

Protecting the future with the power of each person From Fukuoka to the world!

This magazine introduces various One Health initiatives in an easy-to-understand manner. To solve problems that span humans, animals, and environmental fields, such as zoonotic diseases, biodiversity loss, and global warming, it is necessary to act based on the idea of One Health in which we protect to human and animal health and environmental health integrally. Our goal is to "connect the next generation" to build a society in which human and animal health and the environment are in harmony." We hope that this magazine will deepen your understanding of One Health and help you to take action for our future,

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FUKUOKA ONE HEALTH



Instagram



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Portal site



What's “One Health”?

One Health is a concept that treats "human health," "animal health," and "environmental health" as one health and protects them in an integrated manner. In order to live in good health, the animals that live on the earth and the earth itself must be healthy. This idea is now spreading worldwide, and the international framework * has also agreed to tackle the issues of zoonotic diseases and drug-resistant bacteria triggered by environmental problems based on a one-health approach (humans / animals / environmental stakeholders collaborate cross-disciplinarily).

* G7 Summit, 15th Conference of the Parties to the Convention on Biological Diversity (COP15), etc.

One Health has "six basic policies", which are introduced in detail in this magazine. It is important for each of us to understand the concept of One Health and take concrete actions in line with these policies.

For details on One Health initiatives, see page 9 of "Six Basic Policies." → P9

Let's investigate !



Experience the present and future of Fukuoka One Health.

While Visiting spots related to One Health, Let's think about existing problems and what we can do with adults.

Place

Fukuoka Institute of Health and Environmental Sciences
39, Mukaizano, Dazaifu-shi, Fukuoka



This research facility protects human health and the environment. In the future, it will be relocated and constructed in Miyama City, and be the core facility of Fukuoka Prefecture's One Health initiative. collaboration with the newly established "Animal Health Center (tentative name)", we will also focus on measures against common infectious diseases between humans and animals.



Interviewer

5th grade Reporter
Hayato Yamamoto

Teacher

Deputy Director
Yoshito Tanaka

Q2

Are you doing any special research related to One Health?

When a tick called "Ixodida" bites a person after sucking the blood of a wild boar or deer infected with the virus, the virus of the animal can infect the person. That's why we are investigating humans, animals, and ticks to prevent the spread of infection together with the National Institute of Infectious Diseases.



Q1

What kind of research are you doing here?

We are doing research on COVID-19 and food poisoning to protect people and the environment while also monitoring the atmosphere and water environment. We are researching wild animals and alien species. We are also researching a mutant strain of COVID-19 that we've seen a lot in the news recently.



Q3

I'm really worried about being bitten by ixodidaes. What should I do?

Of course, it's serious if you get infected, but ixodidaes themselves only suck the blood of animals. They're not bad insects. I'm often in the mountains where wild animals live, so when I go to those places, it's important to take safety measures like wearing long-sleeved clothes.



We catch dioxins with this cool machine.

Q5

What's the negative impact of chemicals ?

For example, the dioxins produced by burning garbage pollute the atmosphere and water. It's also harmful to the human body, so we're investigating how much it's contained in the water and soil around us.

Now I know how Ixodidaes look



This is how we catch ixodidaes.

Q4

Please tell me more about alien species.

An alien species is a creature brought by a person from another place. For example, the Asian hornet is said to have been brought to Japan by ships. Don't throw away or move creatures unnecessarily as they can have a negative impact on the environment.



Oh! This bee came to Japan on a ship!?



Forests have important roles. In the forest near this bustling town, we searched for hints for people and animals to live in good health.



Place

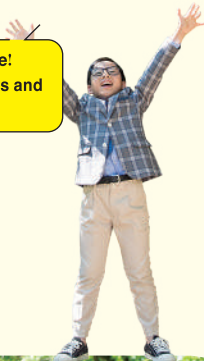
Prefectural Forest in Shiouji
207, Shiouji, Umi-machi, Kasuya-gun, Fukuoka

It is a forest that straddles Onojo City, Dazaifu city and Umi Town, and has an area which is 50 times larger than the PayPay dome. In the future, it will be developed as a "One Health Forest" and will hold events and experience-based on the theme of coexistence of people, animals and nature.

