Iowa Respiratory Virus Surveillance Webinar

2026-27 Season

Iowa Department of Health and Human Services
State Hygienic Laboratory at the University of Iowa

October 15, 2026

IOWA Health and Human Services | IOWA State Hygienic Laboratory

Housekeeping

- All participants will be muted during the presentation.
- Questions can be submitted directly to the facilitator via the Q/A feature located on your control panel
- All questions submitted will be answered at the end of the presentation or after the presentation
- **Rebroadcast on Wednesday, October 21, 2026, at 10 a.m.**
  - **If you registered for this event, you will receive an invite after today**
- When available, you will receive an email with slides

Presentation Overview

- Respiratory Virus Surveillance Description and Summary
- Influenza and Other Respiratory Outbreaks
- Antiviral Update
- Influenza, COVID-19 and RSV Vaccination Update
- Submitting Specimens to SHL and Survey Test Results

Presenters

- Andy Weigel, LMSW, Influenza Epidemiologist, Iowa HHS
- Michael Patten, DO HAI Program Manager, Iowa HHS
- Shelly Jensen, RN, BSN, Immunization Nurse Clinician, Iowa HHS
- Jeff Benfer, MS, MB (ASCP)^{CM}, Supervisor of Molecular Biology, SHL

Respiratory Virus Surveillance

Andy Weigel
Iowa HHS Influenza Epidemiologist

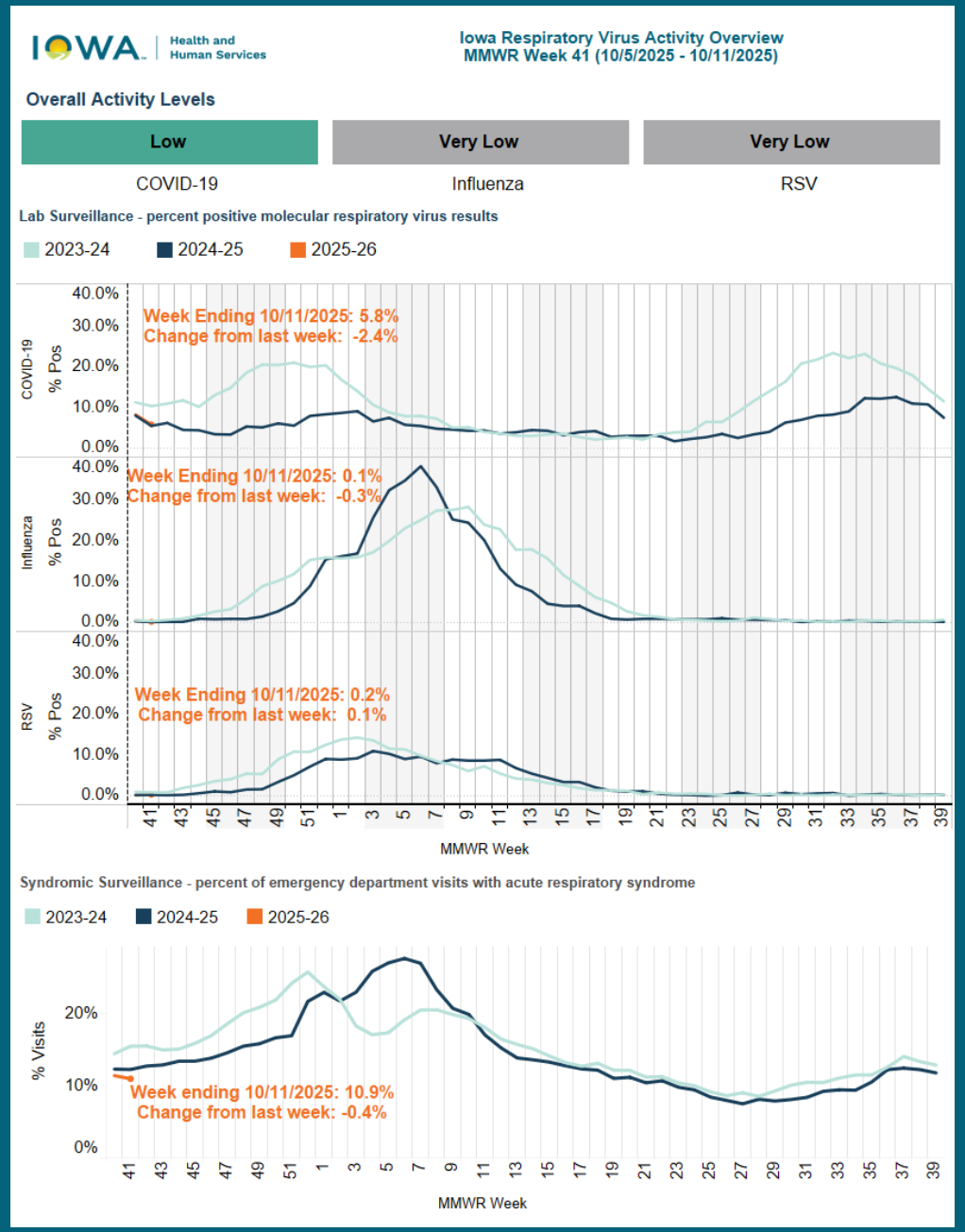
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Iowa Respiratory Virus Surveillance Report

- Published weekly during the influenza surveillance season
- Posted on the Iowa HHS influenza surveillance page
- Email list is the quickest

View the report or subscribe to regular email reports at hhs.iowa.gov/center-acute-disease-epidemiology/iowa-influenza-surveillance

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Iowa Respiratory Virus Surveillance

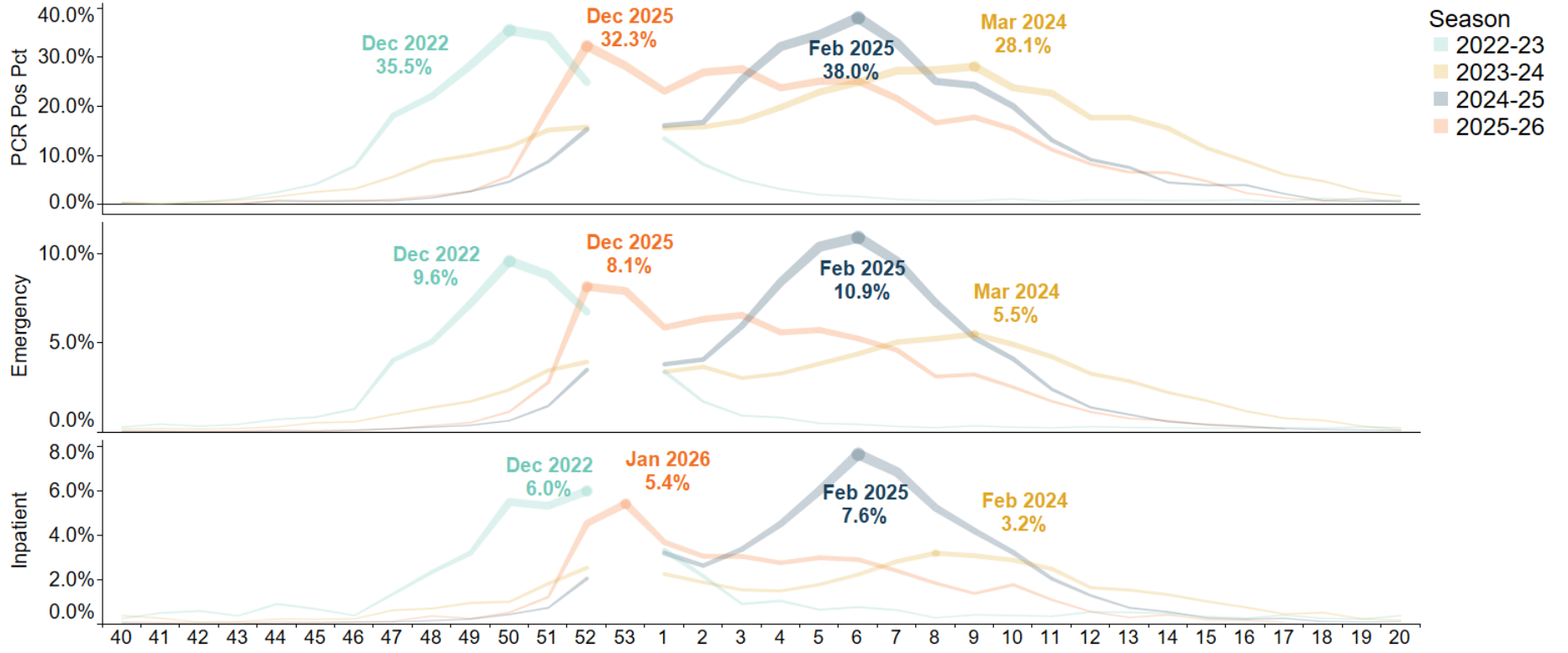
Updated slide
10/21/2026

- Public health and clinical laboratory testing
- Wastewater surveillance
- Outpatient respiratory illness visits (ILI)
- Syndromic emergency department and inpatient visits
- School and care facility outbreaks
- Deaths
  - Nationally notifiable pediatric deaths: added COVID-19 (Jan 2026) and RSV (Jan 2027); influenza notifiable since 2004,

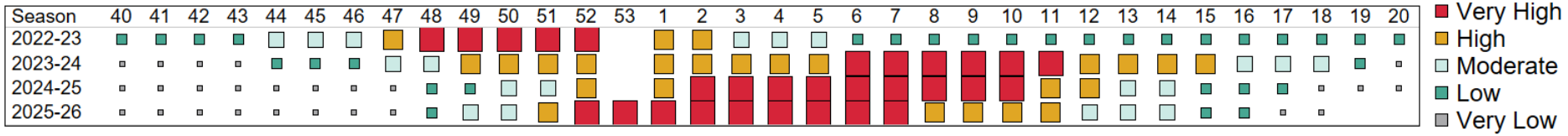
Influenza, COVID-19 and RSV Weekly Activity Levels

- Individual measures (molecular test positivity, ED and inpatient visit proportions) and a composite measure (simple average of the other three measures)
- Calculate thresholds from 3-year historical period (2022-25)*, with flu and RSV excluding data from weeks 21-39
- Individual activity level (less than 20th percentile = very low, 20-40th percentile = low, 40-60th percentile = moderate, 60-80th percentile = high, over 80th percentile = very high)

