Japan's Vaccination Certificate of COVID-19 for international travel

1. Overview

Since July 26, 2021, the Japanese Government has been issuing vaccination certificates of COVID-19 without 2D barcode to those who need the certificate for international travel. Starting from December 20th, 2021, the government issues <u>vaccination certificates with 2D barcode, for international travel as well as for domestic use in Japan</u>. The certificate is issued as an official proof of COVID-19 vaccination to those who are vaccinated at each municipality under the Japanese Vaccination Law.

2. Form of the vaccination certificates

The vaccination certificates are available in the following forms:

	Form of certificate	2D barcode	Type of document	Issuance period
1	Digital certificate	Yes	via mobile phone App (iOS/Android)	Dec 20, 2021-
2	Paper certificate	Yes	normal paper	Dec 20, 2021-
3	Paper certificate	N/A	anti-counterfeit paper	Jul 26, 2021 -Dec 19, 2021

*Samples of certificates are shown in attachments (A) through (C).

While it is expected that most international travelers will use the certificate with 2D barcode after December 20th, there will be some travelers who use the paper certificate without 2D barcode during the transition period. Please note that the certificate issued in former formats remains valid as an official proof of vaccination.

3. Specification of 2D barcode

After December 20th, 2021, the Japanese Vaccination Certificate will be issued with 2 types of 2D barcodes. The barcodes are generated based on the following international standards:

(A) **for international travel**:

ICAO VDS-NC standard

(B) **for domestic use in Japan & international travel**:

SMART® Health Cards standard

*ICAO VDS-NC (Visible Digital Seal Non-Constraints) is a standard for digital health certificates used for cross-border air travel, specified by the International Civil Aviation Organization (ICAO). It utilizes ICAO's trust framework (such as Public Key Infrastructure), which is used for e-Passports around the world today.

*SMART® Health Cards is a standard for digital health certificates specified by the Vaccine Credential Initiative (VCI). For people who provide passport information, the certificate shows the passport holder's name in English as well as in Japanese, so that it can be also used outside Japan, wherever SMART® Health Cards is accepted. Currently, SMART® Health Cards are accepted in Canada, North Macedonia, and in much of the United States.

[Data elements of the certificate]

	for international travel	**for domestic use in Japan & international travel**
Specification	ICAO VDS-NC (ver1.1)	SMART® Health Cards
Data elements on paper certificate	● Name (in English/Japanese) ● Date of birth ● Nationality/Region ● Passport number ● Date of vaccination ● Vaccine type ● Manufacturer ● Product Name ● Lot number ● Country of vaccination ● Certificate issuer ● Certificate identifier ● Issue date	As shown on the left
Data elements in 2D barcode	● Issuing Country ● Name (in English) ● Date of birth ● Passport number ● Certificate identifier ● Vaccine or prophylaxis ● Vaccine brand ● Date of vaccination ● Dose number ● Country of vaccination ● Administering centre ● Vaccine batch number	● Issuer ● Name (in Japanese/English) ● Date of birth ● Vaccine code (Vaccine name & Vaccine brand) ● Date of Vaccination ● Vaccination Authority ● Vaccine lot number

*Data set which is included in 2D barcode of the vaccination certificate is defined in charts (D) and (E) of this document. It is consistent with the requirements specified by ICAO VDS-NC and SMART® Health Cards.

4. **Authentication of the vaccination certificate**

- Authenticate the vaccination certificate for ICAO VDS-NC:

    The barcode signer certificate included in the 2D barcode itself can be used for authentication purposes. The barcode signer certificate can be fully verified using the Country Signing Certificate Authority (CSCA) certificate, which can be shared through the ICAO Public Key Directory (PKD).

- Authenticate the vaccination certificate for SMART® Health Cards:

    Because SMART® Health Cards are based on an open standard and can be issued by anyone, it is important to know who issued a given SMART® Health Card. In order to verify that the certificate is issued by a trusted issuer, the verifier can use the CommonTrust Network* or the VCI Directory.

    *The CommonTrust Network is managed by the Commons Project Foundation. The inclusion criteria for SMART® Health Card Issuers and Health Data Sources in the CommonTrust Network are defined in coordination with the VCI Steering Committee with broad community input. To confirm that a SMART® Health Card is valid and the issuer is part of the CommonTrust Network, you may also use the free SMART® Health Card Verifier App as well as the free App provided by the Japanese government.

5. **COVID-19 Vaccination Certificate Application**

    A free App called "**COVID-19 Vaccination Certificate Application**" is provided by the Japanese government to download and/or present the Japanese Vaccination Certificate as well as to verify a 2D barcode on the certificate. The app is available for free for iOS and Android.

