve Clark at 755 S. Clinton Street, #2A; Denver, CO 80247. He will cash the check and keep the cash holdings specifically for the LDC. When the LDC incurs expenses, Steve will pay for services rendered through his bank account using the cash from LDC’s cash holdings. A log will be maintained detailing the inflow and outflow of monies. At the present, the LDC has \$484.00 in cash, an increase of \$30 since last month thanks to a donation from Michael Cherington.
4. Statistics from Carl Swanson’s First Responder Data Collection Project remain the same as reported last month in Colorado and Tennessee.
5. Both Carl and Greg Stewart saw articles indicating the lightning fatality rate this year may set a record low this year. As of October 5, the date of a CNN article, 14 people have been killed by lightning this year, according to National Lightning Safety Council data. In an average year, approximately 26 people are killed each year. National Lightning Detection Network data showed lightning activity is about 17% less in 2020. Lightning counts were near average for January through April, but then fell significantly from May through July.
6. Rick O’Keefe with the Lightning LP & PQ group, sent an e-mail noting two giraffes were killed last March at the Rockwood Wildlife Reserve in South Africa. The day after a storm, park rangers found two female giraffes lying on the ground approximately 23 feet apart. They smelled of ammonia, indicating death by lightning. A case study of their deaths was published in the September 2020 edition of the *African Journal of Ecology*. One giraffe died due to a direct strike on the head, judging from a fracture in the skull of the head, near the antler-like ossicone. The other may have died indirectly due to the dispersal of the lightning through the air or ground.

7. We met with a lightning survivor. She and her boyfriend had taken a 45-minute hike to the summit of a mountain in North Carolina. There is an overlook with a sign at the summit. When they arrived at the summit, the weather was partly foggy in some directions and partly clear in others. She was standing on a rock ledge on the overlook when she was hit by lightning. She could feel it on the top back of her head and then the top forward part of her head. She described it as loud pops on the top and back of her head. She could smell her hair being singed. There was a flash and a deafening sound of thunder, louder than any metal rock concert. She remembers standing against a ledge and she could not move. The boyfriend had run down the trail after the strike but came back up to help her down the trail. There was no cell service on the summit so they had to descend to a spot where service was available. She was disoriented and she does not recall the ride to the ER. She slept the next day. Some of her medical issues are listed below in no particular order:

- She felt like her brain was too big for her head.
- Burn marks on right side of her body where underwire sports bra was touching her. No ferning.
- Dizziness.
- Sensation of rocking back and forth, as if she were on a boat. For the first two weeks following the strike, that sensation was accompanied by a physical rocking back and forth of her body. Driving sometimes helps alleviate the sensation, although she does get carsick at times. Tried various meds but they have not been effective in alleviating the sensation. Sometimes the sensation is side-to-side and other times it is front-to back.
- Initially, the right side of her cheek was numb. Later on, the numbness increased to the entire right side of her body for a month. Also has weakness on right side of body. Asymmetric smile.
- Difficulty with word-finding and typing.
- Episodes of leg twitching and spasms which last for around 5 minutes.
- Within the last week, she learned her pupils are not the same size – one is more dilated than the other.
- For about a week following the strike, when she would bend over, clear fluid would come from her nose.
- Depression.
- Small cataracts on both eyes.
- Had two MRI scans on her brain – one before the strike and one after. The post-strike scan revealed scarring on the brain (frontal lobe), which was not present in the earlier scan.
- Crowns and fillings have come out over a two week period following the strike, mostly while eating.
- Crystals in the inner ear.
- Pain down the right side of her neck.
- Feels nauseous when eating. Occasionally has trouble swallowing.
- Sleeping is weird. Reports rocking sensation when she rolls over in bed. Has occasional nightmares. Sometimes parts of her dreams get stuck in a repetitive loop. She is learning Japanese. During one dream, a Japanese symbol kept flashing during her dream.
- Gets hiccups almost every day. Hardly ever had hiccups prior to the strike.