Influenza Activity 2022-26



Influenza Overall Activity Levels by Season and MMWR Week

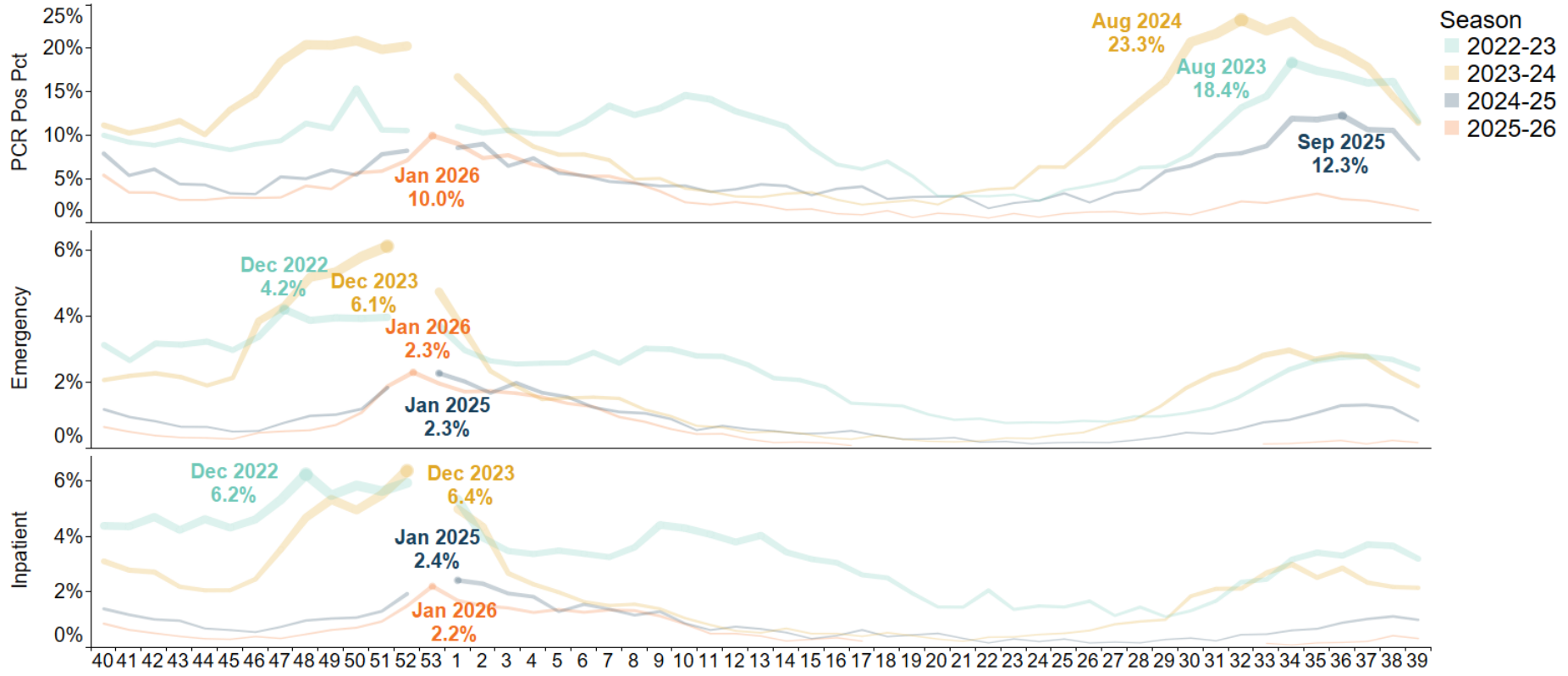


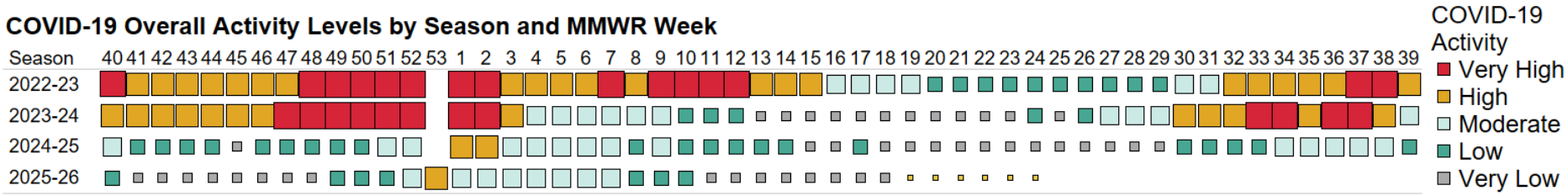
Iowa's syndromic surveillance data feed was interrupted during the 2025-2026 season but has been restored.

MMWR weeks 18-32 (approximately mid-May to mid-August 2026 are not shown due to the unreliable estimates from lower data volume.

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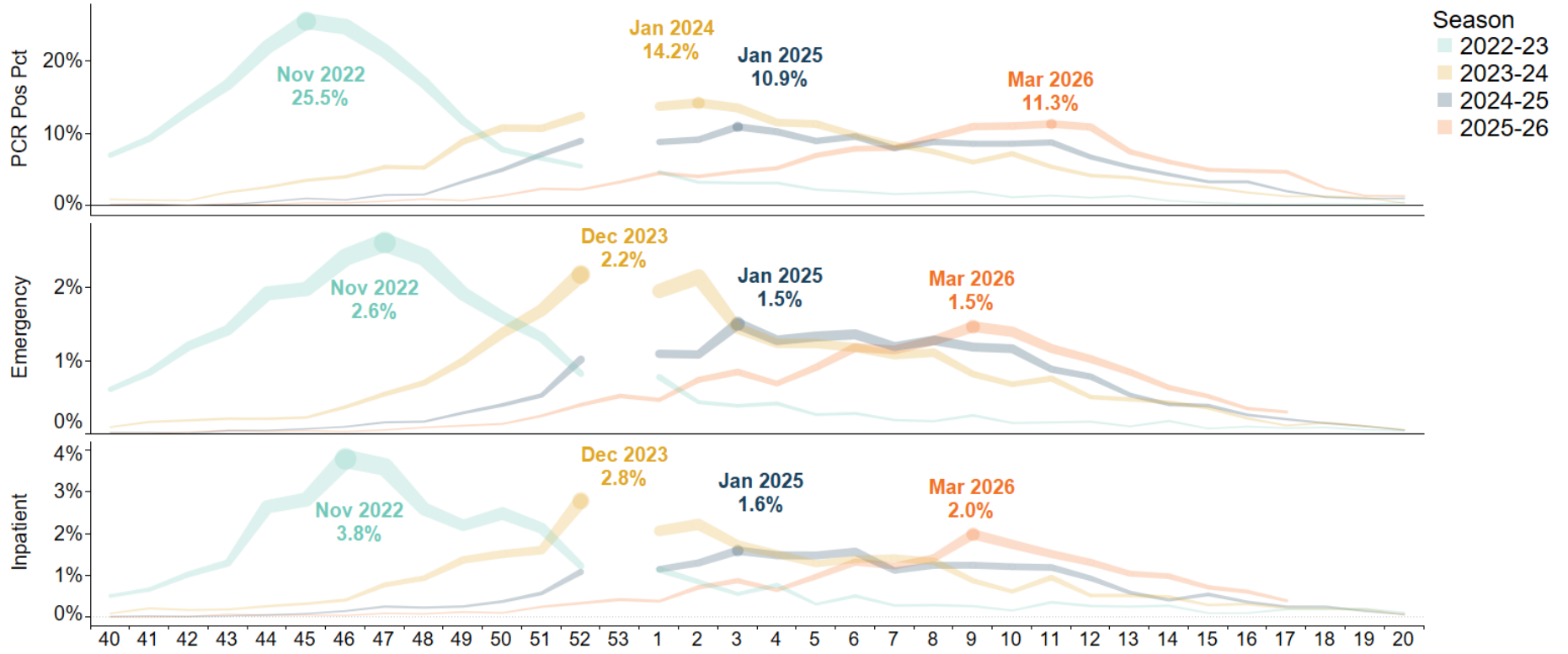
COVID-19 Activity 2022-26



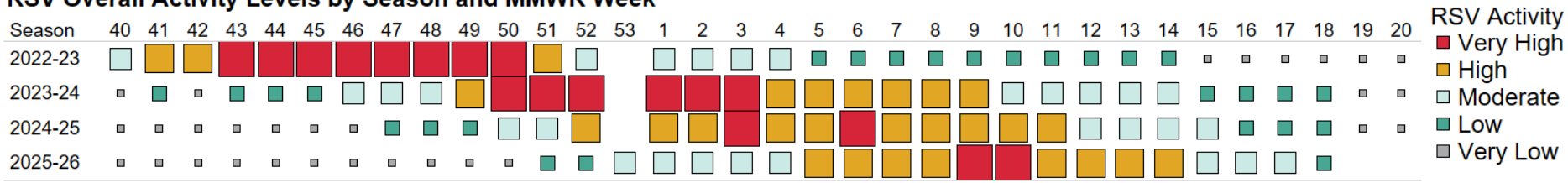


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RSV Activity 2022-26

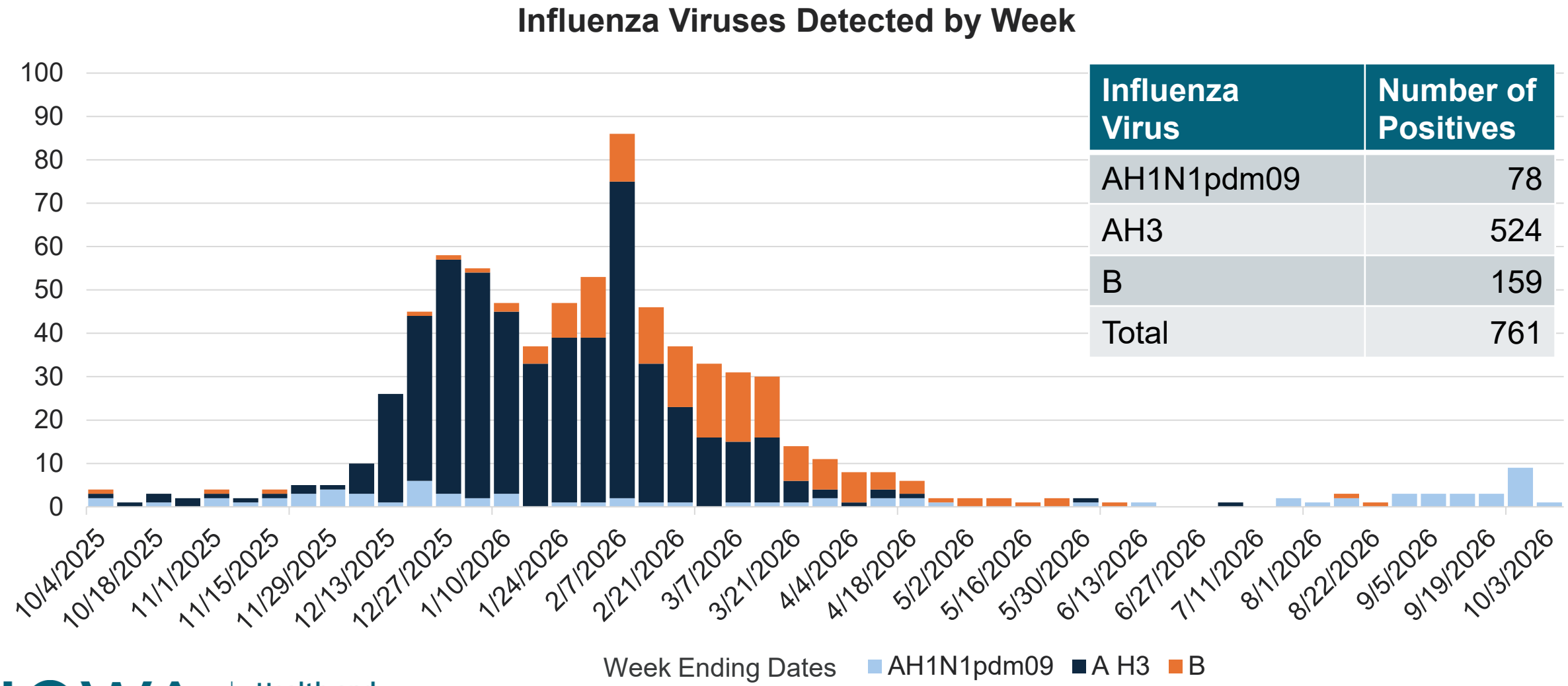


RSV Overall Activity Levels by Season and MMWR Week



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Influenza Testing at SHL 2025-2026



