

PHARMACEUTICAL INDUSTRY IN TOYAMA

Outline & Characteristics of Toyama Prefecture

Toyama prefecture is located in the central part of the main island of Japan and faces the Sea of Japan. Toyama is within 270 km of the three biggest cities in Japan, Tokyo, Nagoya, and Osaka, and has easy access to those cities via our highly developed transportation systems. The Hokuriku Shinkansen (bullet train) began service in March 2015, reducing the time between Tokyo and Toyama to about 2 hours. This is anticipated to increase cultural exchange and stimulate business in Toyama moving into the future.

■Tovama Prefecture

Area: 4,248km

Population: 1,002,090 (as of March 2024) Location: N36°16'-N36°59' E136°46'-137°46'

Well-developed transportation network

Most of the population resides on the plain, and well-developed public transportation and road systems are available throughout the prefecture.

■Transportation system throughout the prefecture

JR line, Ainokaze Toyama Railway, Toyama Chihou Railway, tram are well developed and connect to various parts of the prefecture.



Toyama Ningbo Dalian Air Route Sea Route Tianiin

Northwest Pacific Region Chart (aka "Upside down Map")

Sea Region The region surrounding the Sea of Japan

Gateway to the Japanese

makes up "the Northeast Exchange Area". Toyama, as the hub for the Northeast Exchange, has great airways/seaways to the opposite shore from Toyama Kitokito Airport and Fushiki-Toyama Port.

Toyama Kitokito Airport

Located close to the center of Toyama City (15 min. by car), Toyama Airport is one of major local airports in Japan, which operate four regular international flights.

Port of Fushiki-Toyama

The Port of Fushiki-Toyama, which is composed of the 3 ports of Toyama New Port, Toyama Port, and Fushiki Port, is an important international trading port that plays a central role in the economic and cultural exchange of the Northwest Pacific Region.

Air Route & Sea Route Toyama ← Seoul : 3 flights/week 110 min. Air Route Toyama ۻ Dalian 3 flights/week 135 min. Toyama - Shanghai 2 flights/week 140 min. Toyama ← Taipei : 4 flights/week 175 min.

The route schedule may be updated.

For further information, please contact each airline. ②Sea Route

Chinese Line (Dalian, Qingdao, Shanghai) : 1 liners/week Korean Line (Busan) 2 liners/week 3 liners/week Chinese, Korean Line (Busan, Dalian) Russian Line (Nakhodka Vladivostok) 2 liners/month Russian Line (RORO ship)(Vladivostok) : 14 liners/month



The Tateyama Mountain Range, from the Amaharashi Coast

The coast commands a view of the mountains over the 3,000m across the sea.



Shomyo Falls Gathering up the water from the Tateyama Mountain Range, the fall of 350 m is the highest in Japan.

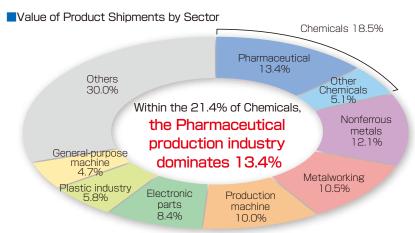


Beautiful and Abundant Natural Environment

From the Tateyama Mountain Range, whose peaks over 3,000 m, to Toyama Bay with depths greater than 1,000 m, Toyama's natural features offer distinct diversity. Toyama has the third highest percentage of pristine forested landscape and the sixth largest of natural parks among Japanese prefectures. Toyama is blessed with an abundance of high-quality clear water and plentiful food that is both fresh and delicious.

The Leading Industrial Prefecture on the Coast of the Sea of Japan

In recent years, heavy chemical industries have developed, capitalizing on the abundant water resources and the inexpensive electrical power. With the growing manufacture of electronic parts and devices supporting the electronics industries, Toyama has become the leading industrial prefecture on the coast of the Sea of Japan.



Source: Annual Business Survey 2022

Examples of Excellent Technologies

- · Industrial robots for automobile manufacturing
- · Relaxation robots
- · Super-sized resin molding systems
- · Pharmaceuticals: Special preparations such as poultices, ointments or eye drops

A Wide Variety of Manufacturing Industries

Electronic parts and devices General machinery

Metalworking

Chemicals

(pharmaceuticals, etc.)

