

Heartland Health Region

**PANDEMIC INFLUENZA
PLAN**

Version 6

**With special focus on H1N1 Influenza
October 5, 2009**



HEARTLAND HEALTH REGION
*Building a region of healthy people
and healthy communities*

ACKNOWLEDGEMENTS

The Heartland Health Region Pandemic Influenza Plan Version 6 represents the hard work and dedication of many staff members of the program and services provided by the Region. Through their dedication and commitment, the Heartland Health Region is able to provide to the residents and staff a comprehensive and integrated plan to ensure emergency preparedness by the Region for the possibility of an influenza outbreak.

The members of the Pandemic Planning Core Committee who are coordinating the ongoing development of the Region's Pandemic Influenza Plan are:

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Throughout this process the Committee has drawn on the expertise of Directors and Managers throughout the Region. Without their assistance this Plan would not have been possible.



HEARTLAND HEALTH REGION
PANDEMIC INFLUENZA PLAN

VERSION 6
OCTOBER 5, 2009

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SECTION 1 INTRODUCTION AND OVERVIEW

Purpose of Plan

The Heartland Health Region (HHR) Pandemic Influenza Plan was developed by the HHR Authority to provide a controlled, organized and coordinated approach for pandemic plan activation, response, deactivation, recovery and review in the event of a Pandemic influenza in the health region. The Health Incident Command System is the response system and structure used by HHR for emergency response and will be used in this situation.

In regards to planning for a pandemic, the Heartland Health Region is responsible for :

- Maintaining a regional pandemic plan
- Holding accountable each affiliated facility/location for the completion of local plans
- Ensuring coordination of services with external stakeholders.

The Heartland Health Region Pandemic Plan must meet national and provincial requirements as adapted for regional and local level specific needs.

The Plan provides guidelines for health service providers in each program and service to cope with the outbreak and management of large numbers of patients/clients during the pandemic. An Influenza pandemic is unlike any other public health emergency or community disaster in that it will impact over a prolonged period of time and affect many areas across the province and, indeed the country, simultaneously. This plan is concerned with responding to the needs of the population of Heartland Health Region in the event of an Influenza pandemic.

Historical Background

A pandemic plan serves to strengthen a health care system's capacity to prevent, be prepared for and respond to public health risks. This plan is informed by best practice recommendations for disasters and public health emergencies. In the past century, Influenza A viruses have been responsible for a number of pandemics. Each pandemic was unique in how the health of the public was affected. There have been three major Influenza A outbreaks in the 20th century: the 1918 Spanish Flu, the 1957 Asian Flu, and the 1968 Hong Kong Flu. More recently, since 2004, an Avian Influenza outbreak (H5N1) spread from South East Asia to Europe and Africa. In the Spring of 2009, the world began responding to an influenza outbreak called H1N1 (Swine Influenza). New strains of influenza vary in rate of spread, the severity of symptoms caused, and the part of the population most severely affected. An appropriate response to future pandemic influenza must be based on learning from the past and the unique characteristics of a new strain of influenza virus.

Framework for Plan

This plan has been developed within the framework of the "The Canadian Pandemic Influenza Plan (February 2004)", and "The Saskatchewan Pandemic Influenza Plan Version for the Health Care System September, 2009. The plan aims to ensure that services in Heartland Health Region are prepared as much as possible to respond to pandemic influenza affecting the population of the Region.

Regional Health Authorities (RHAs) are key stakeholders that are directly responsible for the delivery of health care services across the province. The Ministry of Health has developed the Saskatchewan Pandemic Influenza Plan for the Healthcare in Saskatchewan (SPIP) to assist Regional Health Authorities, and provide consistency for a coordinated provincial response. The SPIP links to the Canadian Pandemic Influenza Plan for the Health Sector (CPIP) and is synchronized with the World Health Organization (WHO) pandemic influenza response phases.

SECTION 2 GOALS AND OBJECTIVES

The **goals** of the HHR Pandemic Influenza Plan are to coordinate efforts of the regional health care system to effectively:

- *minimize serious illness and death*
- *minimize societal disruption*

The **objectives** are to achieve:

- A collaborative process amongst stakeholders at all levels that defines a response to best fit HHR's needs in keeping with National and Provincial strategies;
- A regional response that has clearly identified roles and responsibilities;
- A plan and response that other stakeholders in the Region may use to inform their pandemic planning; and,
- Public confidence that the health care sector in Heartland Health Region is prepared to effectively respond to a pandemic threat.

SECTION 3 ROLES AND RESPONSIBILITIES

The following sets out the roles and responsibilities of agencies at all levels in responding to a pandemic:

International

World Health Organization (WHO)

Pandemic influenza is a global concern that requires international, federal, provincial, and territorial (F/P/T) legislation for an effective response. WHO Pandemic Preparedness determines the global phase, coordinates available international resources, and makes recommendations for action to national authorities.

Federal

Public Health Agency of Canada (PHAC)

PHAC will coordinate a national emergency health response by working with the provinces and territories. This will include liaison with international authorities, analysis and reporting of epidemiological data, ensuring safety and distribution of vaccine, allocation and distribution of national stockpiles, and implementing national communication strategies, plans and frameworks.

The Chief Public Health Officer (CPHO) of Canada will determine the Canadian level of response to the WHO phase of influenza pandemic with advice from federal and provincial experts, and provide an assessment of the severity of the influenza pandemic.

Health Canada

Health Canada has authority to negotiate agreements and provide funding for technical and operational activities related to health. Health Canada is the regulatory authority in the country that is responsible for ensuring the safety, effectiveness, and quality of all drugs, including vaccines, marketed in Canada for human use. Vaccine regulation in Canada is subject to the provisions of the *Food and Drugs Act* and regulations.

First Nations and Inuit Health (FNIH)

FNIH will provide community and public health services for individuals living on First Nation reserves, which includes the administration of vaccine, dispensing of antiviral medications for early treatment, infection control and self-care education on communities where there are health care workers who are licensed to diagnose, prescribe and dispense medication. Persons from

these communities will have access to necessary health services from RHAs through existing referral patterns.

Provincial

Saskatchewan Ministry of Health

The Minister of Health (MoH) is responsible for planning, developing, organizing, and directing provincial public health surveillance, preparedness, and response for pandemic influenza. The MoH is also responsible for developing a pandemic response framework that guides influenza plans at the RHA and local levels, as well as guide all of Saskatchewan in an informed health response.

The *Public Health Act, 1994*, and *Emergency Planning Act, 1989*, state that the MoH is the legislated authority to respond to public health emergencies, such as a pandemic influenza, and will lead and coordinate the provincial health care system response by:

- Directing provincial disease surveillance activities and participating in national surveillance;
- Coordinating the provision of information to and from RHAs and other service providers as appropriate;
- Directing the overall provincial communication strategy and messages;
- Communicating and obtaining support from the federal and provincial government;
- Coordinating and supporting the health responses of RHAs and other health care sector stakeholders; and,
- Receiving and distributing vaccines, and directing the provincial mass immunization program.

Corrections, Public Safety and Policing (CPSP)

CPSP is the legislated authority to support a municipal response to emergencies. CPSP provides coordination and communication for pandemic planning in non-health sectors, and works with municipalities, businesses, and other Ministries to assist with the development of this and other emergency and disaster plans.

Regional

Regional Health Authorities (RHAs)

The RHAs are responsible for developing a regional pandemic influenza emergency response plan and for ensuring regional development on the local level.