Influenza Virus	Number of Positives
AH1N1pdm09	78
AH3	524
B	159
Total	761

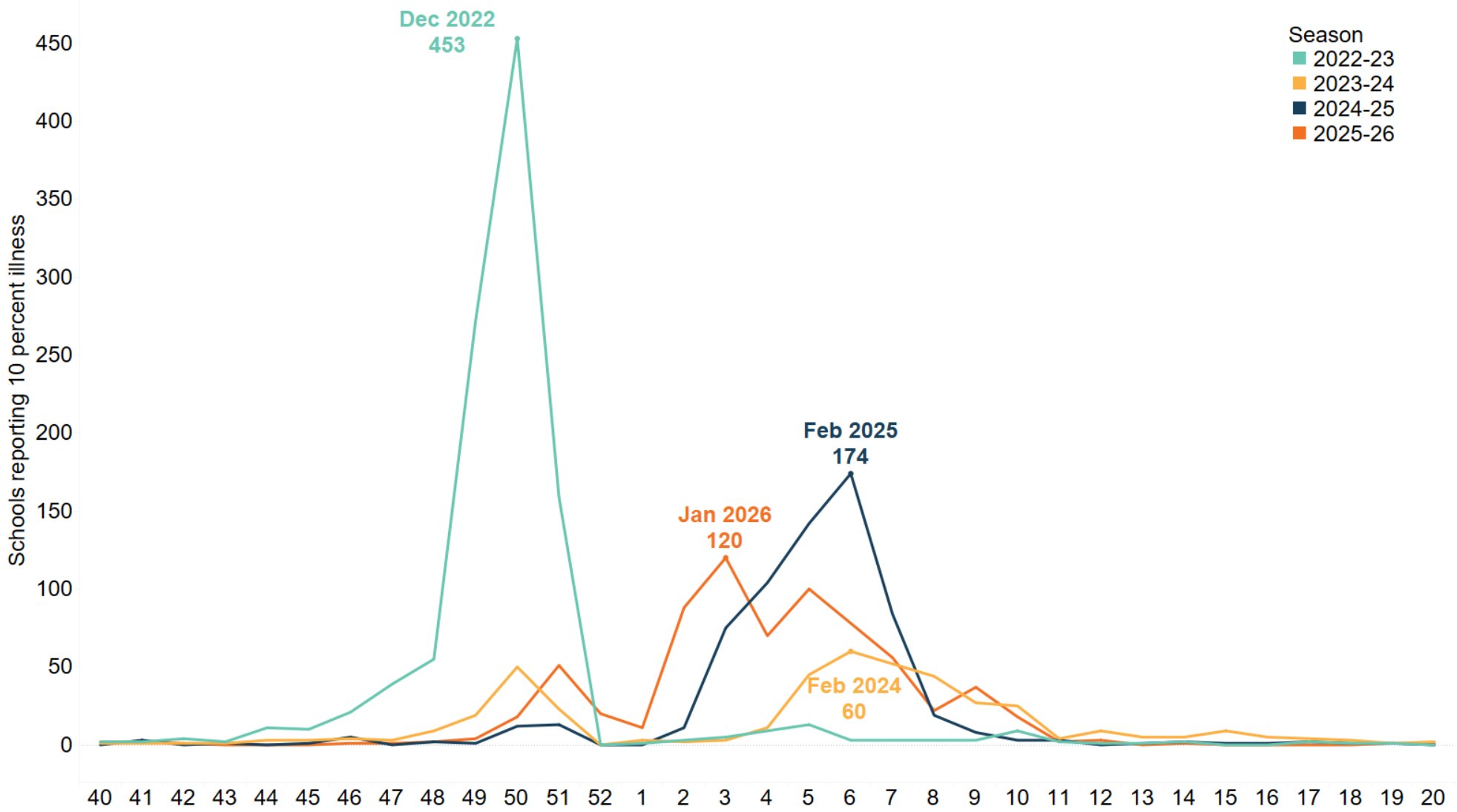
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Reporting School Illness

- Daily illness at least 10%
  - All Iowa schools are required to report to Iowa HHS when percent of illness meets or exceeds 10 percent
  - Report using survey https://redcap.link/iowaschool10pct26-27
- Weekly Illness
  - Sites volunteer to submit total illness numbers each week
  - Start reporting your data at https://redcap.link/iowaweeklyschool26-27

Contact Andy Weigel at 515-322-1937 or andy.weigel@hhs.iowa.gov with questions.

Schools Reporting 10 Percent Illness 2022-26



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Outbreak Control for Schools and Child Care Centers

- Work with local public health to investigate and collect specimens as needed
- Utilize resources at Iowa HHS and CDC
- Reinforce illness policies
- Increase cleaning and disinfecting of key areas
- Encourage and teach hand hygiene
- Notify and educate parents
- Many of the steps we take for any one disease will help for others (e.g., handwashing, staying home when you are sick)

Child Illness and Exclusion Criteria for Education and Child Care Settings

Contact Information

Andy Weigel, LMSW

Iowa Influenza Epidemiologist

Iowa HHS

Phone: 515-322-1937

andy.weigel@iowa.hhs.gov

Thank you!

Respiratory Outbreaks in Long-Term Care Facilities

Michael Patten, DO
HAI Program Manager, Iowa HHS

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Reporting Respiratory Outbreaks (including COVID-19)

- While most individual cases are not reportable, in Iowa **all respiratory virus outbreaks are required to be reported** to the Iowa Department of Health and Human Services (Iowa HHS) by Iowa Administrative Code [641] Chapter 1.
- This can be done **online** using a secure and HIPAA compliant form: https://redcap.link/respiratory_outbreak

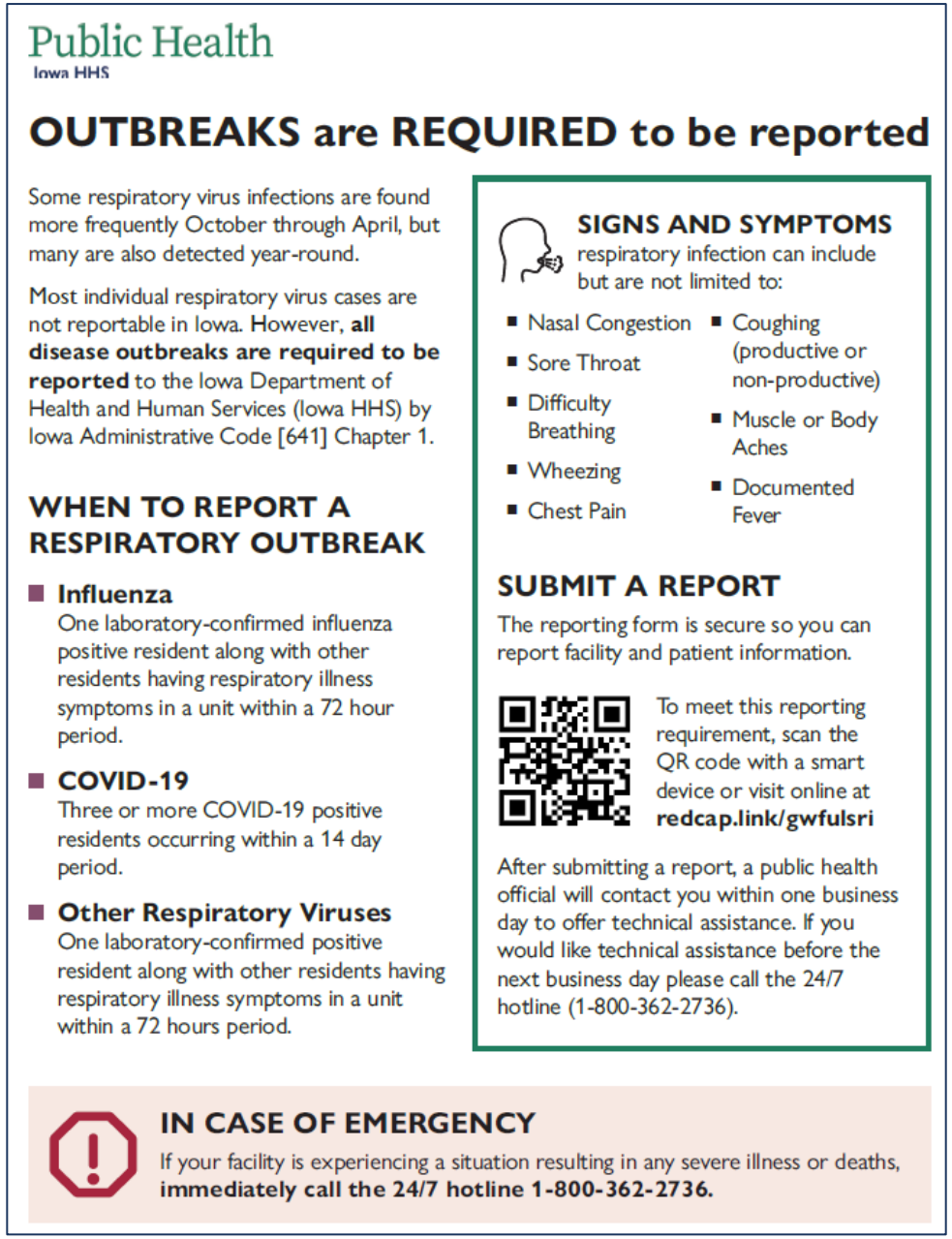
Reporting Respiratory Outbreaks (including COVID-19)

The following outbreak definitions should be used to determine if your facility is experiencing a reportable respiratory virus outbreak:

Respiratory Virus	Outbreak Definition
Influenza	One influenza positive resident along with other residents having respiratory illness symptoms in a unit within a 72-hour period
COVID-19	Three or more COVID-19 positive residents occurring within a 14-day period.
Other respiratory viruses	One positive resident along with other residents having respiratory illness symptoms in a unit within a 72 hours period

Don’t forget the CMS NHSN LTCF COVID-19 Module reporting requirement

Reporting Respiratory Outbreaks (including COVID-19) information



Public Health
Iowa HHS

OUTBREAKS are REQUIRED to be reported

Some respiratory virus infections are found more frequently October through April, but many are also detected year-round.

Most individual respiratory virus cases are not reportable in Iowa. However, **all disease outbreaks are required to be reported** to the Iowa Department of Health and Human Services (Iowa HHS) by Iowa Administrative Code [641] Chapter 1.

WHEN TO REPORT A RESPIRATORY OUTBREAK

- **Influenza**
  One laboratory-confirmed influenza positive resident along with other residents having respiratory illness symptoms in a unit within a 72 hour period.
- **COVID-19**
  Three or more COVID-19 positive residents occurring within a 14 day period.
- **Other Respiratory Viruses**
  One laboratory-confirmed positive resident along with other residents having respiratory illness symptoms in a unit within a 72 hours period.

SIGNS AND SYMPTOMS

respiratory infection can include but are not limited to:

- Nasal Congestion
- Sore Throat
- Difficulty Breathing
- Wheezing
- Chest Pain
- Coughing (productive or non-productive)
- Muscle or Body Aches
- Documented Fever

SUBMIT A REPORT

The reporting form is secure so you can report facility and patient information.