Q1 What is special about this forest?

In Kyushu, there are many trees called evergreens that are deep green all year round, making many dark forests. However, this forest is full of deciduous trees that change color depending on the season, so it is bright. The richer the forest is, the greater the variety of creatures that live there.

Amazing nature! so much greens and fresh air.



Teacher

Administration Office Manager
Yoshiki Naito

Q2 What kind of animals and plants can we meet?

Various animals such as wild boars, badgers, and foxes live here. Even if birds only, there are about 70 kinds of birds. There are many different types of plants, such as rhododendrons, maples, and ginkgos, and there are also rare plants such as the endangered Hemerocallis thunder.



It feels good to hear the songs of various birds.



The forest protects people and animals.

It's easy to understand because it is illustrated on a 3D map.

Q3 What kind of function does the forest have for people and the towns?

It has the role of storing groundwater and preventing landslides. Also, phytoncides, a scented substance from the forest, has a healing effect. It is said that interacting with the forest stabilizes blood pressure and boosts immune function.

Q4 How can I enjoy the forest?

You can hike or take a leisurely stroll. It's fun to see the trees and flowers that are unique to each season, such as cherry blossoms in spring and maples in autumn. It's also fun to observe wild birds.

Pose! With Mr. Naito

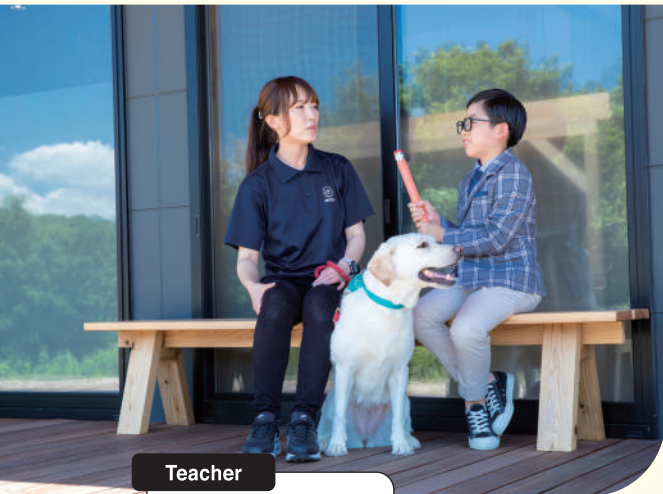


Q5 What is necessary to make a rich forest?

Forests grow better when people help maintain them. If you plant saplings such as sugi and cypress and pull the weeds, the forests will become more green and the trees can be used for timber. It's important that people and forests take care of each other.



Specially trained dogs are superheroes who helped injured people suffering from illnesses or disasters.



Teacher

Therapy Dog Project Leader
Akiko Akagi



Place

MORE WAN

2071-4, Ooaza oo-machi, oomachi-cho, Kishima-gun, Saga

The base of "Japan Rescue Association" in Kyushu, it aims for the coexistence of humans and animals. We train and dispatch disaster rescue dogs and therapy dogs.

We have signed a disaster rescue dog dispatch agreement with Fukuoka Prefecture and are promoting One Health in cooperation with the "Fukuoka Veterinary Medical Association".

Q1 Please tell me what is a therapy dog?

It's a dog that heals people who are sick or need mental care. There are varieties in size and type, and we start training little by little when the dogs are about 3month old. Only a dog that can be kind to anyone can be a therapy dog.



He is full of energy and cute.



Q2 What kind of training do the therapy dogs receive?

They receive training such as eating snacks gently, making eye contact, and walking alongside someone with a cane. They also learn recreational activities such as playing catch and jumping through hoops so that they can play with people.



He is great at listening to his trainers.



I have a question!



Q5 What kind of facility do you want to have in the future?

We will have dog training classes, create a dog run and open a cafe, and make it a place that is accessible to anyone. In the event of a disaster in Kyushu, we plan to dispatch search and rescue dogs from here or use it as a place for evacuation location for people with pets.