RHAs will:

- Take the lead in providing advice and counsel to all health services/programs within their respective jurisdictions;
- Deliver all required critical health and public health services/programs within their respective jurisdictions including mass immunization and distribution of antiviral medications;
- Maintain a regional surveillance system and report information to the MoH;
- Liaise with local partners, (e.g. first responders, community services, mortuary services, schools, workplaces);
- Collaborate with the MoH in the delivery of public information and education programs;
- Assess capacity of health services and work with the MoH to identify additional/alternate resources;
- Reallocate/re-deploy resources when necessary to ensure reasonable and equitable access to essential services and critical scarce resources; and,
- Declare local public health emergency and utilize legislated powers if necessary.

Municipalities

Municipalities are responsible for developing guidelines and procedures for the management of health emergencies within their jurisdiction. These guidelines and procedures will enable the MoH and RHAs to work in collaboration in order to maintain continuity of essential services and support residents.

Municipalities will be responsible for supporting the Heartland Health Region, maintaining public safety services, essential works and municipal services and co-operating with RHAs in provision of the social service needs of the citizens.

Business and Industry

Businesses are responsible for ensuring safe and healthy working environments for employees in accordance with the existing *Occupational Health and Safety Act* and *regulations*. The Occupational Health and Safety (OH&S) Branch of the Ministry of Advanced Education, Employment and Labour works with employers to assist with the development of OH&S Protocols in pandemic influenza plans.

SECTION 4 GOVERNANCE AND LEGISLATION

Governance

The Minister of Health (MoH) is responsible for developing a framework that coordinates the delivery of services that support a health care system response.

Provincially, the health care system's key stakeholders include the MoH, the 13 RHAs, and provincial health authorities such as the Saskatchewan Cancer Agency (SCA), First Nations Inuit and Health (FNIH), Northern Inter Tribal Health Authority (NITHA), and the Saskatchewan Disease Central Laboratory (SDCL).

Overall

- Public Health Emergencies will be responded to through a cascaded approach; initially at the local authority level, then regionally and finally through provincial assistance.
- Federal jurisdictions will respond as per federal responsibility and collaborate with provincial authorities and in some instances directly through RHAs.
- The MoH will provide provincial leadership and facilitate coordination across jurisdictions.
- Routine business processes and communication pathways/networks will be maintained as much as possible.

Provincial

The MoH is responsible for providing leadership to the health care system response by:

- Monitoring the health of the residents of Saskatchewan.
- Directing the overall provincial communication strategy and messages;
- Communicating and obtaining support from F/P/T government; and,
- Coordinating and supporting the health responses of the RHAs and other health care sector stakeholders (e.g. health professional regulatory colleges, Saskatchewan Disease Control Laboratory and HealthLine), including providing direction regarding:
 - surveillance,
 - public health measures,
 - self-care strategies,
 - vaccines and antivirals,
 - clinical care guidelines/triage, and
 - infection control.

Regional Health Authorities

RHAs are responsible for supporting a local and regional response by:

- Providing frontline service delivery of essential health and public health programs;
- Reallocate/re-deploy resources when necessary to ensure reasonable and equitable access to essential services and critical scarce resources;
- Working directly with local jurisdiction stakeholders across all sectors;
- Communicating to the public, staff and stakeholders in their regions, consistent with provincial direction (communication may be specific to the local situation);
- Communicating ongoing operational status to Saskatchewan Health; and,
- Requesting assistance from the province as necessary.

Legislation

In the event of a pandemic influenza, legislated guidance falls under the provisions of the Saskatchewan *Public Health Act 1994*. In the event that a provincial emergency is declared under the *Emergency Planning Act*, 1989, this Act compliments the *Public Health Act 1994*

The Saskatchewan *Public Health Act, 1994*

This *Act* provides wide powers to the Minister of Health and the Chief Medical Health Officer (CMHO) in the event that:

- A serious public health threat exists in Saskatchewan
- The requirements set out in the order are necessary to decrease or eliminate the serious public health threat

In the event of a pandemic influenza, the MoH and the CMHO will determine the level and degree of health response, but every Medical Health Officer (MHO) in Saskatchewan has powers under the *Public Health Act, 1994*. MHO authority is delegated from RHA boards and the Minister, and is exercised in consultation with the CMHO. The goal is to work in collaboration to achieve a coordinated approach. The *Public Health Act, 1994*, enables a centralized coordinated approach and provincial command structure appropriate to a province-wide threat. In the CMHO's absence, the Deputy CMHO will assume central responsibilities.

The *Emergency Planning Act, 1989*

This *Act* is the legal framework for the declaration of local and provincial emergencies in Saskatchewan. The Lieutenant Governor in Council of Saskatchewan is responsible for determining that an emergency exists and for Declaration of an Emergency. The Declaration of Emergency is in place for 14 days and may be extended by the Lieutenant Governor in Council. The Declaration of an Emergency gives the Minister of Corrections, Public Safety and Policing wide sweeping powers. The Lieutenant Governor in Council may make regulations prescribing any matter that the Lieutenant Governor in Council considers necessary with respect to emergency planning.

If the pandemic is severe and there is considerable societal disruption, a State of Emergency may be declared by the Lieutenant Governor in Council. The Declaration of State of Emergency provides sweeping powers to the Ministry of Corrections, Public Safety and Policing to perform actions required to address the emergency.

Under provincial and federal legislation, all local government bodies (municipalities, regional health authorities, education authorities, etc.) may apply for compensation to offset extraordinary costs through the Disaster Financial Assistance program.

Other legislation that may come into play are as follows:

The Saskatchewan *Occupational Health and Safety Act 1993*

The Federal *Emergencies Act, 1988*

The Federal *Emergency Preparedness Act, 1985*

SECTION 5 WORLD HEALTH ORGANIZATION PANDEMIC PHASES

The World Health Organization (WHO) uses a six-phased approach to pandemic-influenza preparedness and response. Phases 1–3 correlate with preparedness. Phases 4–6 signal the need for response and mitigation efforts and recovery activities.

The Canadian Pandemic Influenza Plan (CPIP) and Saskatchewan Pandemic Influenza Plan (SPIP) preparedness and response activities are based on the WHO phases. WHO declares the phase level based on world wide distribution of an influenza virus. The Canadian and Saskatchewan response to the WHO declared phase will be dependent on local conditions and spread, and may be different among jurisdictions. For example, Canada as a whole is not likely to be responding to the same level of impact across each province. One province/territory may be working to mitigate impact from a large number of affected people, and another may have only a few cases and be attempting to contain the pandemic with more stringent action in quarantine and public health measures. In addition, the SPIP's actions follow a gradient from mild, moderate to severe outbreak impact.

RHA response actions will be determined based on the MoH's response and tailored to RHA-specific needs and characteristics.

WHO Pandemic Phases

In **Phase 1** no viruses circulating among animals have been reported to cause infections in humans.

In **Phase 2** an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. For example, a potential pandemic virus, avian influenza A:H5N1 has been at Phase 3 since 2004.

Phase 4 is characterized by verified human-to-human transmission of an animal or human-animal influenza re-assortment virus able to cause “community-level outbreaks.” The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that suspects or has verified such an event should consult immediately with WHO so that the situation can be jointly assessed and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a foregone conclusion.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

Phase 6, the pandemic phase, is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in **Phase 5**. Designation of this phase will indicate that a global pandemic is under way.

During the **post-peak period**, pandemic disease levels in most countries with adequate surveillance will have dropped below peak observed levels. The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur. Countries will need to be prepared for a second wave.