To meet this reporting requirement, scan the QR code with a smart device or visit online at **redcap.link/gwfulsri**

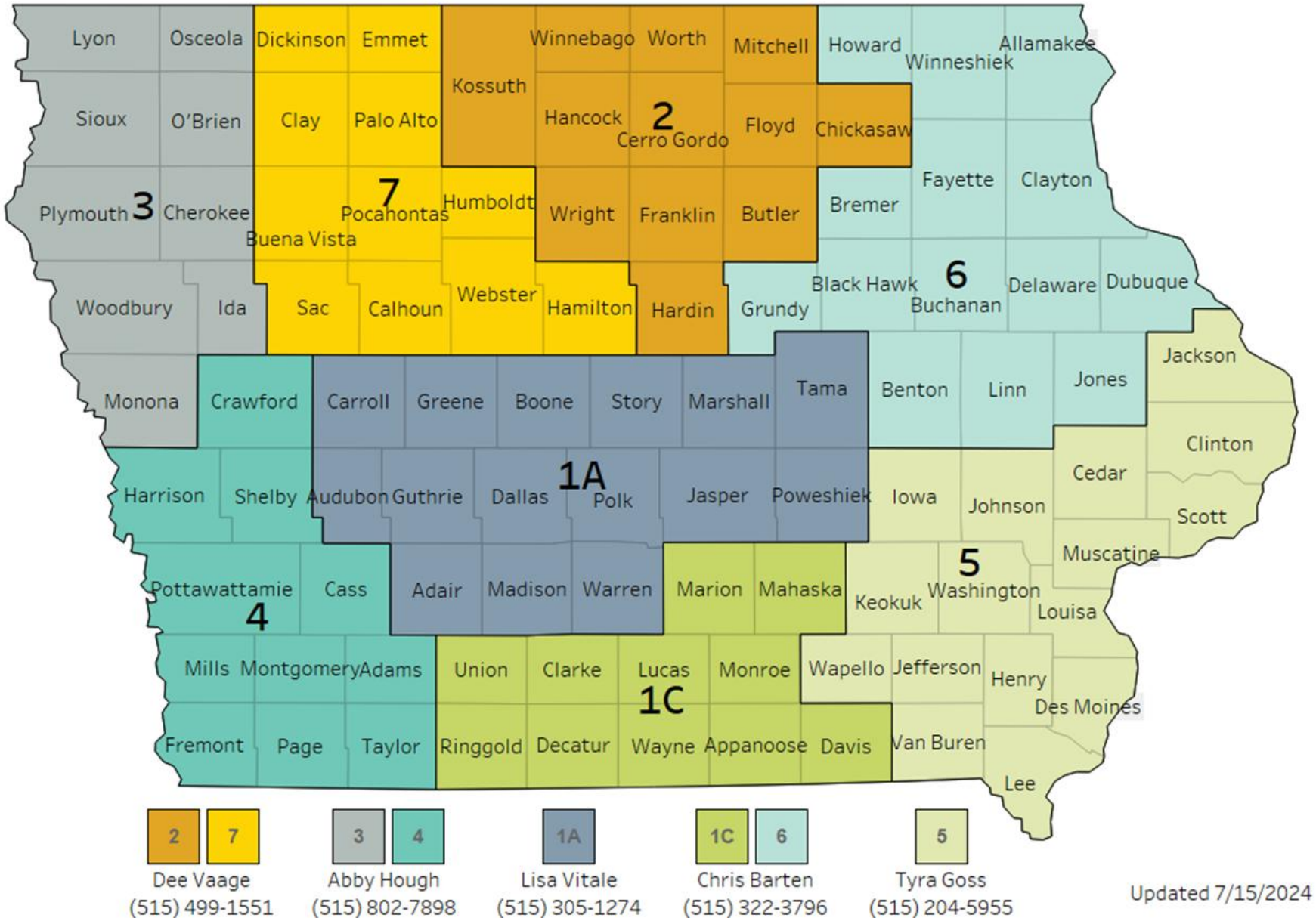
After submitting a report, a public health official will contact you within one business day to offer technical assistance. If you would like technical assistance before the next business day please call the 24/7 hotline (1-800-362-2736).

IN CASE OF EMERGENCY

If your facility is experiencing a situation resulting in any severe illness or deaths, **immediately call the 24/7 hotline 1-800-362-2736.**

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Contacts



Updated 7/15/2024

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Contacts

hai-ar@hhs.iowa.gov

LTC Office Hours

Healthcare Associated Infections (HAI) team hosts monthly open office hours.

- The office hours provide an open forum where attendees can ask questions regarding infection prevention and control.
- Held first Tuesday of every month, at 12:00 P.M. central time. Each session lasts 30 minutes.
- Next one will be November 3, 2026
- **Registration: LTC Open Office Hours**

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Internationa
Week (IIPW
October 19-



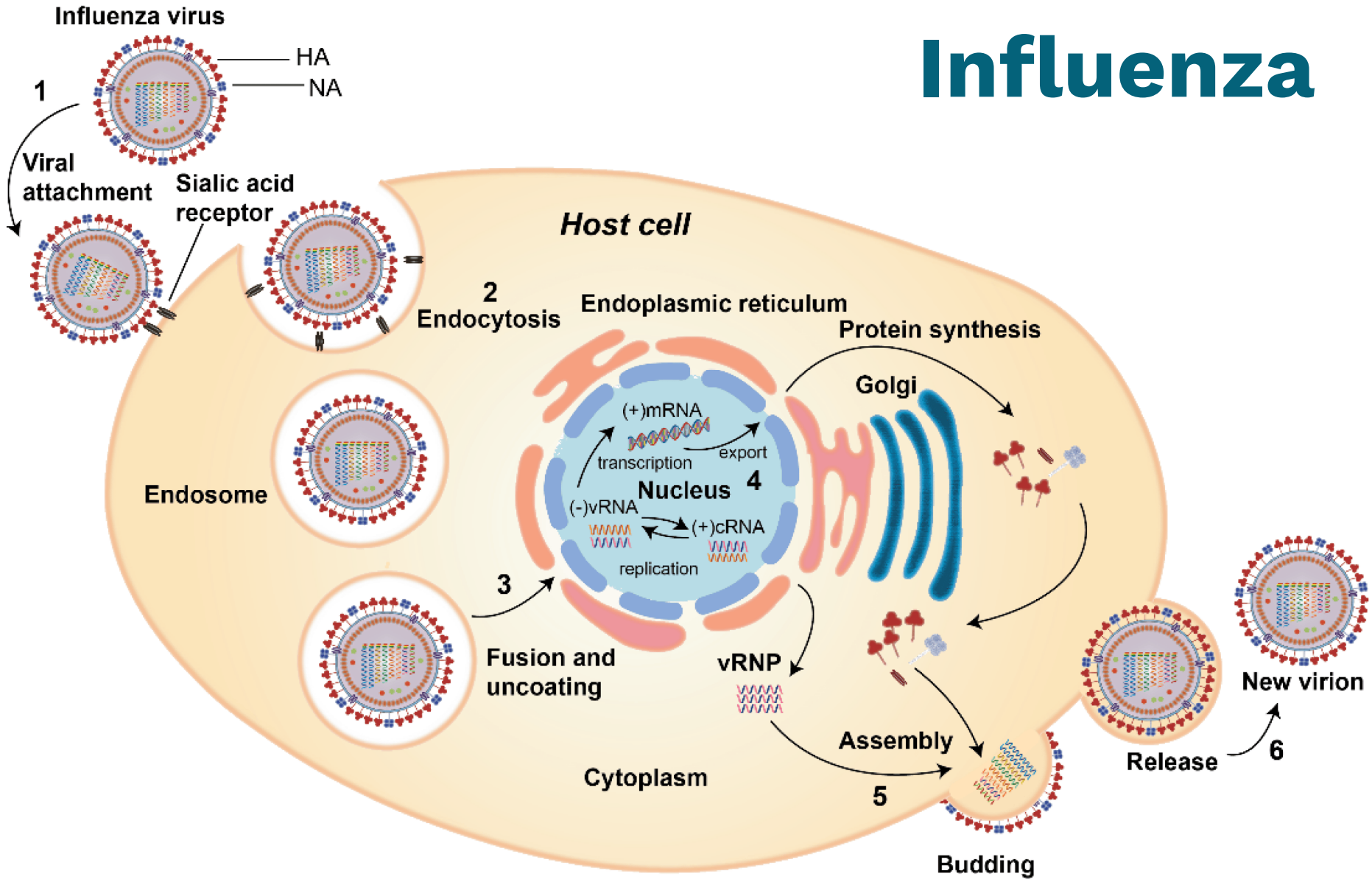
https://infectionpreventionandyou.org/

Antivirals

Matthew Donahue, MD
State Epidemiologist & Deputy Medical Director

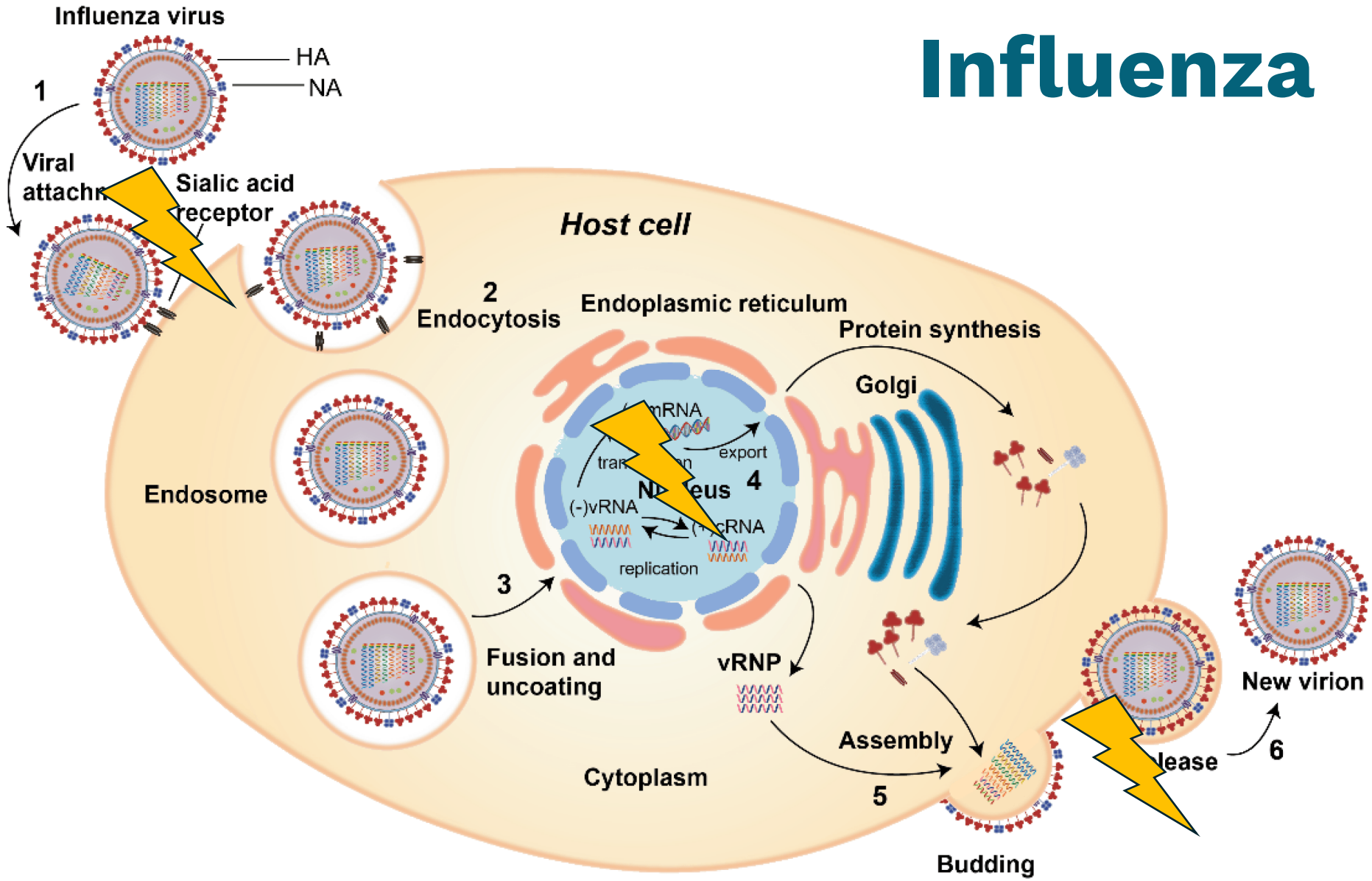
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Influenza