Pharmaceutical Industry of Toyama Prefecture

Toyama's pharmaceutical industry has a long history of more than 300 years with its origins in the mid-Edo era. The wealth generated by the pharmaceutical industry helped to grow other industries in Toyama, such as the financial industry and the electrical power industry, greatly contributing to the modernization of Toyama prefecture.

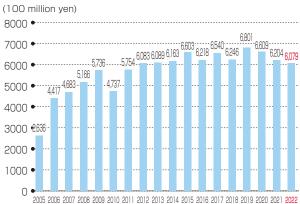
Cluster of Pharmaceutical Manufacturing Industry

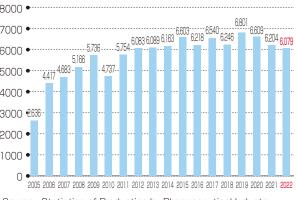
In Toyama, pharmaceutical manufacturers have been working positively to improve their development capabilities and manufacturing quality by introducing the latest technologies. Their products are not only distributed to hospitals and pharmacies in Japan, but also exported to countries all over the world, including Asia, America and Europe.

Highly esteemed production base of medical products

In Toyama, there are more than 100 various factories making generic drugs, over-the-counter drugs, as well as manufacturers that focus on new drug development or new formulation development.

In particular, special preparations such as poultices, ointments or eye drops are produced by the highly-developed pharmaceutical technology. Additionally, there are many related surrounding industries such as packaging containers, packaging and printing, and many storage facilities support GMPs for pharmaceuticals. Therefore, Toyama prefecture has acquired a steady reputation as a distinct medicine manufacturing base in Japan.





Source: Statistics of Production by Pharmaceutical Industry



Pharmaceutical production employing high quality manufacturing equipment

Transition of production amount of pharmaceutical products of **Toyama Prefecture**

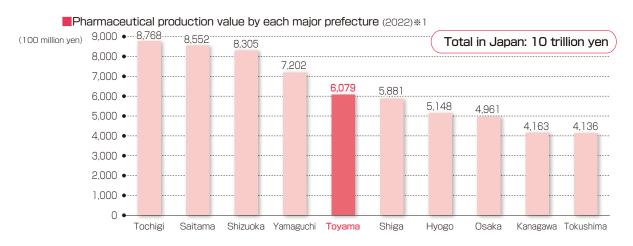
The pharmaceutical industry of Toyama prefecture is highly respected as a major pharmaceutical production site in Japan. Furthermore, the amendment of the Pharmaceutical Affairs Law in April 2005 enabled the contracted manufacture of drugs. As a result of active capital investment on manufacturing facilities in Toyama prefecture and expansion of contract manufacturing, the amount of manufacturing pharmaceutical products has been increasing drastically.





"Toyama's Pharmaceuticals:" Proud to be No.1 in Japan

Toyama Prefecture's pharmaceutical production in 2022 was 607.9 billion yen, ranked 5th place in Japan. Toyama Prefecture was also first in per capita pharmaceutical production value, number of manufacturing sites, and number of pharmaceutical production employees. The prefecture is known throughout the country as "Pharmaceutical Toyama."







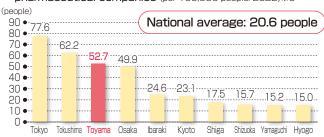
Number of pharmaceutical products manufacturing sites



Number of pharmaceutical production employees



Number of pharmacists working in pharmaceutical companies (per 100,000 people/2022) % 5



- Source: Statistics of Production by Pharmaceutical Industry 2022
- Sources: Statistics of Production by Pharmaceutical Industry and Population Estimates 2022
- *3-4 Sources: Annual Business Survey and Population Estimates 2022
- %5 Source : Statistics of Physicians, Dentists and Pharmacists 2022

Variety of Experimental and Research Institutes and Organizations

- Promotion of pharmaceutical R&D and cultivation of human resources through industry-academia-government collaboration -

In Toyama Prefecture, industry, academia, and government are making great efforts for the promotion of drug discovery and drug review research, in order to improve the R&D system in public research facilities.

