March 28, 2019

**SUBARU, Nissan, and Mazda Vehicles to Be Newly Equipped with “D-Call Net®” Advanced Automatic Collision Notification System**

A total of nine organizations, including HEM-Net, Toyota, Honda, HELPNET, Bosch, and Premier Aid will now promote D-Call Net® initiatives throughout Japan.

Tokyo, Japan, March 28, 2019—Three new automobile manufacturers—SUBARU, Nissan, and Mazda—are to participate in D-Call Net®, which comprises the certified non-profit organization Emergency Medical Network of Helicopter (HEM-Net), automobile manufacturers, and service providers. Now, a total of nine organizations will contribute to improvements in the survival rate of traffic accident victims throughout Japan.

*About D-Call Net®*

D-Call Net®, commonly referred to as an AACN (Advanced Automatic Collision Notification), is an advanced automatic collision notification system that uses vehicle connectivity technology. It estimates the probability of fatal and serious injuries by making an automatic analysis of data at the time a traffic accident occurs based on an algorithm using approximately 2.8 million accident data cases in Japan as a base. This data is reported to all of Japan’s approximately 730 fire departments, as well as 46 air ambulance services and 54 cooperating hospitals** in 37 prefectures, with the aim of increasing the number of lives saved after traffic accidents by making immediate air and ground ambulance dispatch decisions.

* D-Call Net® is a registered trademark of HEM-Net.
** As of March 2019
Going forward: Message from HEM-Net Chairman of the Board Nobuo Shinoda, D-Call Net® representative organization

“The 10th Traffic Safety Basic Plan was drawn up in March 2016; it sought to actively utilize the latest technologies to guarantee traffic safety and to take significant steps toward the realization of a society free from traffic accidents and a world-leading traffic safety society. The key to emergency medical treatment for people seriously injured in traffic accidents is provision of the necessary treatment as quickly as possible—and it is precisely in this area that we must make use of connected and other cutting-edge technologies.

“In order to accurately and promptly implement a flow of “traffic accident – transportation – start of medical treatment,” in 2011 a group of organizations centering on HEM-Net, Toyota, Honda, and Japan Mayday Service began accumulating data and designing algorithms, and subsequently established D-Call Net®, the companies then conducted an operational trial beginning in November 2015. With the cooperation of relevant agencies such as fire departments and hospitals, full-scale nationwide operations commenced in June 2018. Research shows that D-Call Net® can reduce the time it takes for traffic accident victims to receive first contact with a medical professional by approximately 17 minutes; other findings indicate that if D-Call Net® were equipped in all vehicles on Japanese roads, the number of road traffic fatalities could be reduced by 282 people every year.

“Going forward, with the participation of SUBARU, Nissan, and Mazda, we hope to contribute both to an improvement in the number of lives saved throughout Japan and to the realization of a society free of traffic accidents, by introducing D-Call Net® support into as many vehicles as possible.”
D-Call Net® Supplementary Materials

Advanced Automatic Collision Notification Service
D-Call Net®

Vehicle
- Mobile telephone network
- Airbag, ECU, vehicle data

Connection agency
- Operator
- Probability estimation algorithm for fatal and serious injuries

D-Call Net® Server
- Positional information, vehicle data
- Probability of fatal and serious injuries

Fire department headquarters
- Dispatch

Base hospital with air ambulance
- Coordination

Japan Mayday Service (HELPNET)
Bosch, Premier Aid (planned)

1. Direction of collision
2. Severity of collision (G)Y
3. Use of seatbelts
4. Multiple collisions

*1 Based on statistical processing of 2.8 million cases of accident data. Algorithm development and evaluation by Toyota, Honda, Nihon University, and Nippon Medical School.
*2 Voice/data transmission, fax connection
*3 Data transmission
Example of fatal and serious injury probability estimation data (training data)
Expected Effects from Introducing D-Call Net®

Large reduction in time from accident to start of medical treatment
Cooperating Hospitals

1. Teine-Kei Jin-Kai Hospital (Hokkaido)
2. Japanese Red Cross Asahikawa Hospital (Hokkaido)
3. Kushiro City General Hospital (Hokkaido)
4. Kushiro Kojinkai Memorial Hospital (Hokkaido)
5. Hakodate Municipal Hospital (Hokkaido)
6. Hachinohe City Hospital (Aomori)
7. Aomori Prefectural Central Hospital (Aomori)
8. Japanese Red Cross Akita Hospital (Akita)
9. Yamagata Prefectural Central Hospital (Yamagata)
10. Iwate Medical University Hospital (Iwate)
11. Sendai Medical Center (Miyagi)
12. Tohoku University Hospital (Miyagi)
13. Fukushima Medical University Hospital (Fukushima)
14. Dokkyo Medical University Hospital (Tochigi)
15. Japanese Red Cross Maebashi Hospital (Gunma)
16. Mito Saiseikai General Hospital (Ibaraki)
17. Mito Medical Center (Ibaraki)
18. Saitama Medical Center (Saitama)
19. Nippon Medical School Chiba Hokusho Hospital (Chiba)
20. Kimitsu Chuo Hospital (Chiba)
21. Shinnshu University Hospital (Nagano)
22. Saku Central Hospital (Nagano)
23. Niigata University Medical & Dental Hospital (Niigata)
24. Nagaoka Red Cross Hospital (Niigata)
25. Toyama Prefectural Central Hospital (Toyama)
26. Ishikawa Prefectural Central Hospital (Ishikawa)
27. Yamanshi Prefectural Central Hospital (Yamanashi)
28. Gifu University Hospital (Gifu)
29. Seiichi Mikatahara General Hospital (Shizuoka)
30. Juntendo University Shizuoka Hospital (Shizuoka)
31. Aichi Medical University Hospital (Aichi)
32. Saiseikai Shiga Hospital (Shiga)
33. Nara Medical University Hospital (Nara)
34. Minami-Nara General Medical Center (Nara)
35. Mie University Hospital (Mie)
36. Japanese Red Cross Ise Hospital (Mie)
37. Wakayama Medical University Hospital (Wakayama)
38. Toyooka Hospital (Hyogo)
39. Hyogo Prefectural Kakogawa Medical Center (Hyogo)
40. Steel Memorial Hirohata Hospital (Hyogo)
41. Tottori University Hospital (Tottori)
42. Shimane Prefectural Central Hospital (Shimane)
43. Kawasaki Medical School Hospital (Okayama)
44. Yamaguchi University Hospital (Yamaguchi)
45. Hiroshima University Hospital (Hiroshima)
46. Hiroshima Prefectural Hospital (Hiroshima)
47. Ehime Prefectural Central Hospital (Ehime)
48. Ehime University Hospital (Ehime)
49. Kurume University Hospital (Fukuoka)
50. Saga University Hospital (Saga)
51. Oita University Hospital (Oita)
52. University of Miyazaki Hospital (Miyazaki)
53. Kagoshima City Hospital (Kagoshima)
54. Urasoe General Hospital (Okinawa)