Q3 What do search and rescue dogs do?

When a disaster such as a typhoon or an earthquake occurs, they can find a person trapped in broken houses or sands by tracing the smell of the person. They train through play learning commands like "lie down" listening to instructions from a distance and practicing in real environment, such as "lie down", giving instructions from a distance, and practicing in the same rubble as the actual performance.

Q4 What kind of effects does dog therapy have?

By interacting with the dogs, your heart can be warmed. Also, even if you're in someone else's care or you're in the hospital and you're not feeling well, you'll find that taking care of a dog can be therapeutic.



Dogs who do their best for society are amazing!



Six points to solve the problems

One Health has "six basic policies".
By making various efforts based on the policies,
we will lead to the promotion and realization of our philosophy.

That are common between humans and animals prepare for ever-increasing infectious diseases.

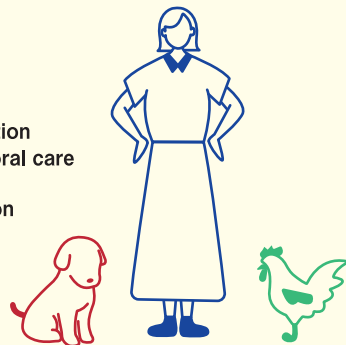
" Zoonotic diseases " is diseases that infects both humans and animals. There are many major social problems such as COVID-19, bovine spongiform encephalopathy (BSE), and bird flu, which are said to account for about 60% of human infectious diseases. In addition, it accounts for about 75% of newly discovered "emerging infectious diseases" in recent years, and there are more

than 200 types confirmed by WHO. To prevent these infections, it is necessary to take countermeasures against the three factors of infection, "source of infection (animals and objects carrying the pathogen)", "infection route (route in which the pathogen invades the body such as droplet infection and contact infection)", and "host (parasitized by the pathogen)".



What we can do

- Prevention and protection from of infection by hand washing, cough etiquette, and oral care
- Pet hygiene management and vaccination
- Prevention of insect bites by wearing long sleeves in grass and bushes



POINT
01

Measures against zoonotic diseases

POINT
02

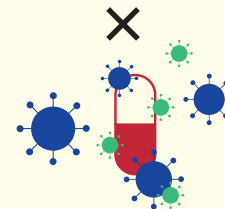
Measures against drug-resistant bacteria



Bacteria

VS

Antibacterial drug



What we can do

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ACTION!

Consider the problems that arise from drug-resistant bacteria.

"Drug-resistant bacteria" are bacteria that can resist antimicrobial agents. When an infection caused by drug-resistant bacteria occurs, treatment becomes so difficult that previously used anti-microbial agents are no longer effective. While the number of drug-resistant bacteria is increasing worldwide, the development of new antimicrobial agents is on the decline, and if no

measures are taken as they are, the United Nations warn that 10 million people will die annually by 2050, exceeding the number of deaths caused by cancer. In addition, it is said that there is a risk of financial damage comparable to the financial crisis during the Lehman shock. Each individual's efforts to prevent the increase of drug-resistant bacteria are important.

- Take medicines following the directions.
- Use all medicines and do not give them away or leave them lying around

Maintain separation between humans and wildlife.

Recent globalization, mass consumption and mass production are destroying forests and ecosystems and accelerating climate change. Global warming causes various disasters such as heavy rains and typhoons, and urbanization by large-scale deforestation and rapid development provides risks for humans to encounter pathogens such as viruses that previously existed the jungle hinterland, or

there is also risks to cause new infections. In order to maintain the health of humans and animals, it is important to protect diverse ecosystems and maintain a separation between humans and animals. And, we must not forget to pass on the rich natural environment to the next generation.

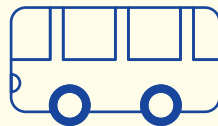
POINT
03

Environmental
protection



What we
can do

- Drive less to reduce exhaust gas
- Save electricity and energy
- Do not litter



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ONE HEALTH
ACTION!

POINT
04

Creating a symbiotic society
between humans and animals

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ACTION!