https://www.mdpi.com/2076-393X/9/9/1032

Influenza



https://www.mdpi.com/2076-393X/9/9/1032

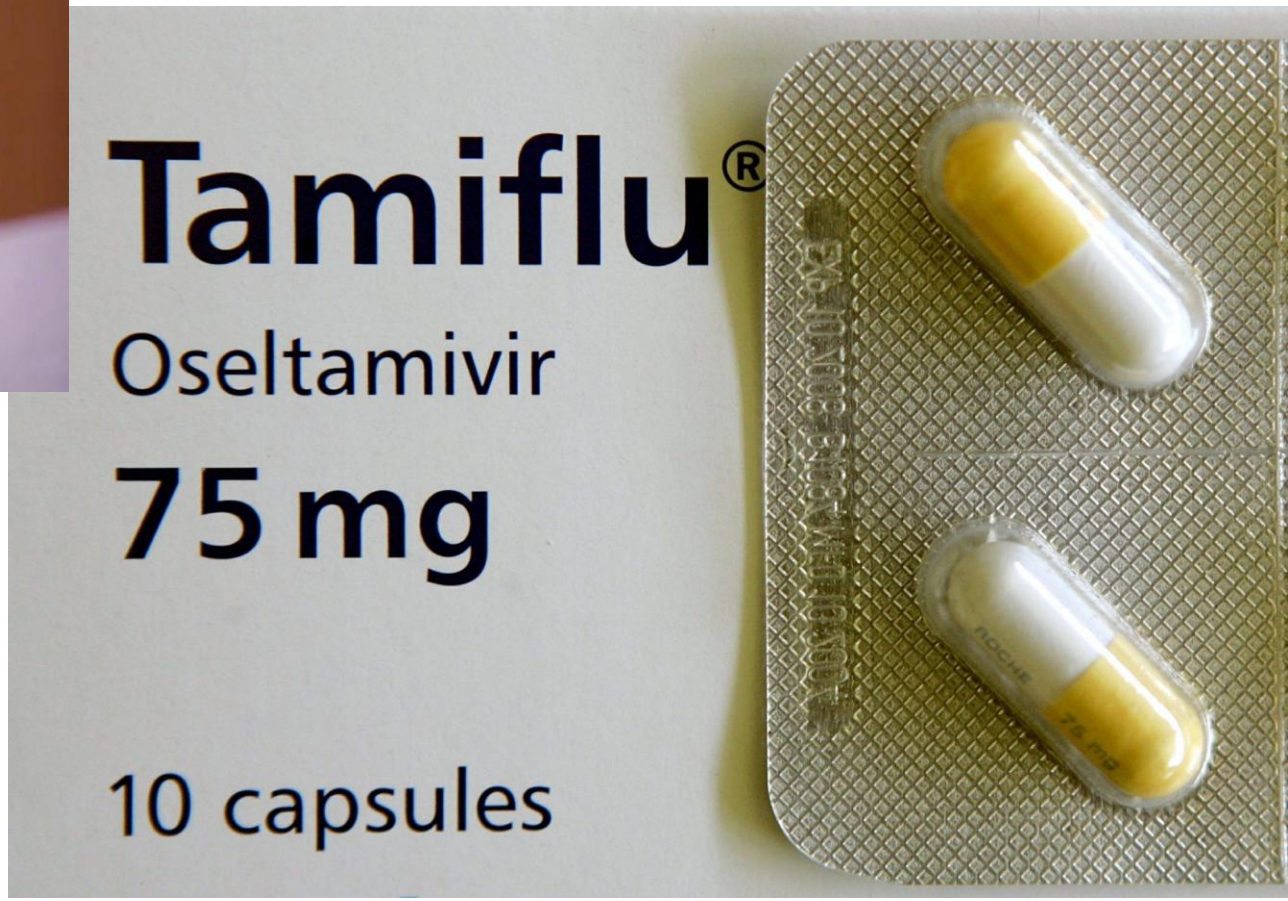
Four FDA recommended options, two most frequently used

Work against influenza A & influenza B

- Neuraminidase inhibitors
  - **Oseltamivir** (oral med, aka “Tamiflu”)
  - **Peramivir** (intravenous)
  - Zanamivir (inhaled)
- Cap-dependent endonuclease inhibitor
  - Baloxavir marboxil (oral)

https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html





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https://today.com/video/tamiflu-raises-concerns-amid-deadly-flu-epidemic-1151142979915?cid=sm_npd_td_fb_ht

Why bother with influenza antivirals?
Most won't need it.
But some really benefit—**know who**.

- Two use cases: 1) **treatment** 2) **prevention** chemoprophylaxis
- Priority groups
  - Inpatients (hospitalized)
  - Outpatients with severe, complicated, or progressive illness
  - Outpatients with higher risk for influenza complications
- Goal: start as soon as possible for greatest benefit, even while test is pending, within 48 hours of symptom onset

https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html


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Can children and pregnant women take oseltamivir? Yes.

- Oseltamivir treatment is available for any age (recommended for all children <2 years and all adults >65 years) IDSA rec 18
- Oseltamivir chemoprophylaxis is available for children/infants down to 3 months and older
- Safety of oseltamivir in pregnancy has been established through decades of research, across multiple studies (recommended for all pregnant women and those 2 weeks postpartum) IDSA rec 18

https://www.cdc.gov/flu/hcp/antivirals/treatment_obstetric.html

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6769232/pdf/ciy874.pdf

Oseltamivir dosing is fairly straightforward

- Treatment for most adults: one pill (75mg) twice per day for 5 days
- Chemoprophylaxis for most adults: one pill (75mg) once per day for 7–14 days from most recent exposure, longer for congregate settings
- Treatment/chemoprophylaxis for children: weight-based, suspension available
- Dose adjustments needed for chronic kidney disease

https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html

What about antiviral resistance?

It can happen but rarely does.

https://www.cdc.gov/fluview/surveillance/2024-week-39.html

Assessment of Virus Susceptibility to Antiviral Medications

CDC assesses susceptibility of influenza viruses to the antiviral medications including the neuraminidase inhibitors (oseltamivir, zanamivir, and peramivir) and the PA endonuclease inhibitor baloxavir using next generation sequence analysis supplemented by laboratory assays. Information about antiviral susceptibility test methods can be found at U.S. Influenza Surveillance: Purpose and Methods.

Viruses collected in the U.S. since October 1, 2023, were tested for antiviral susceptibility as follows:

Antiviral Medication			Total Viruses	A/H1	A/H3	B/Victoria
Neuraminidase Inhibitors	Oseltamivir	Viruses Tested	5,428	2,007	1,960	1,461
		Reduced Inhibition	1 (0.02%)	1 (0.1%)	0 (0%)	0 (0%)
		Highly Reduced Inhibition	6 (0.1%)	6 (0.3%)	0 (0%)	0 (0%)

Clinical Infectious Diseases

IDSA GUIDELINE

Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza[a]

Timothy M. Uyeki,[1] Henry H. Bernstein,[2] John S. Bradley,[3,4] Janet A. Englund,[5] Thomas M. File,[6] Alicia M. Fry,[1] Stefan Gravenstein,[7] Frederick G. Hayden,[8] Scott A. Harper,[9] Jon Mark Hirshon,[10] Michael G. Ison,[11] B. Lynn Johnston,[12] Shandra L. Knight,[13] Allison McGeer,[14] Laura E. Riley,[15] Cameron R. Wolfe,[16] Paul E. Alexander,[17,18] and Andrew T. Pavia[19]

CDC

Influenza (Flu)

EXPLORE THIS TOPIC

Influenza Antiviral Medications: Summary for Clinicians

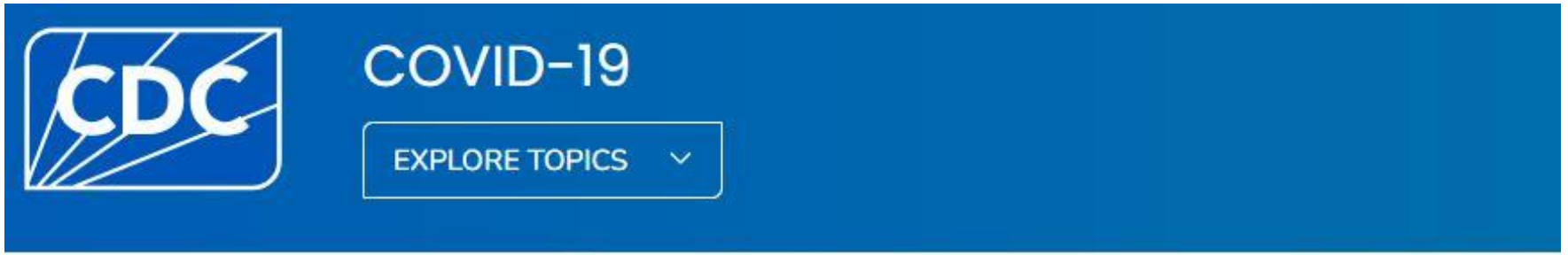
For Health Care Providers

MAR. 10, 2026

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IDSA Guidelines on the Treatment and Management of Patients with COVID-19 Published September 23, 2026

Updated slide 10/21/2026



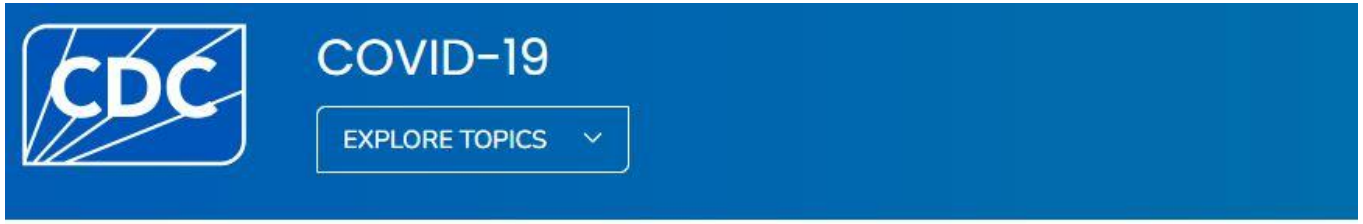
Types of COVID-19 Treatment

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IDSA Guidelines on the Treatment and Management of Patients with COVID-19 Published September 23, 2026