Toyama Prefectural Institute for Pharmaceutical Research

As the only prefectural research institute specializing in pharmaceutical affairs in Japan, the Toyama Prefectural Institute for Pharmaceutical Research is currently engaged in pharmaceutical product R&D, experiments, analysis, as well as technological guidance for businesses. Additionally, through technical practice made available to university students, the institute actively works towards the fostering of human capital that can support the pharmaceutical production industry.



To promote R&D for high value added bio-pharmaceutical products, the center is equipped with advanced analytical equipment and conference rooms for consultations or training workshops for companies or universities. It actively supports human capital development.



Research Center for Drug Development and Quality Control



Toyama Prefectural Institute for Pharmaceutical Research

Center for Innovation in Pharmaceutical **Development and Drug Delivery**

Equipped with formulation machinery and experimental instruments, this center supports formulation innovations from businesses. It also enables university students to perform technological training in order to foster human capital.



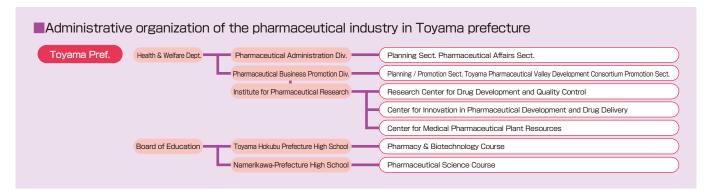
Center for Innovation in Pharmaceutical Development and Drug Delivery

Center for Medicinal Plant Resources

The Center for Medicinal Plant Resources was established to promote the cultivation of medicinal plants, the basic ingredients necessary for many pharmaceutical products, equipped with a training facility in May 2019. It aims to establish cultivation technologies for medicinal plants, give cultivation guidance, and raise awareness about medicinal plants.



Center for Medicinal Plant Resources



University of Toyama

The University of Toyama is one of the leading Sea of Japan side universities, with 9 schools including medicine and pharmacy & pharmaceutical sciences, and also featuring Institute of Natural Medicine and a university-affiliated hospital. The university also has taken initiatives to cultivate professionals in a wide variety of fields, such as interdisciplinary "Graduate School of Pharma-Medical Sciences" newly created in 2022.



University of Toyama: Institute of Natural Medicine

Toyama Prefectural University

Toyama Prefectural University established the country's first Department of Pharmaceutical Engineering in April 2017, supporting the human resources needed by pharmaceutical companies through an engineering viewpoint. At the Department of Biotechnology, reinforcement of the education and research system in bioscience and other fields is also improving.

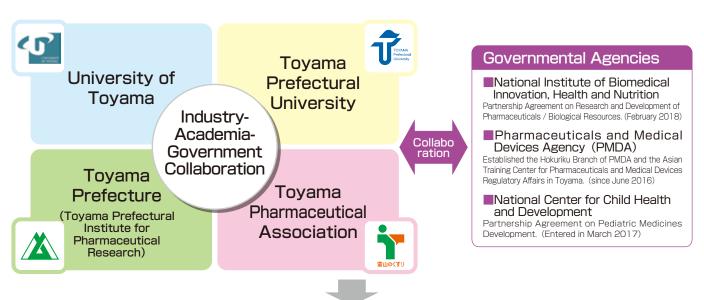


Imizu campus of Toyama Prefectural University

Toyama Pharmaceutical Valley Development Consortium

In order to further develop local universities and Toyama Prefecture's core industry of pharmaceuticals, the Toyama Pharmaceutical Valley Development Consortium is working closely with Toyama-based industry, academia, and government to conduct R&D and foster human resources with expertise in the pharmaceutical field.





Promoting World-Class Pharmaceutical R&D

Developing/Recruiting Professional Specialists to Support the Pharmaceutical Industry

- · Making practical drugs with high added values
- · Enhancement of manufacturing technological capabilities and R&D capabilities of pharmaceutical companies in Toyama
- · Maintaining/Expanding employment and increasing production through active capital investment
- · Promoting the recruitment of companies by utilizing Toyama's concentration of industries in advanced field

"Toyama's Pharmaceuticals" - History of HAICHI: Its origin and the reason of its success -

The HAICHI Sales System, invented in Toyama, has more than 300 years of history behind it. This traditional sales system is still widely practiced today, and has a nationwide market. Despite its long history, the HAICHI Sales System is still evolving and has become an industry unique to Japan.