Previous pandemics have been characterized by waves of activity spread over months. Once the level of disease activity drops, it will be critical to balance this information with the possibility of another wave. Pandemic waves can be separated by months so an immediate “at-ease” signal may be premature.

In the **post-pandemic period**, influenza disease activity will have returned to levels normally seen for seasonal influenza. It is expected that the pandemic virus will behave as a seasonal Influenza A virus. At this stage, it is important to maintain surveillance and update pandemic preparedness and response plans accordingly. An intensive phase of recovery and evaluation may be required.

SECTION 6 EPIDEMIOLOGY AND ESTIMATED IMPACT

The process of epidemiology is to study the causes, distribution and control of disease among populations and identify a relationship between these factors to assist in the tailoring of an appropriate response (i.e. use of antivirals, quarantine, travel restrictions, etc.)

Heartland Health Region’s population of approximately 44,000 persons lives across the health region area in rural and urban settings, including 77 towns/villages & 44 Rural Municipalities. These jurisdictions will be directly impacted by pandemic Influenza and need to consider its implications.

A new influenza virus is expected to be transmitted efficiently from person to person resulting in large numbers of people being infected. This would be due mostly to that fact that there will be little to no immunity to the new virus on a population basis. A population is less susceptible overall if the new virus has circulated previously. For example, the H2N2 virus which caused the 1957 pandemic circulated widely up until 1968; therefore, the population born prior to 1968 is expected to have some residual immunity to this particular strain should it begin to circulate again.

Using epidemiology information collected from past influenza outbreaks it is possible to estimate the impact on Saskatchewan and Health Regions in future outbreaks. Since outbreaks can vary in severity, plans of preparation and response must include mild, moderate, and severe levels of readiness.

Estimates based on an Attack Rate of 15 – 35%

The following chart is an estimate of the impact of the H1N1 Virus for both the Province and Heartland Health Region. These estimates are based on a provincial population of 1 million and Heartland Health Region’s population of 44,000.

	Number becoming clinically ill (clinical illness will vary in severity)	Number requiring outpatient care	Number requiring Hospitalization	Number likely to die from influenza or complications of influenza
<u>Mild</u>				
Province	150 - 300,000	1000 - 60,000	10 – 1000	5 – 300
HHR	6,600 – 15,400	44 – 3,100	0 – 52	0 - 1
<u>Moderate</u>				
Province	150 - 300,000	60,000 - 160,000	1,000 - 2,800	300 - 1,000
HHR	6,600 – 15,400	2,600 – 7,700	4 - 12	1 - 3
<u>Severe</u>				
Province	150 - 300,000	> 160,000	2,800 - 6,000	1,000 - 15,000
HHR	6,600 – 15,400	> 6,700	12 - 26	3 - 45

SECTION 7 KEY PLANNING ASSUMPTIONS

Heartland Health Region has used key planning assumptions to lead to decisions based on the characteristics of previous outbreaks. The following assumptions utilized by the region are a reflection of international expert scientific opinion to be used to guide pandemic influenza response activities.

Expected Course of a Pandemic Influenza

Pandemics of respiratory illness are inevitable and clinical severity will vary from mild to severe. A pandemic may last between 12 to 18 months and may occur in two or more waves. In a single community, a pandemic influenza wave of illness will generally last six to eight weeks, but this time period may vary.

Characteristics of the Pandemic Influenza Virus

Since there is likely to be no specific immunity to the new virus on a population basis, the new virus will be transmitted efficiently from person to person resulting in large numbers of people being infected.

The novel virus is expected to have an incubation time of one to three days, and be infectious 24 hours prior to symptoms and lasting up to seven days in adults (maybe prolonged in children). Most transmission is likely to occur by large droplets (i.e. sneeze or cough) or direct contact with contaminated surfaces.

The course of illness, without complications is three to seven days, but return to prior well being may take weeks. Sick people should be on home isolation. Individuals who recover from illness caused from the pandemic influenza strain will be immune to further infection by that strain.

Critical Shortages

Distribution of effective preventative and therapeutic measures (vaccine and antiviral medications) will be an issue, and decisions as to what population groups have priority for receiving same will have to be made on ethical bases. There also may be critical shortages of healthcare resources such as beds, equipment and supplies.

Absenteeism

During the peak – two weeks of illness in the community – an absenteeism rate from work and school may reach 20% to 25%. This may be due to personal illness, caring for others, pandemic influenza related public health measures (i.e. school closures), and normal baseline absenteeism – an 8% average in a normal winter. Business continuity response should plan for up to a third of the workforce absent, for all reasons, in this peak period during a severe pandemic.

Vaccine

A vaccine supply is typically not available until four to six months after the pandemic influenza strain is confirmed. Even though sufficient vaccine for the Canadian population is expected, it is anticipated that the new pandemic vaccine will become available in batches. This will require the PHAC to implement specific recommendations with regard to nationally determined priority groups for immunization in order to minimize serious illness, overall deaths and society disruptions. It is expected that two doses of vaccine will be required to produce an effective immune response. It is likely that the vaccine will require adjuvant to produce an increased immune response and for dose sparing in order to allow for the maximum number of people to be immunized.

Antiviral Medication

It is assumed that the virus will be sensitive to the antiviral medication in the provincial and federal stockpiles. Testing for resistance will be ongoing. Antiviral medication will be available for treatment for approximately 17.5% of the Saskatchewan population.

SECTION 8 ETHICS

The balance between individual and population interests shift according to the nature of any health risk being addressed. During an infectious disease outbreak there are many kinds of health risks to the public. Population interests will prevail and individual interests may be temporarily affected.

General Ethical Principles

Consistent with the CPIP, the overall ethical principles informing the HHR Pandemic Influenza Plan are as follows:

- Protect and promote the public's health;
- Ensure equity and distributive justice;
- Respect the inherent dignity of all persons;
- Use the least restrictive means;
- Optimize the risk/benefit ratio; and,
- Work with transparency and accountability.

Limited resources will be a reality during a severe outbreak of influenza and requires the adoption of the ethical principle of *respect for the inherent dignity of all persons*. This means that although some people may not be initially eligible (i.e. who gets vaccinated and when), they must be informed and cared for in a way that is respectful and maintains dignity. *Distributive justice* implies the distribution of resources in a fair and equitable manner based on need.

The ethical principle of *least restrictive means* stipulates that personal autonomy should be infringed upon only to the extent necessary to ensure the public good. Public health ethics inform decisions made during a pandemic response to *optimize a risk/benefit ratio* and *to maintain transparency and public accountability*.

SECTION 9 PREPAREDNESS & RESPONSE

Chapter A: Emergency Response

In any emergency there are key players and organizations that have roles and responsibilities that need to be involved at all levels of planning. These include international, federal, provincial and local municipalities. This is particularly true in regards to a pandemic where the World Health Organization and the Public Health Agency of Canada play a crucial role in providing information and direction to the provinces and the health regions.

Pandemic influenza is a worldwide outbreak of communicable disease caused by a novel virus that will require a comprehensive response effort by the health system. The goal of emergency response is to reduce societal disruption and disruption to health services as much as possible during and after a pandemic by preparing in advance.