Updated slide 10/21/2026

The NEW ENGLAND JOURNAL of MEDICINE

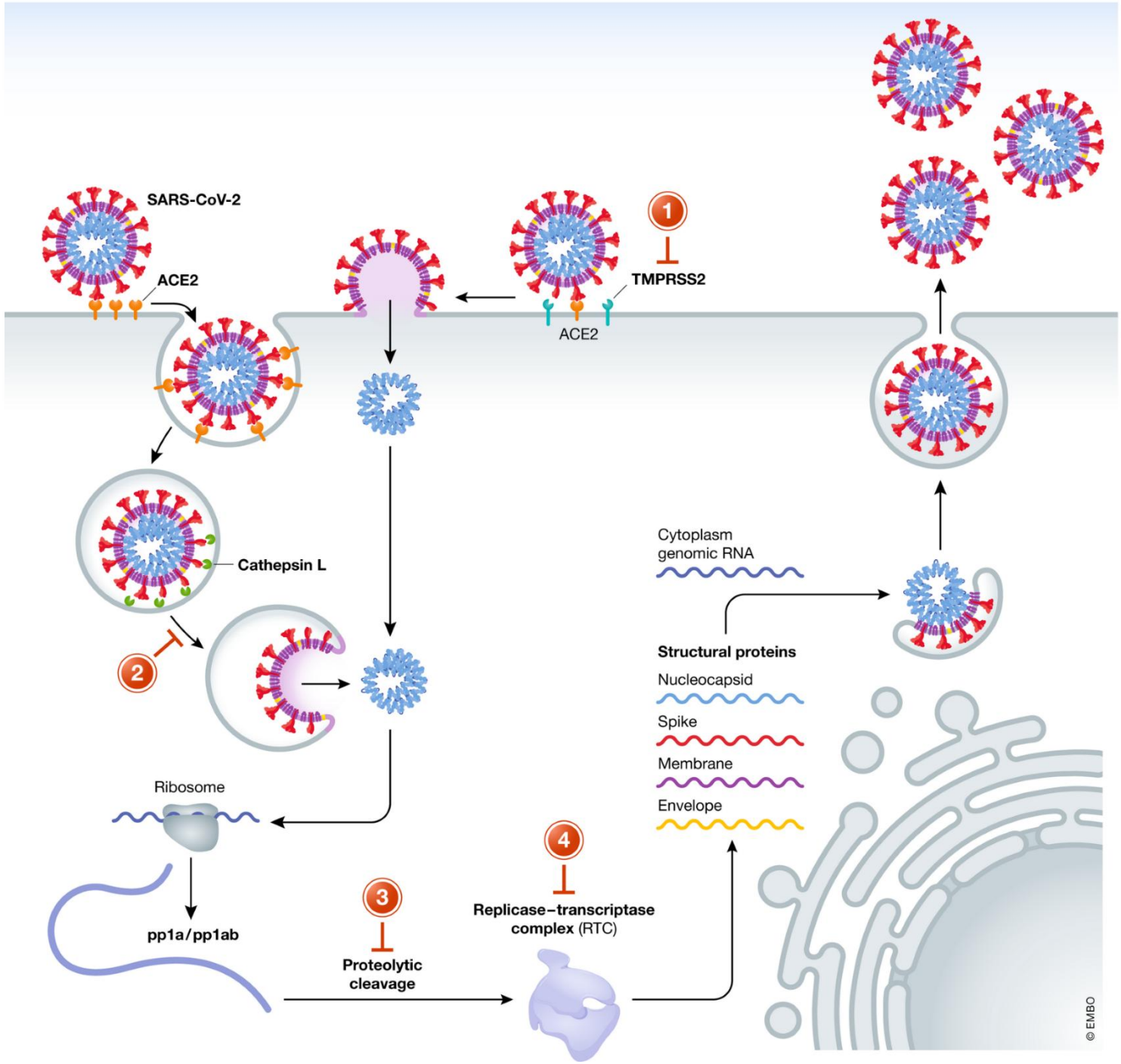


Types of COVID-19 Treatment

ACOG
The American College of Obstetricians and Gynecologists

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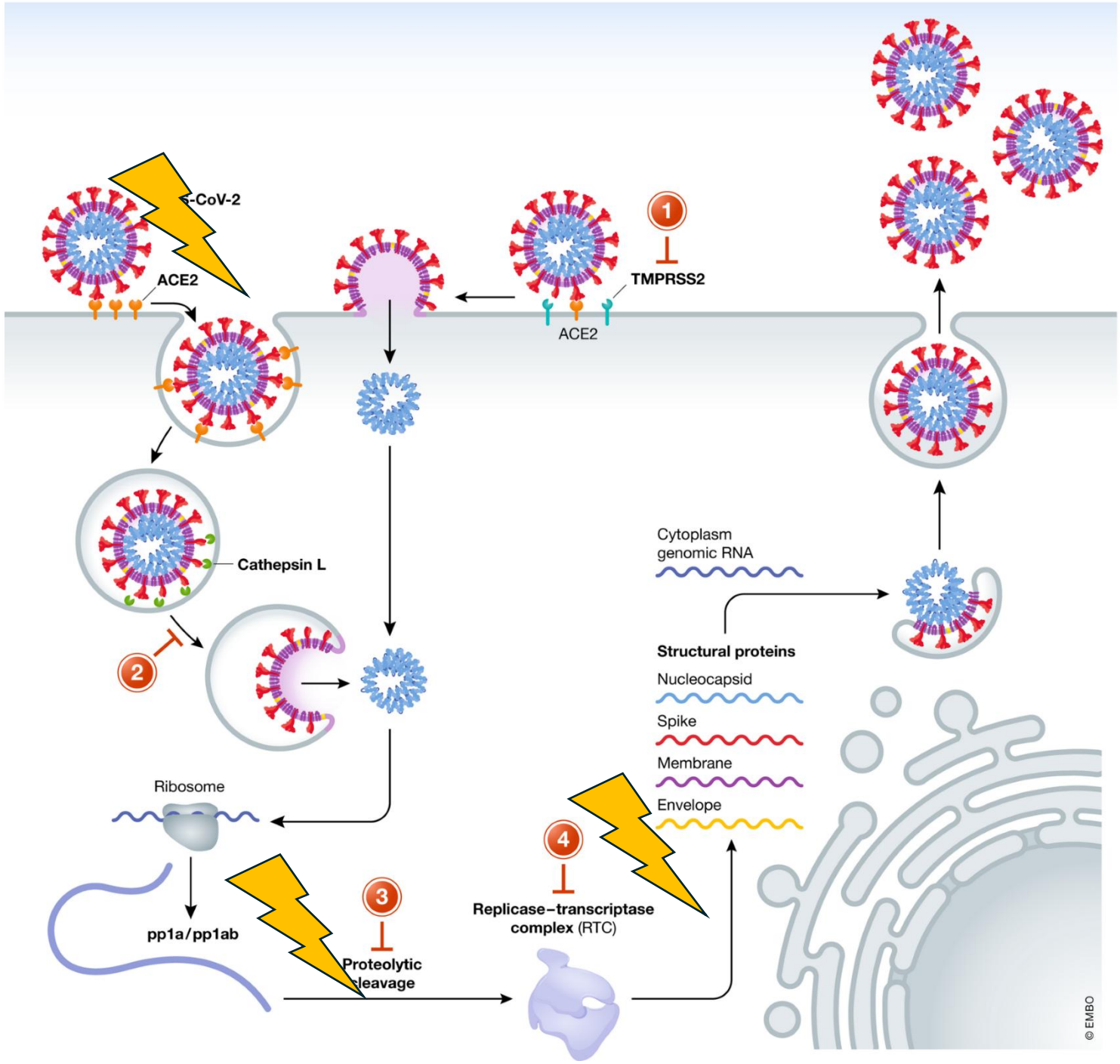
COVID-19



https://www.embopress.org/doi/full/10.15252/emmm.202013105

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COVID-19



https://www.embopress.org/doi/full/10.15252/emmm.202013105

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Multiple historical options for COVID-19 treatment, **nirmatrelvir-ritonavir (Paxlovid)** remains most available

...like influenza antivirals, most won't need it, but some really benefit.

https://www.cdc.gov/covid/treatment/index.html

300mg nirmatrelvir - 100mg ritonavir twice per day for 5 days

Start ASAP, little benefit when started after 5 days from symptom onset



https://reuters.com/business/healthcare-pharmaceuticals/pfizer-price-covid-19-drug-paxlovid-1400-five-day-course-wsj-2023-10-18/

Who benefits the most from nirmatrelvir-ritonavir (Paxlovid)?

- Mild to moderate COVID-19 at **high risk** for progression to severe disease
  - High risk—chronic medical conditions, smoking, obesity, >65yo
- Younger, healthier adults, especially with vaccination, unlikely to benefit

https://www.nejm.org/doi/full/10.1056/NEJMoa2309003


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Can children and pregnant women take nirmatrelvir-ritonavir (Paxlovid)? Yes, but...

- Must be 12 years and older, weigh more than 40kg (88lbs)
- Pregnancy excluded from clinical trials so little evidence
- NIH and ACOG recommend **against witholding** treatment, acknowledge little safety data, but supportive animal data and no clear safety signals in humans

https://idsociety.org/covid-19-real-time-learning-network/therapeutics-and-interventions/who-still-benefits-from-paxlovid/#/+/0/publishedDate_na_dt/desc/

Nirmatrelvir-ritonavir (Paxlovid) requires some cross-checking

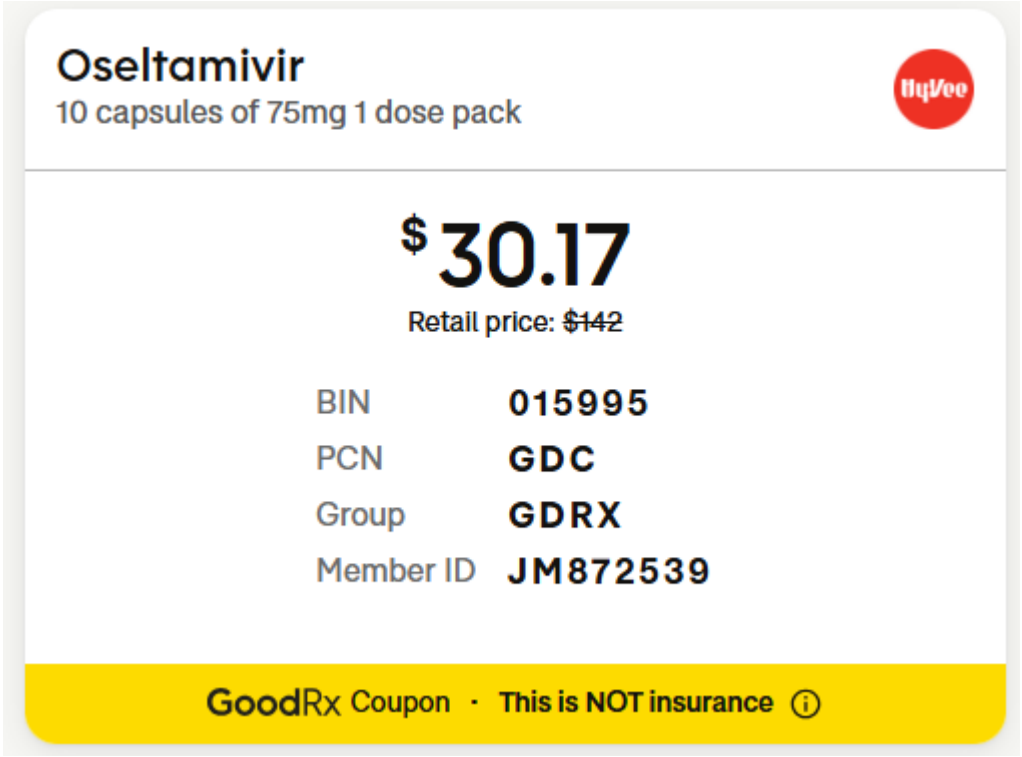
- Dose adjustments needed for chronic kidney disease, similar to oseltamivir (Tamiflu)
- **Need to screen meds for drug-drug interactions**
- **Use Liverpool Drug Interaction Checker**
- Viral rebound 0.8-6.6%