History of "Toyama's Pharmaceuticals"

It is said that Lord MAEDA Masatoshi, the second lord of the Toyama Domain, started the pharmaceutical industry here a little more than 300 years ago in the Edo era. In 1683, MANDAI Jokan, a doctor in Okayama, taught Lord Masatoshi how to make Hangontan, a medicine to treat stomachaches. In 1690, seeing the lord of the Iwashiro-miharu Domain who suffered from a stomachache in the Edo Castle, Lord Masatoshi gave him Hangontan, and it worked instantly. Other feudal lords were so impressed to see the effect of the medicine that they asked Lord Masatoshi to sell the medicine in their territories. This is said to be the impetus of the Toyama HAICHI Medicine Sales System.

"Toyama's Pharmaceuticals" spread throughout Japan

Toyama

"Toyama's Pharmaceuticals," such as Hangontan, have been made in Toyama for over 300 years.

To all over Japan

In the era before advanced transportation systems. Toyama Medicines were distributed throughout Japan by HAICHI medicine vendors called Baiyaku-san on foot, carrying wicker trunks full of medicines.



Wicker Trunks

Todav

Even with today's advanced medical system, "Toyama's Pharmaceuticals" remain very popular nationwide.

(Toyama Prefecture

Share of HAICHI medicine brand output (2022)

Toyama Total HAICHI medicine Others I.I billion Yen output in 2022 49.1% 50.9% 2.2 billion Yen

Of the 2.2 billion yen total value of HAICHI medicine (medicine for household distribution) production in Japan in 2022, 1.1 billion yen, or about 50% share, was made by pharmaceutical manufacturers in Toyama Prefecture.

Source: Statistics of Production by Pharmaceutical Industry 2022

ANTHUM THE THE PARTY OF THE PAR To build a relationship with mutual trust, at a time when there was no mass entertainment, the HAICHI vendors used to bring their clients original woodblock prints and paper balloons as souvenirs.



Paper balloons Woodblock prints▼





HAICHI Medicine Box

These are the medicines used frequently at home, such as medicine for colds, stomach medicine, eye drops and so on.



What is the 'HAICHI' Sales System?

- ① HAICHI medicine vendors visit each household of the clients.
- ② The HAICHI vendor leaves the HAICHI Medicine Box with their clients for *There are no charges at this point. them to store and organize medicines.
- ③ Clients would use the medicines as they needed them.
- ④ HAICHI vendors visit their clients. (Usually every four to six months) The HAICHI vendor will check how much medicine was used, remove any of the medicines in the box that were to expire soon, and replenish the store of medicines accordingly.
- ⑤ The HAICHI vendor would then receive the payment only for medicines that were used.



Sales System is the spirit of "Use first, pay later." This is a sales-method based on the clients' point of view. Clients can use the products first and pay for their use afterwards. Toyama's pharmaceutical industry has been developing with this client-based approach.

The most unique feature of the HAICHI



Friendly talks with customers are important.

Educational Organizations for the Future Leaders of Toyama's Pharmaceuticals

Toyama has long been making strident efforts in education to develop high-quality human resources for the pharmaceutical industry. About 300 years ago, small private schools (Terakoya) for prospective itinerant merchants became widespread, and about 100 years ago, a pharmaceutical school (the present-day Faculty of Pharmaceutical Sciences, University of Toyama) was established. Today, pharmaceutical courses are available in some prefectural high schools to develop the next-generation of high quality human resources necessary to lead Toyama prefecture's pharmaceutical industry.

Local brand logo:

"Toyama's Pharmaceuticals"

The local brand logo of "Toyama's Pharmaceuticals" which had been filed with the patent office by the pharmaceutical industry in Toyama, was officially assessed and registered in July 2007. By this action, the "Toyama's Pharmaceuticals" logo has been approved as being worthy of nationwide name recognition.