International

The World Health Organization (WHO) monitors the development of new strains of influenza. They will provide information to all authorities when it is needed. WHO's plan can be found at: www.who.int/csr/en/

Federal

The Public Health Agency of Canada (PHAC) will provide nationwide guidance and coordination. They will be responsible for monitoring pandemic activity and will provide liaison between Canada and many other nations. A National Pandemic Influenza Committee is already in existence with representatives from all provinces and territories. The federal plan can be found at: www.phac-aspc.gc.ca/cpip-pclcpi/index.html

Provincial

The Saskatchewan Ministry of Health (MoH) will lead the health sector response for the province of Saskatchewan. During influenza pandemic, the Ministry will activate their Health Emergency Operations Centre and contingencies to support coordination with the Public Health Agency of Canada, other jurisdictions, regional health authorities, and other ministerial partners.

Each provincial ministry and Crown will have contingency plans for the delivery of provincial services during influenza pandemic.

The Ministry of Corrections, Public Safety, and Policing, Sask EMO will coordinate government response with all ministries and Crowns regarding consequences of a pandemic across all sectors. They will communicate with municipalities, monitor the effect of the pandemic on prioritized services, coordinate volunteer activities and federal assistance programs and monitor the need for support among families of victims. www.health.gov.sk.ca/influenza-monitor

Municipalities

All municipalities have the responsibility to their residents to maintain local essential services and support their residents. Most have emergency preparedness plans in place using the philosophy of an "all hazards approach" and therefore have been using this as an outline for a

large medical disaster. Their responsibilities include:

- Continuing local government.
- Maintaining public safety and essential services. (Police, fire, waste management, etc.)
- Supporting their local Regional Health Authority in managing this disaster. This may include support in accessing local information sources, assistance with setting up an off-site facility, utilization/closing of public buildings, etc.

Heartland Health Region

In the event of an influenza pandemic, using a Federal/Provincial/RHA collaborative approach, the Chief Executive Officer for the Region in collaboration with the Ministry of Health and the Region's Medical Health Officer will determine the level and degree of a regional health care system response.

- **Regional Health Emergency Operations Centre (RHEOC)**

The RHEOC will be activated at the call of the Manager on Call or the CEO and/or designate:

- upon a call from the Ministry of Health to activate or
- upon a decision to activate made upon consultation with the Outbreak Control Team.

The RHEOC will be operated out of the Heartland's Regional Office and will utilize the Incident Command Structure set out in the Region's Emergency Preparedness Plan (EPP).

The CEO will become the Regional Commander and activate the Incident Management System. The Incident Management System provides an approach to managing any incident by dividing the event into components of a command and control structure that corresponds to responsibilities and objectives, and then designate people to be responsible for outcomes. Regional Commander will appoint staff to carry out the functions of the RHEOC. (*See Annex 9A*)

- **Outbreak Control Team**

In the event of a Pandemic the RHEOC will delegate some or all of its authority for the response to the Outbreak Control Team. The Outbreak Control Team co-chaired by Director of Public Health and the Medical Health Officer will then assume responsibility for the response as it relates to the Pandemic. The team will take direction from the RHEOC and consult with the Ministry of Health's Health Emergency Operations Centre. The team will also provide direction and support to the Regional Health Care Facilities and Programs affected and communication to the residents of the Region and its stakeholders. (*See Annex 9A*)

Annex 9A

- Table 1 RHEOC Activation Chart – Stage One
- Table 2 Outbreak Control Team Organizational Chart

Chapter B: Health Services and Business Continuity Plans

In order to respond effectively to pandemic influenza, special measures for delivering health services have to be implemented. During influenza pandemic it is expected the health care system will need to deal with both an increased demand on the system and a high rate of absenteeism. Assuming there will be a large number of cases and limited resources during a pandemic, the measures within the plan are designed to ensure that pandemic patients are appropriately triaged and cared for, while provisions for essential medical services continue.

Over-Riding Principles for Delivering Services:

- Client/patient safety and quality of care is of primary concern.
- Essential programs and services are maintained to meet the needs of the regional population.

- Establish trigger points for when adjustments in services are required.

Business Continuity Plans (BCP)

Purpose

Business Continuity Plans address:

- Prioritizing services to be provided (i.e. no elective services);
- Maximum independent use of existing structures, facilities, equipment and staff;
- Use of other facilities
- Movement of patients between facilities or regions for specialized care.

BCPs relate to a disruption in the business of delivering health care services. A disruption could be an influx of clients or a reduction in staffing. In either situation, establishing specific trigger points for adjusting services is necessary to maintain priority services and programs.

In developing BCP in Heartland Health Region specific programs and services have identified their day-to-day services and categorized them (which ones need to be reinforced, which ones must continue to run, which ones can be reduced, and which ones can be removed) according to a ranking or prioritizing order. Plans must be able to respond to a 10% to 20% increase in demand on services and should anticipate a 33% reduction of the workforce during the peak of the illness (two weeks of illness in the community). An **algorithm** is used in the initial evaluation of the facility's ability to respond to the current situation. (*See Annex 9B*)

Trigger Points

In a pandemic situation, the trigger points used for a particular service will be different from other services. For some programs trigger points can not be established, due to the complex nature of the pandemic situation, Situation Report Forms will be used to determine adjustments to programs and services. Trigger points may be implemented all at once, or in stages, depending on the geography of the impact. Trigger points indicating when to implement adjustments to delivery of services to address both surge capacity and absenteeism have also been set for most programs and services. (*See Annex 9B List*)

Facilities may also have their own internal trigger points to assist in dealing with the variety of scenarios that may occur in a pandemic situation. Facility triggers focus on reduction of non-essential services due to staff shortages.

Adjustments to Services

The following adjustments to services may be made once trigger points are reached:

a) Acute Care

The Heartland Health Region will make every effort to maintain Emergency Outpatient services in all existing health centres. Facilities will submit a daily status report relating to their particular situation. Service modifications to acute care include a plan to:

- Cancel all elective outpatient procedures
- Cease specialty programs – surgery/COPS
- Implement Influenza Assessment Sites
- Modify admission criteria and protocols, e.g. cease or freeze admissions. Physicians to access alternate regional facilities
- Divert emergencies/implement bypass protocols
- Limit or restrict visitors
- Close specific departments. e.g. laboratory and x-ray

b) Laboratory & X-ray

- Routine lab and x-ray services may be reduced.
- Visits by itinerant surgeons, e.g. ortho, may be postponed or cancelled.
- Lab/x-ray departments where staffing levels are minimal may be closed, with consideration given to maintaining on call services only.

c) Long Term Care

Long-term care (LTC) services will be maintained in all existing LTC facilities. Adjustments will be to:

- Minimize admissions to long-term care – admit clients only in extreme circumstances.
- Discharge residents to family wherever possible.
- Reduce care service to residents to manageable levels with regard to client/resident and staff safety.

d) Home Care

- Limit home nursing visits to only most critical clients.
- Maximize use of physician clinics in providing services to home care clients.
- Convalescent care will no longer be provided.
- Respite stays will be cancelled.
- Observation beds will be utilized only in emergencies and as staffing levels permit.
- Palliative care will be provided for end stage only.

e) Emergency Medical Services

- Only emergency calls and emergency transfers will be performed.
- Bypass Protocols will be implemented, pending geography and severity of influenza.
- Consider a designated transport unit for transport of ILI and/or H1N1 positive patients.
- Maintain EMS services in essential sites (Biggar, Davidson, Eston, Kerrobert, Kindersley, Outlook, Rosetown, and Unity) and when not possible, implement alternate coverage plans.
- EMS staff may be assigned to assist with inpatient care.

f) Support Services

1. Dietary

- Introduce a three-day menu to reduce preparation times.
- Use disposable dinnerware and utensils to decrease staff workload.
- Discontinue Meals On Wheels in the community.
- Discontinue catering for meetings at the facility.