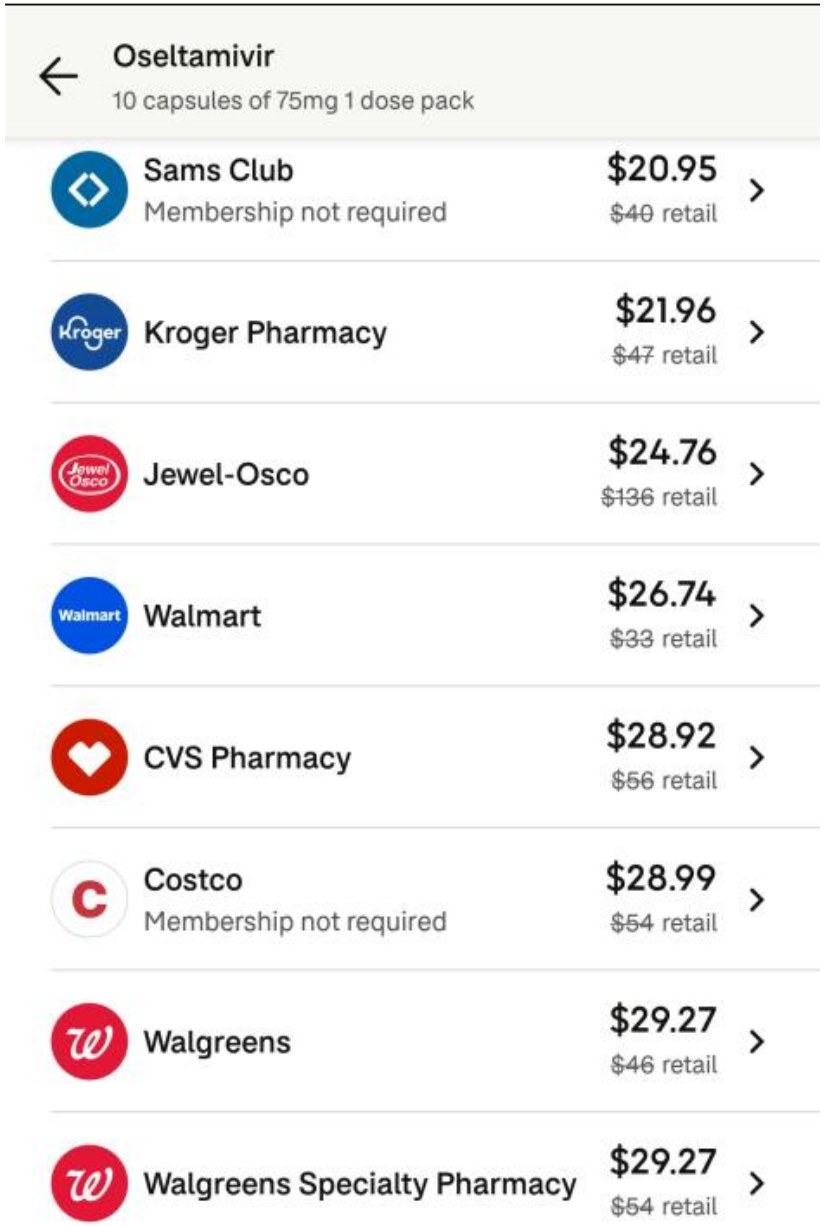
https://www.covid19-druginteractions.org/checker
https://www.hiv-druginteractions.org/checker



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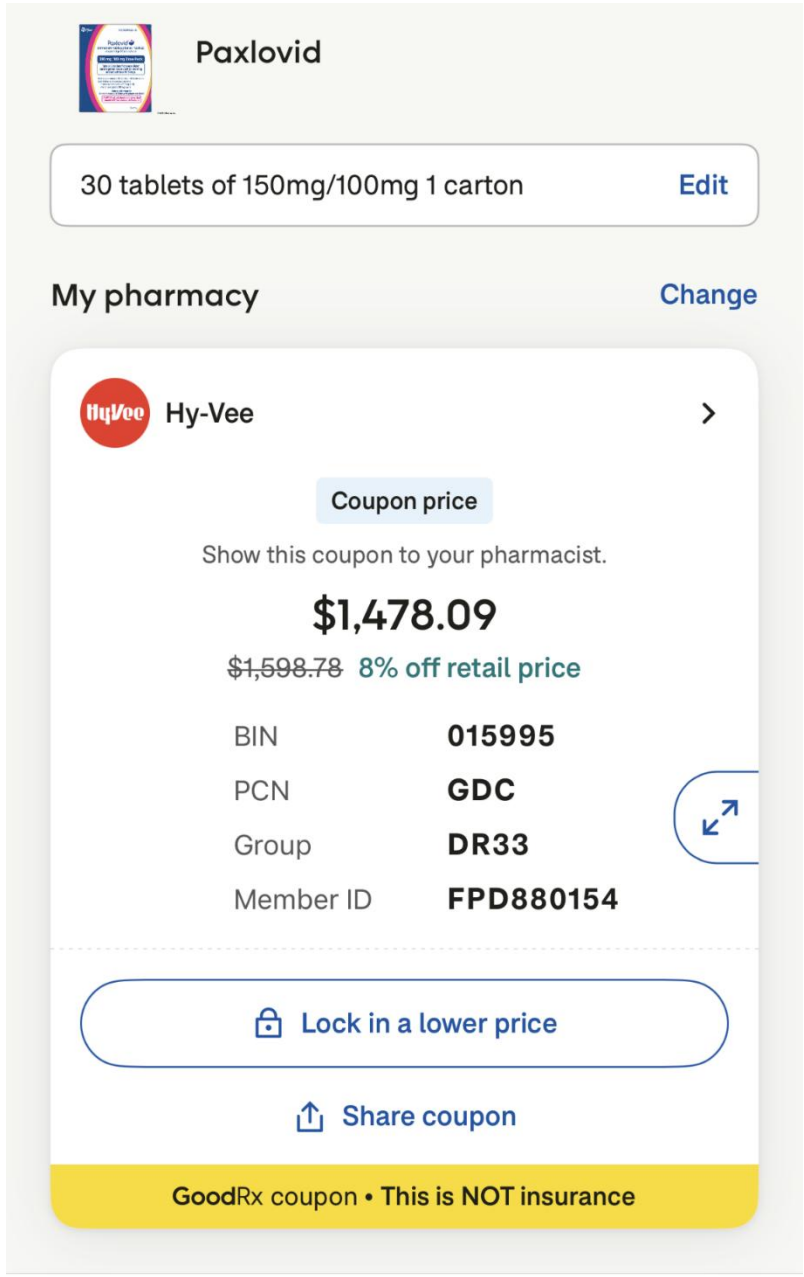


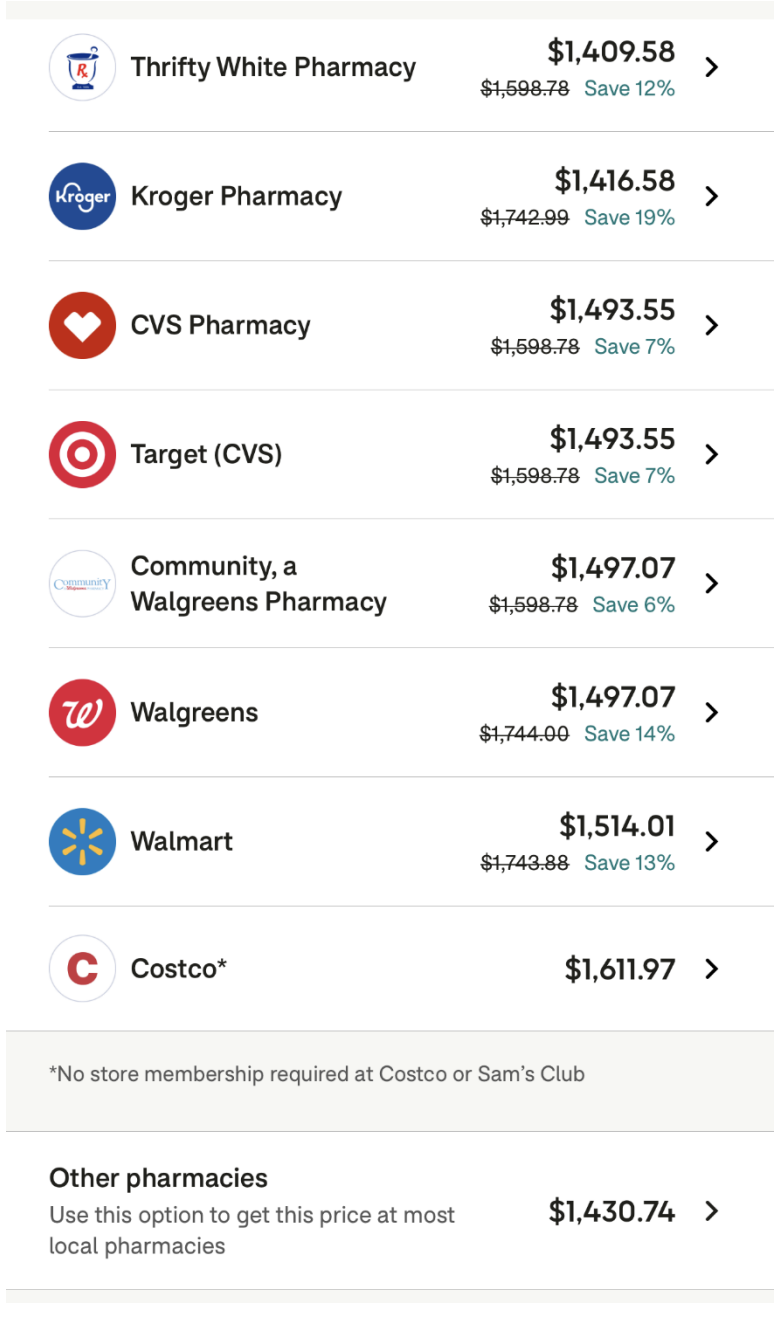


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GoodRx

Nirmatrelvir-ritonavir (Paxlovid) cost?