Build relationships between humans and animals using proper care.

Pets such as dogs, cats, and birds have added delight and comfort to our lives and are now important members of our families. In addition, some animals are active in various aspects of social activities such as disaster relief and animal therapy. While humans and animals coexist in this way, easy breeding, abandonment, abuse, and sales by malicious vendors have become problems. In such cases, common infectious

diseases are transmitted through pet animals due to excessive contact and improper management. In order to maintain a better relationship between humans and animals, it is important to understand the ecology, instincts, and habits of animals, pay attention to hygiene when keeping animals, and keep them properly until the end of their lives.



What we
can do

- Schedule Pet vaccinations and regular health checkups
- Use microchip to track pets
- Do not feed wild animals



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ACTION!

**Be healthy by connecting
with animals and
the environment.**

Human health can be nurtured not only by improving eating habits and habitual exercise, but also by having a living environment where people can spend their time in a healthy state of mind and body. Taking a walk in the abundant nature and interacting with animals have the power to invigorate people regardless of age, gender, or disability. It has also been scientifically proven that spending the time in forests has various effects such as reducing stress

hormones, stabilizing blood pressure and pulse rate, and enhancing immune function. For future health promotion, it is necessary to consider the connection between animals and the environment together. We are not just living alone. We maintain our health in a healthy environment and in relationships with a wide variety of animals and plants.

POINT
05

Health promotion

POINT
06

Creating a better relationship between
the environment, people and animals

**Support good health
with safe food and
a healthy environment**

"Food" is the source that supports our healthy daily life. Eating livestock, agricultural products and marine products grown in a healthy environment is directly linked to human health. Farmland and water are needed to produce safe rice, vegetables, and other crops. For livestock products such as meat, eggs, and milk, we must pay attention to the breeding environment and food safety so that cows, pigs, chickens, etc. can grow healthy. In addition, working

on local production for local consumption will lead to the safety and security of "food" and the reduction of the burden on the environment. And it is important to be aware that agricultural products and marine products are related to the natural environment and the "life" of animals through the knowledge about "food" and "food education" to learn "what to eat" and "what should not be eaten".



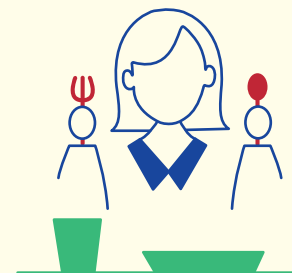
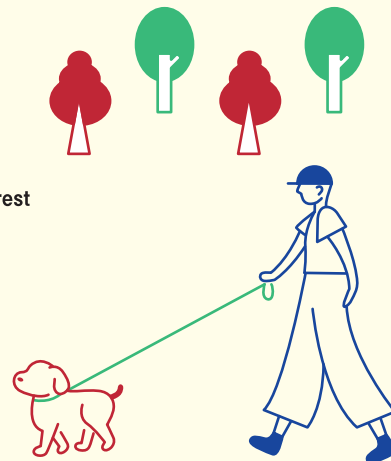
What we
can do

- Eat foods local to Fukuoka Prefecture.
- Reduce food waste (do not overbuy, overcook, overorder, and clean you plate).



What we
can do

- Get in touch with nature by hiking and other activities
- Take a refreshing walk in the forest
- Visit zoos and aquariums



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There are so many!

Fukuoka Prefecture's unique efforts

Measures to prevent outbreaks and spreading of diseases utilizing the survey results

Fukuoka Prefecture's Efforts
01

01-1

Survey on zoonotic diseases

Since 2014, with the cooperation of veterinary hospitals in Fukuoka Prefecture, we have been conducting a survey on the possession of pathogens that cause zoonotic diseases for dogs and cats, which are the most familiar pet animals. The results obtained are shared with medical, veterinary, and government officials, and are useful for measures such as prompt diagnosis in the event of human infection.