She describes her initial experiences with the medical community as not being good. The ER doctor did not know what to do except to perform standard tests. Her neurologist told her she'd be good in 2 weeks, which did not happen. Her ENT doctor was not much help. She called over 100 neurologists and not one of them knew anything about treating lightning patients.

She said the connection points for the lightning were the top of her head and the right side of her body between the armpit and the waist. She said her skin was moist from the fog, but not dripping wet. There were no signs of lightning before she was hit – no lightning or thunder, no hair standing on end and no sounds that might suggest lightning was about to hit. She remembers it being partly foggy, but then it was mostly foggy when she was hit. It was not raining at the time.

Ken Langford referred her to Mary Ann Cooper's lightning and medicine articles on the Internet.

The survivor has asked for lightning data to verify the strike. She is especially curious to learn if this was a lone strike. LDC administration unanimously approved spending money for a CoreLogic lightning verification report. We will inform the membership of what we find.

8. LDC welcomes your medical questions. Please send them via e-mail to Steve Clark at [sclarktoto@gmail.com](mailto:sclarktoto@gmail.com). Your medical questions will be forwarded to Dr. Phil Yarnell for his review and will usually be taken up for discussion in the next month's meeting. Please be advised any questions posed are for the general consideration by the group and do not constitute a formal medical opinion. If a formal evaluation is requested, arrangements can be made directly with Dr. Yarnell. If you have a medical emergency, please call 911 or your local EMS.
9. Questions, comments, error notifications, and critiques of these minutes are welcome. Please forward those to Steve Clark. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
10. LDC Disclaimer: These minutes do not represent official positions of the LDC or its members. They simply reflect the comments made at the meeting. Furthermore, the LDC does not implicitly or explicitly recommend or endorse any product or service. Any product or service presented in these minutes is done so for purposes of discussion and analysis. The merit (or lack thereof) is open for the consideration and review by the entire membership.
11. Next meeting: Zoom meeting. Friday, November 13, 2020, from 11:45 AM to 1:00 PM MDT.

Respectfully Submitted,  
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## Lightning Links

**This is a monthly listing of periodicals, websites, and videos about lightning and allied areas from a variety of sources. A headline or description is listed, followed by the link. Please note that some of the links are perishable, which means you'll need to go to the source for the information.**

Rojas, J., 2020: Lightning Strike Catches Dunedin Man's SUV on Fire. *Bay News 9*. September 17, 2020. Link: <https://www.baynews9.com/fl/tampa/news/2020/09/17/lightning-strike-catches-dunedin-man-s-suv-on-fire>

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Machemer, T., 2020: Are Giraffes Doomed to Be Struck More by Lightning Because of Their Height? *Smithsonian Magazine*. September 24, 2020. Link: <https://www.smithsonianmag.com/smart-news/are-giraffes-doomed-be-struck-lightning-because-their-height-180975905/?spMailingID=43541598&spUserID=ODg3NDcwNDc1MTUxS0&spJobID=1842055020&spReportId=MTg0MjA1NTAyMAS2>

Scheijen, C., 2020: Inferred Giraffe Deaths from Lightning Strikes. *African Journal of Ecology*. September 8, 2020. Link: <https://onlinelibrary.wiley.com/doi/abs/10.1111/aje.12785>

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Kaur, H., 2020: The US Could See the Fewest Recorded Deaths From Lightning Strikes This Year. *CNN*. October 5, 2020. Link: <https://www.cnn.com/2020/10/05/weather/us-lightning-strike-deaths-trnd/index.html>

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Wilson, M., 2020: Lightning Strikes Rarely Kill, but Change Victims' Lives. *U.S. News and World Report*. July 5, 2020. Link: <https://www.usnews.com/news/best-states/arizona/articles/2020-07-05/lightning-strikes-rarely-kill-but-change-victims-lives>