    [System Requirements for Japan's "COVID-19 Vaccination Certificate Application"]
    ・Smartphone with NFC (Type B) chip
    ・iOS 13.7 or later
    ・Android 8.0 or later

    Other Apps which are compatible with ICAO VDS-NC or SMART® Health Cards (e.g. Smart® Health Card Verifier) may be used to verify the vaccination certificate.

6. **Frequently asked questions**

Q1) **Are there any differences between the certificate for international travel and the certificate for domestic use in Japan?**

Both certificates basically provide identical vaccination records of the certificate holder. The 2D barcode for international travel (ICAO VDS-NC) contains the holder's <u>passport number</u> and <u>their name only in English</u>. The 2D barcode for domestic use (SMART® Health Cards) does NOT contain the passport number, but if passport information is provided at the timing of application, the barcode contains <u>the holder's name in English as well as in Japanese</u>.

Q2) **Is the certificate valid in both paper and digital form?**

Yes, the certificate is available in paper form as well as in digital form on the app, and both certificates are valid as a proof of vaccination.

Q3) **Can a person have multiple vaccination certificates?**

A person can have multiple certificates without any limitation. For those who are vaccinated at a different site for each dose, they are expected to have multiple certificates issued by each municipality or authority.

Q4) **How can I tell if the certificate holder is fully vaccinated?**

Japan's Vaccination Certificate simply presents the holder's vaccination history. The determination of whether a certificate holder is fully vaccinated is up to the decision of each state where the holder is travelling.

Q5) **Is there any expiration date to the certificate?**

Japan's Vaccination Certificate itself has no expiration date because it simply shows the records of the holder's vaccination history.

Q6) **How can I verify authenticity of the certificate?**

The certificate is signed with a digital signature using a private key. Authenticity of the certificate can be verified by a public key, contained in the barcode itself or provided by the signer.

Q7) **Where do I find verifier apps to scan the barcode?**

A mobile app called "COVID-19 Vaccination Certificate Application" that can read and authenticate Japan's Vaccination Certificate will be available for free for iOS and Android. Other apps compatible with VDS-NC or SMART® Health Cards may be uses for verification.

(A) Sample of paper certificate <u>with 2D barcode</u> (issued from December 20th, 2021)

新型コロナウイルス感染症 予防接種証明書
Vaccination Certificate of COVID-19

姓 名
[Surname Given name]
三宅 翔太
[MIYAKE SHOTA]

生年月日 [Date of Birth] (YYYY-MM-DD)
1991-02-18

国籍・地域 [Nationality/Region]
JAPAN

旅券番号 [Passport Number]
TK0000000

日本国内用・海外用
[Domestic Use in Japan / International Travel]
SMART Health Cards
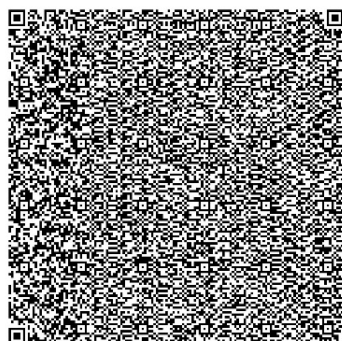
海外用
[International Travel]
ICAO VDS-NC
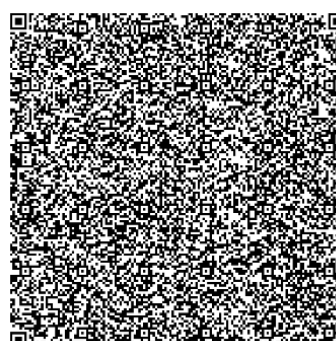
接種年月日 [Vaccination Date] (YYYY-MM-DD)	ワクチンの種類 [Vaccination Type]	メーカー [Manufacturer]	製品名 [Product Name]	製造番号 [Lot Number]	接種国 [Country of Vaccination]
2021-03-01	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	FC9880	日本 [JAPAN]
2021-03-23	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	FE8206	日本 [JAPAN]
2021-12-01	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	FE9787	日本 [JAPAN]

証明書発行者 [Certificate Issuance Authority]
東京都霞が関市長
[Mayor of Kasumigaseki City, Tokyo Metropolis]

日本国厚生労働大臣
[Minister of Health, Labour and Welfare, Government of Japan]

証明書ID [Certificate Identifier]
900001-20211209-200002

証明書発行年月日 [Issue Date](YYYY-MM-DD)
2021-12-09

(B) Sample of digital certificate <u>with 2D barcode</u> (issued on or after December 20th, 2021)

[Home]

[Certificate Details]