Other pharmacy prices

GoodRx

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Nirmatrelvir-ritonavir (Paxlovid) cost?



https://www.cdc.gov/covid/media/pdfs/2024/07/Treatment-PDF_PAXCESS-Brochure.pdf

CDC Emergency Preparedness and Response



COCA Calls | COCA | CDC

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Respiratory Vaccine Recommendations

Shelly Jensen, RN, BSN
Immunization Nurse Clinician, Iowa HHS

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Influenza Vaccine

- Routine annual vaccination for all persons ≥ 6 months who do not have a contraindication
- Children 6 months–8 years who have not received ≥ 2 doses before July 1, 2026, require 2 doses this season
- New available vaccine: mFlusiva (mRNA) for persons 50 years of age and older

CDC recommendations for influenza vaccination from the July 2025 immunization schedule remain in effect for the 2026-2027 influenza season

ACIP Recommendations Summary | Influenza (Flu) | CDC

RSV Vaccine: Adults

- 75 years or older: single dose
- 50–74 years at increased risk: single dose
- Available vaccines: Abrysvo, Arexvy, mRESVIA
- Timing: ideally late summer or early fall (can be given at any time of year)

RSV Vaccine: Pregnancy

- Pregnant 32 0/7 weeks–36 6/7 weeks gestation
- Timing: September–January
- Only approved vaccine: Abrysvo
- Single dose for those who have not previously received vaccine; revaccination not recommended for subsequent pregnancies

RSV Monoclonal Antibody: Infants & Young Children

- Nirsevimab (Beyfortus):
  - Infants <8 months born during or entering their 1st RSV season
  - Young children 8–19 months entering their 2nd RSV season at increased risk for severe RSV disease
- Clesrovimab (Enflonsia):
  - Infants <8 months born during or entering their 1st RSV season
- Timing: October–March

COVID-19 Vaccine

CDC recommendations for COVID-19 vaccines from the July 2025 immunization schedule remain in effect for the 2026-2027 season.

Healthcare Professionals: Immunization Schedules | CDC

COVID-19 Vaccine Recommendations

- A 2026-2027 COVID-19 vaccine is recommended for adults ages 18 years and older
- A 2026-2027 COVID-19 vaccine is recommended for all children ages 6 months–17 years with moderate or severe immunocompromise; for all other children, a COVID-19 vaccine is recommended through shared clinical decision making

Interim Clinical Considerations for Use of COVID-19 Vaccines in the U.S. | CDC

Q **Can I get multiple vaccines against respiratory viruses at the same time?**

A Yes, this is common practice. While there are some exceptions, most vaccines, including for flu, COVID-19, and RSV, can be safely given at the same visit.



Talk to your doctor or pharmacist to learn more.

CDC

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Resources

- RSV Immunization Guidance for Infants and Young Children | CDC
- RSV Vaccine Guidance for Adults | CDC
- RSV Vaccine Guidance for Pregnant Women | CDC
- Respiratory Syncytial Virus (RSV) Prevention (AAP)
- AAP Flu Guidance
- AAP Recommendations for COVID-19 Vaccines
- Flu Vaccine | Health & Human Services

Resources

- Home | Immunize.org
- Vaccine Education Center | Children's Hospital of Philadelphia
- Vaccination Recommendations by the AAP
- Respiratory Virus Vaccines: Clinical Guidance And Resources | AAFP
- Consolidated respiratory virus immunization recommendations | AMA
- ACOG Releases 2026-27 Respiratory Virus Season Immunization Recommendations for Pregnant and Postpartum Individuals | ACOG

Contact Information

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Immunization Nurse Clinician, Iowa HHS

shelly.jensen@hhs.iowa.gov

1-800-831-6293 x 1

Laboratory Respiratory Surveillance in Iowa

Jeff Benfer, Molecular Biology Supervisor, SHL

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Overview

- All labs that do influenza testing throughout the state play an important role in influenza surveillance and the ability for the CDC to develop vaccine recommendations and detect novel flu strains and antiviral resistance.
- All labs that do any respiratory virus testing and report their results to the Respiratory Virus Survey are also contributing to national surveillance.
- The flu specimens that labs submit to SHL, we submit a strategic subsampling based on geographic distribution throughout the state of those specimens every two weeks for sequencing.

Iowa Respiratory Surveillance Testing Guidance 2026/2027

- All labs please send to SHL:

  Up to One flu positive and One Positive SARS-CoV 2 and One RSV Positive for PCR per week, per facility

- Note: sequencing results not reported back to submitting facility

- Contact Iowa HHS or SHL for guidance during a respiratory outbreak.

SHL influenza surveillance testing and sequencing serves the following purposes:

- Demonstrates predictive value and accuracy of other tests
- Novel virus detection and monitor for variants of interest or concern (high path avian H5 for example)
- Contribute samples check for antiviral resistance, vaccine strain selection and match to current vaccine
- Surveillance testing is provided at no cost and is partially supported by the Centers for Disease Control and Prevention

Purpose of specimens submitted to SHL

- The goal for this is to have consistent low/moderate levels of specimen submission over the course of the entire respiratory season for subtyping and further characterization.
- Additionally, we are especially interested in flu positive patient specimens if unusual illness or exposure to animals. The goal/purpose of this is to potentially identify novel or increase virulence influenza viruses.

For flu surveillance testing this year, SHL will use:

- Hologic Flu/SC2/RSV PCR
- The RSV result added last year, which in new
  - If positive for Flu A they will be reflexed to Flu A subtyping (H3, H1, or possible variants)
  - If positive for Flu B they will be presumed Victoria since Yamagata is considered extinct

Ordering collection kits

- Visit **www.shl.uiowa.edu**
- Click “Order a test”
- Click “Order clinical kits”
- Complete form

Specimen Collection

- Do not send specimens used for other testing, because they may contain a lysis buffer that could react negatively.
- Validated Specimen Types for Flu/SC2/RSV:
  - Nasopharyngeal (NP) Swab
  - Nasal Swab (NS)

For suspect HPAI please call Iowa HHS CADE line 800-362-2736

  - H5 acceptable specimen types NP, NS and Conjuctival Swab if conjunctivitis symptoms are present

Specimen Collection, Continued

- Specimens for testing should be collected within three days of onset of symptoms.
- PCR is a very sensitive test, and precautions should be taken to not cross-contaminate specimens.
- Wear gloves and change before and after collecting specimen.
- Avoid contact with environmental surfaces.
- Fold printed eForm/ Test Request Form in half and place in the side pocket of biohazard bag (not inside biohazard with specimen).
- Make sure the specimen tube contains two identifiers - name and DOB is enough.
- Send via the SHL courier or can mail in a styro container with ice pack.

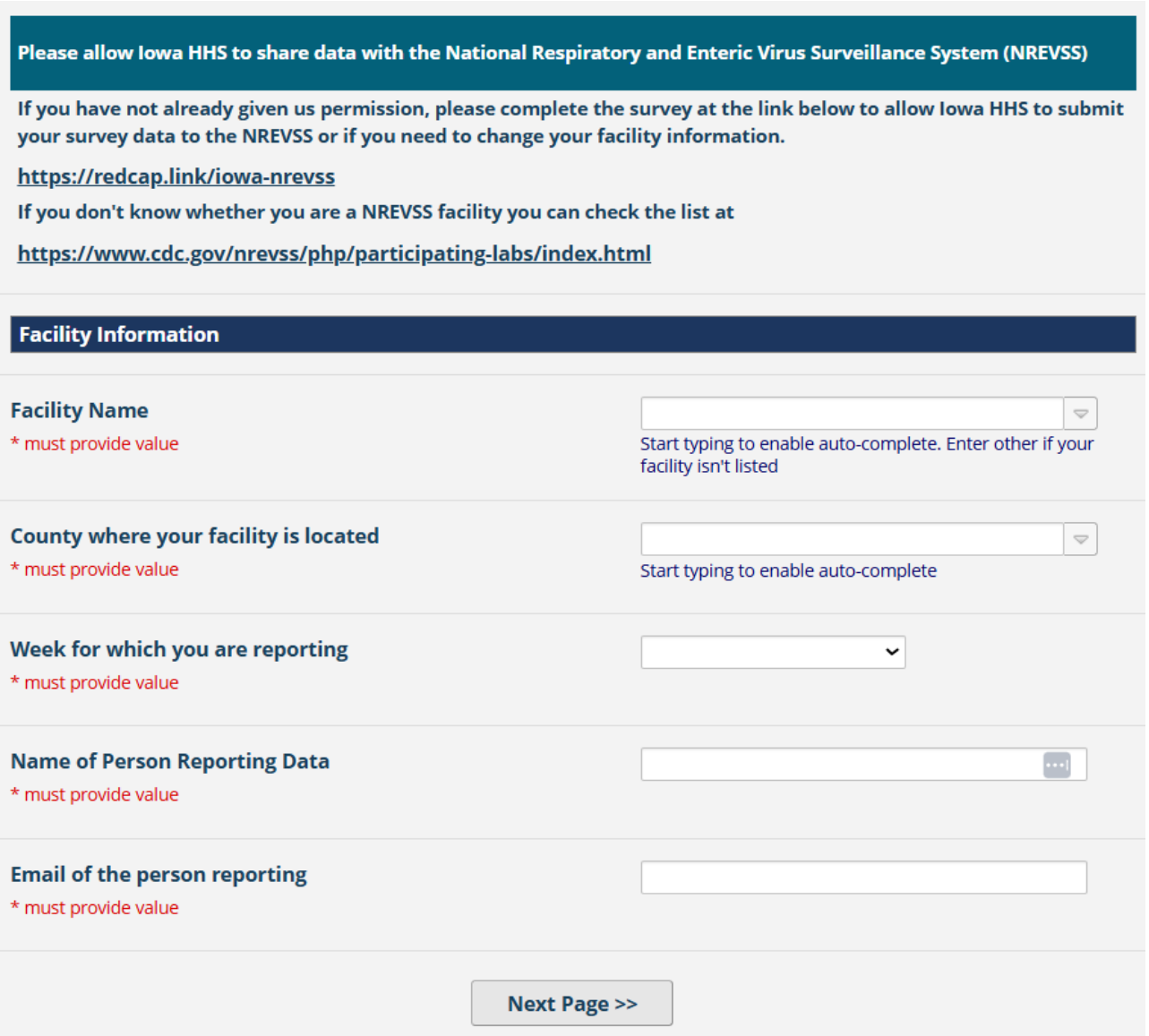
Iowa Respiratory Survey—
Submitting Your Lab's Test Results

- Iowa Respiratory Virus Test Results - Clinical Laboratories
- Contact Kris Eveland at (319) 335-4279 or kristofer-eveland@uiowa.edu if interested
- SHL will send you a link to the public survey
  - Each week, we'll send you the combined results from the previous week
- Benefit
  - Situational awareness - what's circulating in your local area
  - Data is used by Iowa HHS for the weekly respiratory virus report.
- We need more labs around the state for better geographic representation

Iowa Respiratory Survey

Please give Iowa HHS permission to pass your weekly lab totals to NREVSS:

https://redcap.link/iowa-nrevss



Wastewater Surveillance Testing for Flu A, Flu B, and RSV

- Wastewater Testing | State Hygienic Laboratory | The University of Iowa
  - Wastewater Testing Results | Wastewater Testing - State Hygienic Laboratory
    - SHL Wastewater WWTP Dashboard | Tableau Public

Laboratory Contact Information

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Thank you for participating!!!


Questions?
IOWA
Health and
Human Services

Rebroadcast

- Wednesday, October 21, 10 a.m.
  - If you registered for this event, you will receive an invite after today.