2. Maintenance

- Equipment Maintenance may be limited to critical systems and equipment. Some equipment may need to be pulled out of service, depending on the extent of the repair and availability of a service person.
- Depending on the category, work requests on Routine Maintenance Requisitions may be deferred.
- Grounds Work may be deferred and limited to that pertaining to client, staff and visitor safety, i.e. snow and ice removal.
- Maintenance department may be required to do specimen transport, pending “Transportation of Dangerous Goods” training

3. Laundry

Laundry services will be maintained in facilities that do in house laundry, with the following adjustments:

- Reduction of personal laundry processing.
- Use of disposable laundry supplies in outpatient departments.
- Facilities that process linens may see hours of operation increased to accommodate same from other facilities.
- Locations using the services of Saskatoon Central Linen may be required to transport laundry to a location with on-site linen services.

4. Housekeeping

- Housekeeping services will be maintained in all facilities.
- Utilization of enhanced cleaning procedures will depend on admission type as well as presenting symptoms of outpatients (*see Annex 9B*).
- The implementation of Influenza Assessment Centres will necessitate additional cleaning, e.g. between case cleaning.
- Seasonal or project cleaning will be discontinued.

g) Public Health Nursing

When the H1N1 vaccine becomes available the business continuity plan for Saskatchewan public health nursing services will be implemented. Regionally, programs/services will be scaled down as follows:

- Immunizations for at risk clients and early childhood are considered a priority as well as communicable disease control and outbreak management.
- Disease-based surveillance, vaccine management and influenza immunization (seasonal flu) will continue to be offered.
- Alternate strategies for delivery of other immunizations will be explored.
- Other services, community development and health promotions will be delayed and deferred.

h) Public Health Inspection

Services provided by Public Health will be adjusted to reflect increased demands of the mass immunization program. Urgent requests and inspections will be given priority.

i) Community Services

1. Mental Health Nursing

Administration and monitoring of medications required to be provided to the chronically mentally ill psychiatric clients will continue; however these services may have to be reduced in the event of staff absenteeism or redeployment of staff to programs where human resources are needed to address increased demand for service – e.g. immunization.

2. Mental Health Counseling Services (Adult Counseling Services and Child & Youth)

The effect on providing counseling services in Mental Health will largely depend on staff absenteeism, and the need for bereavement counseling and other psychosocial responses. It is expected that programs will continue to operate with minimal disruption to service unless there is a requirement to redeploy staff in the event of a shortage of human resources to assist with direct patient care.

3. Addictions Counseling

In the event of a reduction in Addictions staffing due to absenteeism and the possibility of redeployment, counselors will be prioritizing their workloads to deal with issues of an emergent nature e.g. detox situations and SGI program services.

4. Autism Program

The Autism Spectrum Disorder consultant and the Support worker will be conducting their program unless there is a need to redeploy them to other programs where human resources are needed.

5. Community Therapy Services

The Physiotherapy, Occupational and Speech Language Therapy programs will continue to be offered provided that the staffing levels are not reduced by increased absenteeism. Also, staff may be subject to redeployment in the event that human resources are needed in other client care areas.

6. Population Health Promotion Programs

Population Health Promotion programs include the positions of Population Health Promotion Coordinator, Dental Health Educator, Public Health Nutritionist, Community Developer, Family & School together Coordinator will continue to work in their programs unless there is a need to redeploy them to other programs where human resources are needed.

7. Podiatry

The Podiatry Program will continue to offer services provided that staffing levels are not reduced by increased absenteeism or redeployment of staff to other areas.

j) Diabetes Nurse Educators and Registered Nurse Practitioners (RNNP)

- In cases where the Diabetes Nurse Educator is unavailable, a local physician will need to initiate insulin starts.
- If RNNPs are redeployed to provide services elsewhere, clinics operated by RNNPs may see decreased hours of operation, or be cancelled altogether.

k) Materials Management

- Materials Management's focus will be on maintaining and distribution of necessary supplies for pandemic.
- Facilities can expect that substitutes for routine items may occur.
- Ordering and receiving may be limited to essential supplies.

l) Other Regional Programs

Regional programs such as Information Systems, Payroll, Accounting and Scheduling will be adjusted to maintain priority services.

Annex 9B

- Algorithm – Adjustments to Delivery of Services
- Triggers - Service/program Specific Business Continuity Plans
- HHR Acute and LTC bed capacity
- Situation Report Forms

Chapter C: Stockpiling

The Heartland Health Region has undergone a process of identifying and acquiring a stockpile of medicines, supplies and equipment to ensure the provision of services in the event of an emergency. The Regional Health Authorities and the Ministry of Health have worked together to determine what supplies need to be stockpiled, where and how they will be accessed.

Stockpiling Process

Two categories of items are being stock-piled:

a) Antivirals

Antivirals are being provided by the Ministry of Health to the RHAs. The distribution centre that has been designated by the HHR is the Kindersley Health Centre. See Chapter 9 K – Antivirals.

b) Medical Supplies

- Stockpiled supplies

A list of stockpile supplies was compiled by the region's Materials Management Department in collaboration with the Ministry of Health and the Saskatchewan Association of Health Organizations Materials Management Department. (*See Annex 9C*) Supplies were streamlined to common items in order to make the process of ordering and monitoring less labour intensive.

- Location of Stockpile

The stockpile of all Pandemic supplies is being stored at the Kindersley Corporate Office. The Region has also authorized the construction of a building in Kindersley which will house supplies allocated for this purpose in the future.

- Transportation of Supplies

The Region has leased a mini-van from SPMC in order to transport supplies around the Region. Supplies will be delivered directly to facilities. Another contingency plan for transportation is being considered.

- Administration of Supplies

The Materials Management Department will be responsible for managing, coordinating and distributing the stockpiled pandemic supplies.

Distribution of supplies will be tracked by the Materials Management Department and associated costs expensed to the appropriate financial codes.

The process for obtaining pandemic supplies by facilities and programs from Materials Management has not as yet been determined, but it is expected that a list of Pandemic Supplies will be distributed to all facilities and this list will be utilized to order supplies.

At the onset of the pandemic, the Materials Management Department will ship out to each facility an appropriate supply of pandemic supplies.

Annex 9C

- List of Pandemic Supplies
- List of Mass Immunization Items

Chapter D: Finance and Accounting

Funding for costs incurred during pandemic planning, the pandemic outbreak and post pandemic recovery will be borne by a combination of federal and provincial agencies and the Regional Health Authorities. Therefore, Heartland has a responsibility to estimate and measure the impact of the pandemic event.

Financial Accounting

Heartland Health Region is responsible to track expenses in the following categories:

- Expenses already incurred
- Expenses that will be incurred
- Planned costs related to Pandemic, pending further direction
- Costs that will occur in the event of a pandemic.

Financial costs that will be tracked include:

- Stockpiling e.g. medical and non-medical supplies, vaccines, and antivirals
- Quality control and training e.g. equipment, staffing
- Surveillance and supervision.
- Monitoring, evaluation and program management

Financial Pandemic Committee

In order to accomplish its responsibilities, Heartland Health Region has established a Financial Pandemic Committee to develop budgets and forecasts for the pandemic, develop tracking processes for expenditures and monitor expenses.