新型コロナワクチン
接種証明書アプリ

Vaccination Certificate of COVID-19

氏名 / Name
MIYAKE SHOTA

接種回数 / Number of doses	最終接種日 / Date of last dose
2 doses	23-MAR-2021

発行日 / Date of issue
09-DEC-2021

Mayor of Kasumigaseki City, Tokyo Metropolis

*Certificate for international travel

新型コロナウイルス
感染症予防接種証明書

氏名
三宅 翔太

氏名 / Name
MIYAKE SHOTA

接種回数	最終接種日
2回	2021年03月23日

2021年12月09日発行   東京都霞が関市長

*Certificate for domestic use in Japan

13:17:16

VDS-NC	SHC

接種回数 / Number of doses
2 doses

最終接種日 / Date of last dose
23-MAR-2021

氏名 / Name
MIYAKE SHOTA

国籍・地域 / Nationality, Region
JAPAN

旅券番号 / Passport number
TK0000000

生年月日 / Date of birth
18-FEB-1991

Vaccination Details

接種年月日 / Vaccination date	01-MAR-2021

ワクチンの種類 / Vaccination type
COVID-19 mRNA

メーカー / Manufacturer
Pfizer/BioNTech

製品名 / Product name
COMIRNATY

製造番号 / Lot number
FC9880

接種国 / Country of vaccination
JAPAN

接種年月日 / Vaccination date	23-MAR-2021

ワクチンの種類 / Vaccination type
COVID-19 mRNA

メーカー / Manufacturer
Pfizer/BioNTech

製品名 / Product name
COMIRNATY

製造番号 / Lot number
FE8206

接種国 / Country of vaccination
JAPAN

発行日 / Date of issue
09-DEC-2021

証明書ID / Certificate's ID
900001-20211209-200003

証明書発行者 / Certificate issuance authority
Mayor of Kasumigaseki City, Tokyo Metropolis
Minister of Health, Labour and Welfare, Government of Japan

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(C) Sample of paper certificate <u>without 2D barcode</u>

(from July 26, 2021)

新型コロナウイルス感染症　予防接種証明書
Vaccination Certificate of COVID-19

姓 名
[Surname Given name]
接種 証明
[SESSYU SYOUMEI]

生年月日 [Date of Birth] (YYYY-MM-DD)
1991-02-05

国籍・地域 [Nationality/Region]
JAPAN

旅券番号 [Passport Number]
TR0000000

1回目接種 [First Dose]	2回目接種 [Second Dose]
ワクチンの種類 [Vaccine Type] COVID-19 mRNA	ワクチンの種類 [Vaccine Type] COVID-19 mRNA
メーカー [Manufacturer] ファイザー [Pfizer/BioNTech]	メーカー [Manufacturer] ファイザー [Pfizer/BioNTech]
製品名 [Product Name] コミナティ [COMIRNATY]	製品名 [Product Name] コミナティ [COMIRNATY]
製造番号 [Lot Number] 1234-5678	製造番号 [Lot Number] 1234-5678
接種年月日 [Vaccination Date](YYYY-MM-DD) 2021-06-08	接種年月日 [Vaccination Date](YYYY-MM-DD) 2021-07-06
接種国 [Country of Vaccination] 日本 [JAPAN]	接種国 [Country of Vaccination] 日本 [JAPAN]

証明書発行者 [Certificate Issuance Authority]
東京都霞ヶ関市長
[Mayor of Kasumigaseki City, Tokyo Metropolis]

日本国厚生労働大臣
[Minister of Health, Labour and Welfare, Government of Japan]

証明書ID [Certificate Identifier]　　　　証明書発行年月日 [Issue Date](YYYY-MM-DD)
012041-20210730-000002　　　　　　2021-07-30

(from Dec 1, 2021)

新型コロナウイルス感染症　予防接種証明書
Vaccination Certificate of COVID-19

姓 名
[Surname Given name]
接種 証明
[SESSYU SYOUMEI]

生年月日 [Date of Birth] (YYYY-MM-DD)
1991-02-05

国籍・地域 [Nationality/Region]
JAPAN

旅券番号 [Passport Number]
TR0000000

接種年月日 [Vaccination Date] (YYYY-MM-DD)	ワクチンの種類 [Vaccine Type]	メーカー [Manufacturer]	製品名 [Product Name]	製造番号 [Lot Number]	接種国 [Country of Vaccination]
2021-04-02	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	ABC123	日本 [JAPAN]
2021-04-23	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	DEF465	日本 [JAPAN]
2021-12-23	COVID-19 mRNA	ファイザー [Pfizer/BioNTech]	コミナティ [COMIRNATY]	GHI789	日本 [JAPAN]

証明書発行者 [Certificate Issuance Authority]
東京都霞ヶ関市長
[Mayor of Kasumigaseki City, Tokyo Metropolis]

日本国厚生労働大臣
[Minister of Health, Labour and Welfare, Government of Japan]

証明書ID [Certificate Identifier]　　　　証明書発行年月日 [Issue Date](YYYY-MM-DD)
011002-20211226-XXXXXX　　　　　　2021-12-26

