

Minutes June 12, 1992 Meeting of Colorado Lightning Task Force

1. Meeting commenced at 11:30 am at St. Anthony Central Hospital and was adjourned at 1:10 pm.
2. Members present: Boyson, D Clark, S Clark, Cherington, Collier, Heitkamp, Holle, Langford, Lopez, Wright.
3. Attached agenda was circulated.
4. New members were introduced:

Michael Boyson 758-1630
Colorado Hospital Association
2140 South Holly Street
Denver, CO 80222

Todd A. Heitkamp 361-0061
NOAA National Weather Service Forecast Office
10280 Smith Road
Denver, CO 80239

5. The following members have submitted preliminary materials and CVs for proposed book:

Steven Clark - Electrical properties of lightning; detection networks; which "bolt" is the damaging one?

Raul Lopez and Ron Holle - Lightning strikes in Colorado; physics of lightning; underreporting of injuries; detection networks.

Richard Collier and Rodney Perala - Lightning hazards to munition facilities.

Rod Larson - Lightning protection for buildings; economics; foreign country experience; induced lightning; future applications.

Michael Cherington - Lightning injuries affecting the human nervous system; differences and similarities between lightning injuries and technical electrical injuries; literature and lightning.

Ken Langford - Safety aspects; anticipating lightning strikes; shelters which are protective; places to seek and to avoid; first aid.

6. Three new questionnaires were received today from Paul W. Cocking, R. N. Poudre Valley Hospital in Ft. Collins, CO. (490-4203) describing 3 young men who were struck by lightning on separate days in June 1991. One was reported to have suffered a ruptured tympanic membrane.
7. Michael Boyson reported that the database of CHA contained ten patients diagnosed with lightning injury for the year 1991. This number was higher than most of us anticipated. CHA has data from the year 1988.

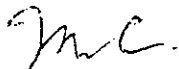
The group decided on the following plan as a priority project: Raul Lopez, Ron Holle, and Ken Langford will present data from their files of front range newspapers for the years 1988 to 1991. Todd Heitkamp will present information from the Storm Data for that same period of time. Michael Boyson will bring the data from CHA and also see if he can get the data from the Colorado Department of Health on death certificates with lightning listed during the years 1988 to 1991.

If this data can be accumulated by the next meeting, we will be well on our way to describing the Colorado experience with regard to lightning victim data that applies to serious injuries requiring hospitalization as well as fatal cases. Hopefully our group will soon be able to prepare this important information for publication.

8. Michael Cherington will prepare a medical checklist of clinical signs that might suggest lightning as the cause of injury in patients who have been diagnosed with serious cardiac or neurological damage. This list can be used by Michael Boyson in a future search of CHA data in attempt to uncover "underreported" lightning cases.
9. Todd Heitkamp will contact media people in different locations throughout Colorado and ask them to notify us about lightning cases that come to their awareness.
10. Ken Langford reported on his visit to Chicago where he met with Dr. Mary Ann Cooper {312-413-7489}. She said she was interested in working with our Task Force. We may be able to arrange for conference tele-communication system in the future.
11. Raul Lopez and Ron Holle reported on their meeting with Dr. Chris Andrews last week in Australia. They reported the interesting finding of Dr. Andrews that Australian sheep killed by lightning showed damage in the vicinity of their eyes, nose, mouth more markedly than on the skin. Richard Collier speculated that skin resistance to current exceeds that of mucous membranes and perhaps this could explain such a phenomenon. Ron also mentioned that Dr. Andrews will soon be publishing a document on a regular basis that will be circulated to the centers around the world concerned with lightning damage. Ron stated that there^{are} only a few groups such as ours and Dr. Andrews considers ours an important group. Locations of centers include: Australia, Bulgaria, Chicago, Denver, England, France, Japan.
12. Un-answered question of the month was asked of Ron Holle by an underwater diver. He wondered what his risk was when working underwater for long period of times while lightning may be occurring in the vicinity. We asked Richard Collier if EMA could provide some clues to the answer using simulated lightning in waters of different ionic composition.
13. Future meetings of the group will be held on the second Friday of each month in Conference Room A on the first {main} floor of St. Anthony Hospital.

14. Have a Happy Fourth of July.

Respectfully submitted:

A handwritten signature in cursive script, appearing to read 'M.C.', is written in dark ink.

Michael Cherington, M.D.
Chairman, Lightning Data Center