Chapter E: Surveillance

Surveillance is the ongoing responsibility of Public Health and Communicable Disease Programming within Heartland Health Region. It is the ongoing collection, analysis and interpretation of health data in order to improve decision-making. Influenza surveillance is required to determine:

- When, where and which influenza viruses are circulating;
- Detection of new viruses;
- The high risk populations;
- The intensity and impact of influenza activity; and,
- Unusual events.

Surveillance must be timely and able to detect cases (sensitivity) and identify that a case is truly due to the novel virus (specificity).

Both laboratory and epidemiological surveillance are necessary for identifying influenza viruses and determining their communicability and infectivity.

Having a system for tracking illness trends will also ensure that the health care system can detect stressors that may affect operating capacity, including staffing and supply needs during a pandemic. Partnerships with the following groups are paramount for a complete surveillance report to be developed and maintained on a weekly basis:

Sentinel Schools

The epidemiological profile shows that school age children are the hardest hit by the pandemic A-H1N1 influenza virus strain; therefore heightened surveillance among this population is prudent. All schools are approached and invited to participate annually.

Primary Care Clinics/Outpatient Departments/Long Term Care (LTC) ILI Surveillance

There are 18 facilities in Heartland Health Region, comprised of Primary Care Clinics, Acute Care Facilities, Integrated Care Facilities, and Long Term Care facilities. All facilities are invited to send their surveillance reports to Communicable Disease Program on a weekly basis.

Sentinel physicians

Heartland Health Region has recently had five physician clinics agree to participate in the Saskatchewan Influenza Surveillance Program 2009/2010. These physicians/clinics report influenza-like-illness (ILI) among patients visiting their practice one clinic day per week using the Sentinel Physician Surveillance form as requested and outlined by the Ministry of Health. Reports are sent directly to the Ministry of Health. All physician clinics in HHR are invited to participate in regional ILI surveillance programming as well.

Annex 9E

- HHR Surveillance Plan

Chapter F: Laboratories

The Heartland Health Region's Laboratory Preparedness Plan (Annex 9F) provides phased planning for laboratory preparedness and response efforts during a pandemic. Portions of the overall plan have been extracted to address the issues specific to the Pandemic H1N1 situation.

Laboratories will be challenged with the need to accommodate the expected surge in volume of tests while maintaining their current testing capacity, as both available staff and resources will be affected by the pandemic.

Lab responsibilities specific to pandemic will depend on the geography and progress of the pandemic event and will include the:

- Provision of diagnostic testing for patient management (influenza-related and other diagnostic services)
- Support surveillance activities

Alterations to Laboratory Services

Laboratory Services will remain 'business as usual' until the service can not handle the current situation. Daily Situation Reports, submitted by the Care Team Manager in each facility, will assist in determining whether the trigger points for adjustments to laboratory services have been reached. Adjustments to lab services may include one or all of the following:

- A reduced test menu
- Laboratory closure

Business Continuity Plan

The Business Continuity Plan for laboratory services will also take into consideration:

Supplies, Equipment and Human Resources

- The region's pandemic stockpile includes some laboratory supplies and Personal Protective Equipment.
- Coordination of diagnostic testing reagents and supplies is done on a lab by lab basis.
- Deployment and redeployment of staff and volunteers is being considered, depending on the situation.

Transportation

- The region will implement a plan for delivery of lab specimens, both internally and externally should regular methods be unavailable.
- Specimens suspected or confirmed to be infected with H1N1 will be shipped as per Transportation of Dangerous Goods Regulations.

Infection Prevention and Control

- As with any potentially infectious specimen, laboratory staff will adhere to standard or enhanced precautions when appropriate.

Saskatchewan Disease Control Laboratory

- Specimens will be sent to SDCL for the testing of severe respiratory illness (SRI). SDCL is the prime laboratory for surveillance, detection and typing of influenza for the province.

ANNEX 9F

- Heartland Health Region Laboratory Preparedness Plan

Chapter G: Infection Prevention and Control

A comprehensive infection prevention and control program forms the basis for a successful pandemic influenza plan. Adherence to infection prevention and control policies and procedures is important to maximize prevention of the transmission of influenza and other infectious diseases.

The goal of good infection prevention and control is to protect patients/residents/clients, health care workers, visitors and others in the healthcare environment from infectious diseases and to reduce the transmission of influenza among and between patients and health care workers to mitigate the impact on human resources during a pandemic (fewer ill patients and more healthy workers).

Infection prevention and control measures during pandemic influenza activity should take into account the probability that a high proportion of the population may be affected for the following reasons:

- Risk of transmission is high.
- Immunity within the population is low.
- An increased number of persons will be seeking medical care.
- Resources traditionally used for infection prevention and control may be in short supply.

Transmission

Contact with respiratory secretions and large droplets, either directly or via contact with contaminated surfaces, appear to account for most transmissions.

Strict adherence to hand washing/hand antisepsis and respiratory hygiene may be the most important preventative measure during a pandemic.

Infectivity

The incubation period for influenza is 1 to 3 days. The period of communicability is from 1 day before symptoms appear and usually continues for up to 7 days after the onset of illness, but may continue for longer. Individuals infected with influenza tend to shed more viruses in their respiratory secretions in the early stages of the illness and patients are most infectious during the 24 hours before the onset of symptoms and during the most symptomatic period. Viral shedding may be longer in infants, and prolonged in young children and immunodeficient patients. The virus will survive on hard, non-porous surfaces for anywhere from 24 to 72 hours depending on conditions; 8 – 12 hours on cloth, paper and tissue, and 5 minutes on hands.

Routine Practices and Additional Precautions for Health Care Settings

HHR has developed a Pandemic Infection Prevention and Control Plan detailing practices for use in the care of all patients at all times in all health-care settings.

Annex 9G

- Heartland Pandemic Plan - Infection Prevention and Control Guidelines

Chapter H: Public Health Measures

The purpose of public health measures during an influenza pandemic is to decrease the number of individuals exposed to the new virus and to potentially slow the progress of the pandemic.

Public health measures are designed to respond to the needs of a population. Enactment of these public health measures will depend on circumstances at the time and will be directed by the Ministry of Health. These measures will be reviewed and updated as information becomes available during the pandemic.

Key public health measures include:

- Public education;
- Self isolation;
- Contact management (i.e. quarantine);
- School and daycare-based infection prevention and control;
- Social distancing measures in the community; and,
- Travel and mass gathering restrictions.

Public Education

One of the means of publicizing public health measures is public education. Heartland Health Region has instituted a Communications Plan that incorporates public education regarding the slowing of the spread of the disease through:

- infection control practices for hand washing and cough etiquette; and
- self isolation in the event that symptoms are experienced.

Information can be found on the HHR website regarding these measures.

Self Isolation

The criteria regarding self isolation has been provided by the Public Health Agency of Canada (PHAC). PHAC has recommended that the period of self isolation is from onset until the symptoms have resolved and the person is able to participate fully in day-to-day activities. This applies to school and work settings.

School Closures

One of the most commonly discussed public health measures in the first wave of the H1N1 virus was the ineffectiveness of school closures. There is limited evidence that school closures reduce overall transmission. Students who are out in the community increase the spread of disease, instead of being at home self-isolating or staying in school in a controlled environment. The School Divisions in the Health Region have an understanding that school closures will not be implemented unless direction is received from the Ministry of Health.

Social Distancing

Social distancing measures should be undertaken by the public to reduce the spread of influenza. Common practices such as handshaking, hugging and religious practices such as sharing of communion need to be reviewed with infection control practices in mind.