(D) Data set of ICAO VDS-NC specification

#				Element	Required	MaxSize	Content	Example
1	"data"						Data Zone	
2		"hdr"					Header Zone	
3			"t"	Type(t)	○		Type is set to "icao.vacc"	"icao.vacc"
4			"v"	Version(v)	○	integer	Version number of PoV (Proof of Vaccination)	1
5			"is"	IssuingCountry(is)	○		Three letter code identifying the issuing state	"JPN"
6		"msg"					Message Zone	
7			"uvci"	UVCI(uvci)	○	12	Unique Vaccination Identifier	"6U5RSWMBASG2"
8			"pid"	PersonIdentification(pid)		Object	Person Identification	
9				"n"	Name(n)	○	39	Family name_First name	"MIYAKE SHOTA"
10				"dob"	Date of birth(dob)	○	10	YYYY-MM-DD	"1991-02-18"
11				"i"	UniqueIdentifier(i)	○	11	Passport number	"TK0000000"
12				"ai"	AdditionalIdentifer(ai)	○	24	Any other document number at discretion of issuer	"JPN00000120210801000001"
13			"ve"	VaccinationEvent(ve)		Array	Vaccinaiton Event	
14				"des"	Vaccine or Prophylaxis(des)	○	6	Vaccine or vaccine sub-type: ICD-11 Extension codes	Pfizer/BioNTech, Moderna: "XM0GQ8" AstraZeneca: "XM9QW8"
15				"nam"	Vaccine brand (nam)	○		Medical product name	Pfizer/BioNTech: "COMIRNATY" Moderna: "COVID-19 Vaccine Moderna" AstraZeneca: "Vaxzevria"
16				"vd"	VaccinationDetails(vd)		Array	Vaccination Details	
17					"dvc"	Date of vaccination(dvc)	○	10	YYYY-MM-DD	"2021-03-01"
18					"seq"	Dose number (seq)	○	2	Vaccine dose number	"1"
19					"ctr"	Country of vaccination(ctr)	○	3	Three letter code of the state where the holder is vaccinated	"JPN"
20					"adm"	Administering centre(adm)	○	20	The name of the vaccination authority	"MHLW_Gov_of_JAPAN"
21					"lot"	Vaccine batch number (lot)	○	20	Vaccine Lot Number	"1234-5678"
22	"sig"						Signature Zone	
23		"alg"		SignatureAlgo(alg)	○		Signature Algorithm: ECDSA with SHA256	"ES256"
24		"cer"		Certificate(cer)	○		Signer certificate (base64url)	
25		"sigvl"		SignatureValue(sigvl)	○		Signature value signed over the data	

(E) Data set of SMART® Health Cards specification

#	Key	Required	MaxSize	Content	Example
1	"iss"	○		Issuer	https://vc.vrs.digital.go.jp/issuer
2	"nbf"	○		Timestamp issue (Not before)	1623928550.92200
3	"vc"				
4	"type"	○		"https://smarthealth.cards#health-card", "https://smarthealth.cards#immunization", "https://smarthealth.cards#covid19"	"https://smarthealth.cards#health-card", "https://smarthealth.cards#immunization", "https://smarthealth.cards#covid19"
5	"credentialSubject"				
6	"fhirVersion"	○		Version of FHIR	"4.0.1"
7	"fhirBundle"				
8	"resourceType"	○		"Bundle"	"Bundle"
9	"type"	○		"collection"	"collection"
10	"entry"		Array		
11	"fullUrl"	○		"resource:0"	"resource:0"
12	"resource"				
13	"resourceType"			"Patient" information	"Patient"
14	"name"	○	Array	Name	
15	"use"	○		Name type "usual": Japanese name "official": English name as in Passort	"usual"
16	"text"	△		Full name	"SMITH JANE"
17	"family"	△		Family name (UTF-8)	"三宅" or "MIYAKE"
18	"given"	△	Array	Given name (UTF-8)	"翔太" or "SHOTA"
19	"birthDate"	○		Date of birth: "YYYY-MM-DD"	"1991-02-18"
20	"fullUrl"	○		"resource:1"	"resource:1"
21	"resource"				
22	"resourceType"			Vaccination record	"Immunization"
23	"status"	○		Status	"completed"
24	"vaccineCode"	○		Vaccine code	
25	"coding"		Array		
26	"system"	○		"http://hl7.org/fhir/sid/cvx"	"http://hl7.org/fhir/sid/cvx"
27	"code"	○		Vaccine Product "207":Moderna "208":Pfizer/BioNTech "210":AstraZeneca	"208"
28	patient				
29	"reference"	○		"fullUrl" pf "Patient" information	"resource:0"
30	"occurrenceDateTime"	○		Date of vaccination: "YYYY-MM-DD"	"2021-03-01"
31	"performer"		Array		
32	"actor"				
33	"display"	○		Vaccination authority	"MHLW_Gov_of_JAPAN"
34	"lotNumber"	○		Vaccine lot number	"1234-5678"