

**Toyama University Hospital provides  
“N95 Mask Fit Test Training” to Regional Medical Facility Personnel**

On September 9, 2019, a local community cooperation seminar was held at Toyama University Hospital.

We asked Professor Yamamoto and Chief Nurse Aoki of Clinical Infectious Diseases Section/Infection Control and Prevention to tell us about the 58<sup>th</sup> seminar as well as Toyama University Hospital’s efforts to control infections.

**We supply each clinical department’s latest medical information to local health-care facilities through local community cooperation seminars, thus building a visible relationship with them.**

Since 2003 we have been holding local community cooperation seminars for local health-care professionals on a regular basis. The seminar started as a case review conference between local medical practitioners and us. Initially, there were 3 seminars a year and now 6 seminars are held a year.

At a seminar we provide up-to-date information of each clinical department to health-care professionals in the local medical institutions who are working at the forefront of patient care. Besides, we think it important to build a visible relationship with them.

All 33 clinical departments take their turns to be in charge of each seminar, meaning that each department is supposed to take care of one seminar every 5 years.

Clinical Infectious Diseases Section/Infection Control and Prevention was in charge of the 58<sup>th</sup> seminar held in September, 2019. As the seminar covered the program of infection prevention, not only doctors but also many paramedics such as nurse, pharmacist, clinical laboratory technician, etc. participated in it.

(Comment by Professor YAMAMOTO).



Professor YAMAMOTO Yoshihiro, Infection Control/Prevention



Program for 58<sup>th</sup> Local Community Cooperation Seminar

1<sup>st</sup> Lecture: Infection Prevention Based on the Mode of Transmission

By SAKAMAKI Ippei,

Clinical Professor, Clinical Infectious Diseases Section/Infection Control and Prevention

- Exercise: (1) How to check that there are no unwashed areas before and after washing hands.  
(2) Fit testing of N95 masks used to treat TB patients.  
(3) How to put on and off a protective clothing when outbreaks of bird flu occur.

2<sup>nd</sup> Lecture: How to use antibacterial drugs properly, including anti-influenza drug.

By Professor YAMAMOTO Yoshihiro,

Clinical Infectious Diseases Section/Infection Control and Prevention, Toyama University Hospital

**At the seminar, hands-on exercises that cannot be done usually at local health-care facilities were carried out.**

Although a seminar mainly provides lectures only, we think it important for participants to conduct exercises to learn infection prevention measures. Thus, we went back to the basics and exercised hand hygiene with the particular emphasis on the checking of unwashed areas before and after washing hands.

Wearing a N95 mask is not going to do any good if it is not worn properly. Since quantitative fit testing of N95 masks using an instrument to measure the leakage is rarely performed at local health-care facilities, we wanted them to experience it. For this reason, we added “fit testing of N95 masks” in the seminar.

The seminar participants responded to this hands-on exercise positively by saying, “I am pleased to be able to wear a mask properly because you can adjust the mask if the leakage is found by performing a fit testing.”

(Comment by Head Nurse AOKI)

### Exercise (2) Fit testing of N95 masks

At this exercise the participants had an experience to ensure that the mask is worn snugly over the face by using a mask fitting tester MT-03 to measure the leakage of air from the mask quantitatively.



Leakage Rates for Seminar Participants (Portion of Measurement Results)

Name	Sex	Leakage Rates (%)	
		1 <sup>st</sup> Measurement	2 <sup>nd</sup> Measurement
A	M	2.14	--
B	F	1.51	--
C	F	0.64	--
D	M	1.83	--
E	M	7.90	3.11
F	F	0.81	--
G	F	6.04	2.45

### Infection Control/Prevention of Toyama University Hospital’s Efforts to Control Infections

**Infection Control Consultation in which the doctors of the infection management are available 24 hours a day and 365 days a year.**

The doctors in the Clinical Infectious Diseases Section are in charge of both consultation and management of infectious diseases. One of the infection prevention management is the phone consultation in infectious diseases.

The doctors in the Clinical Infectious Diseases Section can receive consultations 24 hours a day and 365 days a year from not only the doctors in the sections other than the Clinical Infectious Disease Section in the Toyama University Hospital but also the doctors in the affiliated hospitals in the prefecture when in need.

### Close Cooperation with Each Clinical Site

The infectious disease team makes rounds twice a week as infection prevention measure. It visits different wards and outpatient departments each time so that it will be able to visit the entire hospital per month.

By displaying many pictures taken during the rounds on the screen using the projector, the team members check which department is “well-prepared” for infectious diseases and which department is “not.” The results of the rounds are fed back to each department and the “unprepared” department is required to improve the situation.

Also, if resistant bacteria are found in the hospital, the bacteria test laboratory informs all physicians and nurses on a medical treatment site of them. If the resistant bacteria pose a risk of significant damage, the doctors and nurses in the Infection Control/Prevention will go to the site and discuss the countermeasures in cooperation with the site staff.

(Comment by Professor YAMAMOTO)



Head Nurse AOKI Masako,  
Infection Control/Prevention



All members of the Infection Control Committee monitor the pictures taken during the rounds at a meeting.

### Excellent Teamwork in the Infection Control/Prevention Makes Post-Round Exchange of View Livelier

The hospital's Infection Control/Prevention consists of doctors, nurses, health-care professionals, pharmacists and administration staff. I think that information is delivered quickly, communication between the members is smooth and teamwork is excellent. It is generally said that paramedics are reluctant to express their opinions to doctors, but in our hospital, the team members do not hesitate to express their opinions to Professor YAMAMOTO, who in turn, will encourage the members to discuss and he will stand at the forefront in leading the activities if necessary. Thus, preventive measures are implemented smoothly.

(Comment by Head Nurse AOKI)

## **Hi-Luck 350 That Has Less Leakage Than Other Respirators Enables Our Staff to Concentrate on Their Business with Peace of Mind.**

We conducted a quantitative fit testing using a mask fitting tester in which our staff members were asked to wear both the old N95 mask and the Hi-luck 350. As a result, Hi-Luck showed significantly less leakage than the other mask.

Some commented that the Hi-Luck 350 fits over the face regardless of size or shape and that it is easy to wear since the length of the straps can be adjusted after putting on the mask.

We can protect our staff against air pollution by letting them wear a mask that has less leakage. Thus, our staff can concentrate on their business with peace of mind.

(Comment by Head Nurse AOKI)



### **Profile of Toyama University Hospital**

It is the only advanced treatment hospital in Toyama Prefecture. As the “last bastion” of regional medical care, it is responsible for providing health-care and medical services to the local residents by strengthening the cooperation with other local health-care facilities.

Opening: 1979

Number of beds: 612 beds (as of May 1, 2019)