Mass Gatherings

Local authorities and HHR public health officials will decide on a case-by-case basis whether mass gatherings will be cancelled during the pandemic. Considerations will be given to the timing of the epidemic and the vulnerabilities of the communities involved.

Travel Restrictions

Travel restrictions are generally set by the Public Health Agency of Canada, and apply to countries. Information can be obtained on the PHAC website regarding countries where travel restrictions have been imposed.

Chapter I: Influenza Assessment Sites

The number of outpatient visits and hospitalizations are expected to rise beyond capacity during a pandemic. Influenza Assessment Sites (IAS) will be established in the Heartland Health Region with a goal to:

- Prevent a surge on physician offices and emergency room services;
- Maximize human resources;
- Provide better access and quicker assessment and treatment of people with influenza; and,
- Minimize spread of influenza by keeping persons with influenza like illness separated from others.

Heartland Health Region will be utilizing space for Influenza Assessment Sites in the region's health centres that already offer primary care services to provide integrated, stream-lined influenza-related primary care. Influenza Assessment Sites will be located in:

- Biggar Hospital
- Davidson Health Centre
- Dinsmore Health Care Centre
- Elrose Health Centre
- Eston Health Centre
- Kerrobert Health Centre
- Kindersley Health Centre
- Kyle Health Centre
- Lucky Lake Health Centre
- Outlook Hospital
- Rosetown Health Centre
- St. Joseph's Health Centre
- Unity Health Centre
- Wilkie Health Centre
- Beechy Health Centre

Traffic Flow - Zones

Where possible, each IAS will set up with **a one way path** through the site for infection control. The pathway will contain the following zones in order of patient contact:

- **ENTRY ZONE** - the first point of contact where patients are asked whether they are exhibiting respiratory or non-respiratory symptoms, and where the guidelines for mask use should be applied. Patients who are exhibiting influenza like symptoms will be provided with surgical masks and provision to wash hands or use hand sanitizers, tissues and tissue disposal areas.
- **TRIAGE ZONE** - where the process of prioritizing of patients based on the severity of their condition is done. Seating will be arranged so that each patient is approximately a metre from another patient. The triage area should be at least two metres from where those who cannot wear masks are located.
- **WAITING ZONE** - where patients will wait to be seen. This is the area for cohorting patients with similar severity of illness, e.g. mild, moderate and severe patients will wait for further clinical assessment and diagnostics in this area.
- **ASSESSMENT ZONE** - where the clinical assessment occurs. In this area, an evaluation of a patient's physical condition and prognosis based on information gathered from physical and laboratory examinations and the patient's medical history. This assessment is typically done by the physician or Nurse Practitioner.

Patients will be either: 1) referred home with information and may or may not have been given medication; 2) admitted to an acute care setting within the health centre; or 3) transferred to a hospital setting by their own means or by ambulance.

- **DISCHARGE ZONE** is an exit area that allows patients to exit the facility via a separate route from the main entry zone, where possible.

Triggers for activation of IAS

The Influenza Assessment Sites will not be established until certain triggers have been reached. These triggers take into consideration:

- Level of activity in family physician offices
- Level of activity in outpatient departments
- Reduction of capacity in primary care or hospital settings caused by absenteeism
- Need for easier access to services by the population
- Anticipated activity in the Region - determined from activity in other areas.

Authorization for establishment of the IAS will be given by the RHEOC (Regional Health Emergency Operations Centre).

Information Flow

Patients

Patients will be provided information sheets depending on the following situations:

1. Sent home with antivirals
2. Sent home on a course of antivirals
3. Referred to the emergency room of a secondary or referred directly to a tertiary hospital in event of diagnosis of SRI or developing SRI

The information will cover their self management and self isolation, when to represent or who to contact if symptoms worsen and how to protect family members.

Referral facility

If a patient is referred, the receiving hospital will be contacted and informed of patient details such as illness severity, time and mode of delivery (ambulance or own transport).

Provision of Antivirals

The physicians and nurse practitioners will need to write prescriptions before providing the antivirals to patients. This is required for tracking purposes.

Annex 9I

- Maps of IAS Sites for each Facility
- General Guidelines for Operation of IAS

Chapter J: Clinical Management of Influenza

Clinical management during an outbreak or pandemic is the safe and effective medical assessment and treatment of patients with suspected or confirmed cases of influenza. Clinical guidelines such as self care, admission criteria, appropriate specimen collection, updated treatment protocols and infection prevention and control measures are crucial to the management of cases occurring in a pandemic

Guidelines are developed from diverse expertise including the World Health Organization, (WHO), the Public Health Agency of Canada, (PHAC), and the Ministry of Health, (MoH), the Regional Health Authorities, (RHAs), and clinicians.

Clinical management of influenza is determined by the specific characteristics of the new virus, but is also built on lessons learned from previous outbreaks and pandemics, and on well established guidelines for treatment of seasonal influenza and associated complications such as pneumonia.

Clinical care requires assessment of the severity of the influenza, how the population is being affected, and also of overall health of an individual (i.e. hydration and nutrition) and co-morbidities. Clinical guidelines will be modified as specific information becomes available and distributed to health care providers.

In the case of pandemic H1N1, mild cases may be treated at home with rest, hydration and good nutrition. If moderate symptoms are being experienced such as persistent cough, fatigue and fevers then assessment by health care provider is advised.

People who have other illnesses should ensure that illness is well controlled. If a person has a serious risk factor such as brittle asthma, severe heart disease or is immuno-compromised, they should be assessed at onset of symptoms.

Symptoms of particular concern are shortness of breath and severe fatigue.

Women pregnant in the second or third trimester of pregnancy should be tested for the pandemic virus H1N1 and offered to start on antivirals. The antivirals can be ceased if the test is negative for the pandemic virus.

Hydration is important particularly in children. Good oral hydration (plenty of fluids) may prevent hospital admission.

There have been few outbreaks of H1N1 in long term care facilities. There have been few cases in people over the age of 65 years, however if elderly do get infected they are more likely to have severe disease. Outbreaks of H1N1 in long term care facilities or other institutions need to be considered on a case by case basis as to whether antivirals are used for treatment only or if post exposure prophylaxis is warranted. This will depend on the age of the inhabitants and their epidemiology of the disease at the time. The RHA MHO will make this decision.

Annex 9J

- SK Clinician Advice (updated Oct 1, 2009)

Chapter K: Antiviral Management and Distribution

During a pandemic influenza, antiviral medications will be used to treat ill persons with Influenza like Illness (ILI) who present within 48 hours of onset of their symptoms, or as established by clinical guidelines. Ineffective use of antivirals could lead to a shortage and those people who would benefit most from it may not have access. Depending on how the virus is spreading, the MoH will distribute a portion of the antiviral reserve to HHR based on our population.

A prescription for antivirals is required from a medical or nurse practitioner. The prescription will be dispensed free of charge to Saskatchewan residents from designated pharmacies or at influenza assessment sites within HHR. Influenza assessment sites are being established at most facilities in the region.

HHR antiviral supplies will be stored and managed in Kindersley under the direction of the Regional Pharmacist. Distribution to other regional sites will be provided through Kindersley as required. A procedure for inventory management and documentation of transfer and usage of antivirals has been established.

Adverse reactions can be reported to HealthLine at 1-877-800-0002. Serious adverse reactions must be reported to a physician and assessed further.

HHR will follow additional program parameters for antiviral use as directed by the MoH.