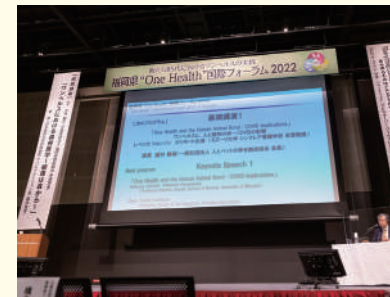
01-2

Survey of drug-resistant bacteria

Since there are concerns about the transmission of drug-resistant bacteria from animal to human contact and from human to animal contact, we are conducting a survey of outbreak trends in pet animals, which have many opportunities for close contact with humans. In addition, we are conducting a fact-finding survey of river water to understand how much antimicrobial agents and drug-resistant bacteria, which are found in humans and animals, flow out into environmental water such as rivers, circulate in our daily life, and develop into risks.

02-1

Fukuoka Prefecture "One Health" International Forum



The world's top researchers in various fields such as medical care, veterinary medicine, and the environment aim to solve zoonotic diseases, including COVID-19, with One Health Approach, and disseminate the research results to the world. Fukuoka Prefecture "One Health" International Forum has been held every year since 2020. In the forum, prefectural lectures for citizens have taken place in addition to keynote speeches and subcommittees by prominent domestic and foreign experts.

02-2

One Health Declaration Business Registration System

There is a system to register businesses in Fukuoka Prefecture that have declared that they will carry out activities based on the concept of One Health. Specifically, they will be asked to make efforts such as posting posters to raise awareness of zoonotic diseases and reduce the amount of electricity and gasoline used, and disseminate the efforts on their company's website and SNS. By encouraging these activities, we will expand the circle of One Health initiatives to employees, their families, friends, as well as local communities and business partners.



Fukuoka Prefecture's Efforts
02

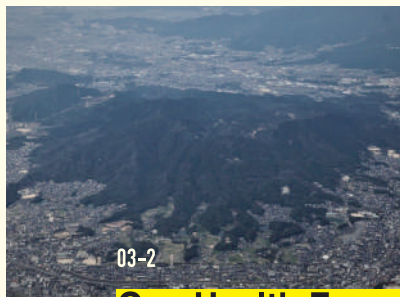
Send messages about One Health from Fukuoka to the world

Providing a place where you can learn while experiencing One Health

03-1

One Health Festival

We have been holding prefectural participation-type events every year since 2020 with the aim of deepening our understanding of One Health. Including talk shows and panel exhibitions, we are preparing various projects that you should feel familiar with One Health, such as walking experience with therapy dog, horse riding experience, sale of Yame tea and local production for local consumption menu.



03-2

One Health Forest

Approximately 340 hectares of forest park "Shiouji Prefectural Forest" that straddles Onojo City, Dazaifu City, and Umi Town is being maintained as a "One Health Forest". You can experience One Health in a rich forest where various creatures live. In addition to holding new hands-on programs such as bathing in a forest, we introduce the relationship between people, animals, and forests at the learning exhibition hall in the park.

04-1

One Health Center

We will establish the nation's first "One Health Center" as a practical base for dealing with One Health issues such as emerging infectious diseases and global warming. As its core facility, the "Health and Environment Research Institute", which conducts research and surveys on human health and environmental conservation, will be relocated and constructed. And we will establish a new "Animal Health and Sanitation Center (tentative name)", where the health and hygiene of livestock, pet animals, wild animals, and exhibited animals in zoos will be centralized. Taking advantage of the unique characteristics of being able to carry out integrated tests / inspections, surveys / research in the fields of "humans""animals"and the "environment", we will continue advanced specialized research and, surveys related to One Health and developing professional human resources.



Image of the new Insurance Environment Research Institute
* Animal health center is not shown in this image.



Leaflet
(for elementary, junior high and high school students)

04-2

One Health education

Leaflets are distributed to elementary, junior high and high school students and faculty and staff so that each child can understand the philosophy and specific contents of One Health. In addition, we are promoting One Health education using One Health supplementary teaching materials at high schools in Fukuoka Prefecture. It is the first initiative in Japan that is taking up the idea of "One Health" and providing education. We hope that the younger generation, who will be future leaders, will think about One Health and take action.

Leading the promotion of One Health in the world with advanced efforts

There are more! Fukuoka Prefecture's unique efforts