Collective Trademark: "Toyama's Pharmaceuticals"

富山のくすり

<Symbol mark>

The medicine salesmen of Toyama have delivered "security" to the households in Japan for more than 300 years. The silhouette of the medicine salesman which is a symbol of "security" has been put together with the letter "T," which stands for Toyama, and will depict the close association of "Toyama's Pharmaceuticals with security."

<Coloration>

Green represents the "abundant greenery of nature" which is one of the attractions of Toyama prefecture while the orange represents "security/ warmth "

Introduction of Facilities and Resource Centers related to Pharmaceutical Businesses within the Prefecture

In Toyama prefecture, there are many pharmaceutical business-related facilities. Visitors can find out about the history and tradition of the pharmaceutical business in Toyama prefecture and find out about the roots of "pharmaceutical city Toyama."



Unique designs of "Toyama's Pharmaceuticals" The packages of the HAICHI pharmaceutical come with unique designs.

Toyama prefectural institute for pharmaceutical Research Center for Medicinal Plant Resources

A variety of medicinal plants can be seen at the paeoniae radix garden, herb garden, peony garden, etc.

Address

2732 Hirono. Kamiichi-machi

076-472-0801

10 min. by car from Kamiichi Station on Toyama Chihou Railway

Opening hours

9:00 - 17:00

Every Saturday and Sunday



Traditional Medicine Merchant Kanaokatei

At the Kanaokatei reference materials on the Toyama pharmaceutical sales business, which has a remarkable history of 300 years, are on exhibition. The main house, which used to be a business district in the early Meiji Period, still holds the remains of the former pharmaceutical market.

Address

1-5-24, Shinjo-machi, Toyama City

076-433-1684

5 min. walk from Higashi Shinjo Station on Toyama Chihou Railway

9:30 - 17:00

Every Tuesday, the beginning and the end of the year

Toyama Municipal Folk Craft Village

Inside the exhibition space of resource centers, various resources that convey the history of medicine sales in Toyama such as peddling tools, equipment that were used in the creation of medicine and souvenirs such as woodblock prints for medicine advertisement, etc., are on exhibition.

980 Anyobo, Toyama City

076-433-2866

By bus: Take the direct bus to Kureha Roiin Center, get off at Toyama Municipal Folk Craft Village: OR take the bus to Shin-sakuradani, get off at An-yobo bus stop and walk 5 minutes

Opening hours

9:00 - 17:00 (Admission ends at 16:30)

The beginning and the end of the year (12/28 - 1/4)

4 Namerikawa City Museum

Namerikawa city is the area where the pharmaceutical sales business is active within Toyama prefecture. A diverse range of reference materials related to the pharmaceutical business is displayed here.



676 Hiraki, Namerikawa City



076-474-9200

15 min. by car from Ainokaze Toyama Railway Namerikawa Station

10:00 - 18:00 (Admission ends at 17:30)

Every Monday, the next day of holiday,

the beginning and the end of the year (12/29 - 1/3)









URLs of websites related to the pharmaceutical industry

·Toyama Prefecture

https://www.pref.toyama.jp/

·Toyama Prefectural Institute for Pharmaceutical Research

https://www.pref.toyama.jp/1285/kurashi/kenkou/iryou/1285/intro/english.html

·Toyama Hokubu Prefecture High School

https://www.tomihoku-h.tym.ed.jp/ https://www.namerikawa-h.tym.ed.jp/

·Namerikawa Prefecture High School ·Toyama City Natural Medicine information

https://www.city.toyama.toyama.jp/etc/wakanyaku/s_kusuri.html

·University of Toyama

https://www.u-toyama.ac.jp/

·Tovama Prefectural University

https://www.pu-tovama.ac.ip/

·Toyama Pharmaceutical Association

https://www.toyama-kusuri.jp/en/

·Toyama Pharmaceutical Valley Development Consortium

https://www.kusuri-consortium.jp/



I wish
Toyama's Pharmaceuticals
contribute your health.

The mascot of Toyama's Pharmaceuticals ${\color{red} KUSURIN}$