Annex 9K

- Antiviral Management and Distribution

Chapter L: Vaccination and Mass Immunization

Vaccination against influenza is one of the most effective measures for reducing disease, death and societal disruption during an influenza pandemic. Even though sufficient vaccine for the Canadian population is expected, it is anticipated that the new pandemic vaccine will become available in batches and will be distributed to Heartland Health Region based on percentage of population. Prioritization may be required depending on the availability of vaccine.

The HHR Public Health Nursing programming will be responsible for leading the immunization efforts, documentation into the Saskatchewan Immunization Management System (SIMS), quality assurance, and dealing with adverse reactions.

The HHR mass immunization plan is intended to immunize at least 75% of the population over as short a period as possible. Clinic locations are established throughout the region and teams of nurses, administrative staff and others will travel to these locations.

HHR will follow the general guidelines and program parameters as provided by the Ministry of Health.

Annex 9L

- HHR Vaccine and Mass Immunization Plan

Chapter M: Human Resources

The health care system is likely to be stretched during a pandemic, due to a combination of the following factors:

1) Surge capacity – It is anticipated that there will be an increased number of patients who will be accessing services at health centres exhibiting symptoms of H1N1 and that additional staffing will be required to provide services to those patients over a prolonged period of time. Unlike a mass casualty situation that has a relatively short duration, the pandemic response may be required for 8 to 10 weeks.

2) Absenteeism in the workforce - It is estimated that up to 35 per cent of the skilled workforce could be unavailable for some time during a 6 – 8 week time frame because of illness in themselves or in their families.

Triggers for addressing the shortage of human resources can be found in the appendices to Section 9, Chapter B– Health Services and Business Continuity Plan.

Fundamental Principles

Effective, reliable, efficient lines of communication between employers, employees and impacted bargaining units are essential in achieving the fundamental principles.

Maintenance and protection of the health, safety and well being of employees, patients/residents/clients, and the general public is a fundamental principle of Labour Relations pandemic planning

Collective agreements continue to exist in the event of a pandemic and employers should make reasonable efforts to develop contingencies within the confines of the applicable collective agreement(s). Where additional demands are made of employees (overtime, travel, schedule changes etc.) appropriate collective agreement language applies.

Employers should strive to minimize salary disruption; however there may be situations where payments above regular salary may need to be made on a retroactive basis.

There may be situations/incidents which require prompt or immediate action to ensure the safety and well being of patients/residents/clients and/or employees. In such circumstances employers should communicate the situation to the impacted bargaining unit(s) as soon as is reasonably possible considering each specific situation.

Strategies for Addressing Human Resource Shortages

Providing health care services in a pandemic will present challenges to health care workers related to the scarcity of resources, scope of practice, liability and workplace safety.

Redeployment and Reallocation of Existing Staff

Staff who work in both facility-based and community based services may be redeployed to assist with delivery of services strained by the pandemic. Examples may include such redeployments

as Licensed Practical Nurses, EMS staff and Community Mental Health Nurses performing immunizations. Staff will be retrained to provide services that they normally do not provide, but they will not be redeployed to perform duties outside their scope of practice.

Both In-Scope and Out-of Scope staff that are not already employed in facilities may also be redeployed to areas of support service roles

Recruitment of Additional Staffing outside Current Workforce

Recruitment of health care professionals to augment staffing during a pandemic may become necessary. Communication is being established with these professionals at a provincial level and at a local level. The communication will inform health care professionals about influenza, influenza pandemic plans and their potential roles within those plans. It will be important to convey the potential impact of the pandemic on health care service provision and specifically the need for additional human resources. Education regarding the identification and treatment of influenza and immunization programs will be ongoing during the pandemic.

Discussions are underway on a provincial basis with licensing bodies to determine which additional human resources will be available for recruitment to the workforce to perform duties in the event of a pandemic, or to assist with mass immunization. These licensing bodies include:

- Saskatchewan Registered Nurses Association to license retired nurses and those who were registered but have let registration lapse;
- The Saskatchewan Association of Licensed Practical Nurses to expand their transfer of function;
- The Registered Psychiatric Nurses of Saskatchewan to utilize Community Mental Health Nurses for immunizations; and
- The Saskatchewan Paramedic Association to utilize EMT / PCP Trained, EMT-A, EMT-P for immunization

Volunteer Recruitment

Volunteers are an integral part of the human resources aspect of pandemic planning. Existing Volunteer Services Coordinators will serve as a primary resource. These Coordinators will have recruitment strategies, screening tools, role descriptions, support from other professionals for supervision, training, vaccination, etc., and current as well as potential volunteer registries.

Plans have been developed regarding the numbers and skills required of volunteers, both those with healthcare skills and those without. Supervisors of programs where volunteers will be deployed have prepared Job Descriptions for volunteer positions including job duties, hours of work and training required, etc.

A Provincial Volunteer Services Committee has been struck to gather information and provide support to Health Regions in the recruitment, processing and training of this addition to the workforce. Recruitment will have to be done outside the traditional volunteer workforce as the individuals and service groups that generally provide services are most often elderly and will not be able to undertake support service work.

Self-Care for Staff – Prevention and Containment

Vaccinations

Staff is being encouraged by the health region to receive vaccinations for the H1N1 virus. Vaccines will be provided free of charge to health care workers and they will be a priority for vaccination.

Staff who are not able to be vaccinated will be provided, at no cost, with antivirals when medically indicated.

Self-Isolation

When staff members are experiencing the symptoms of H1N1, they are being advised by the health region to self-isolate from onset until the symptoms have resolved and they are able to participate fully in day-to-day activities. Staff may not be required to provide a medical certificate for absences related to the H1N1 virus to prevent overburdening of the health system and reduce their interaction with others outside the home.

Annex 9M

- Utilization of Health Professionals for Mass Immunization
- Volunteers for Housekeeping and Laundry
- Volunteers for Dietary

Chapter N: Occupational Health & Safety

Pandemic influenza needs to be considered as a biological hazard in the workplace. Before and during a pandemic influenza workplaces in the Heartland Health Region will need to:

- assess the risk of exposure to pandemic influenza virus in job tasks and put appropriate controls in place,
- assess workplace hazards due to absenteeism, resulting from illness or caring for ill family and friends, to establish controls addressing any new hazards or operational changes.

In Saskatchewan the legislation that guides response activities is *The Occupational Health & Safety Act, 1993* and *The Occupational Health & Safety Regulations 1996*. Section 85 (Exposure Control Plan of the Regulations) and 302 (Chemical and Biological Substances) include more specific responsibilities related to infections hazards in the workplace.

Risk of Exposure

In regards to assessing the risk of exposure by workers to the influenza virus and putting appropriate controls in place, Heartland Health Region has implemented a number of measures:

- Developed the Heartland Health Region Infection Prevention and Control Manual that sets out infection control procedures to be utilized by workers in carrying out their duties.
- Provided information regarding the use of Protective Equipment (PPE) to be worn by health care workers including a Point of Care Assessment to be completed by workers when they encounter a patient or client and the recommendations for what PPE to use in what situation.
- Conducted Fit Testing for N95 Respirators in all the facilities in the Region. As of the end of September, 2009, 48% of staff has been fit tested.
- Stockpiled an 8 week supply of Personal Protective Equipment (N95 Respirators, Surgical masks, Face Shields, Gloves and Gowns) to ensure that workers had sufficient supplies to care for patients without risk of exposure due to lack of sufficient PPE.
- Planned for the vaccination of staff with influenza vaccines (seasonal and/or H1N1) as recommended by the MoH. These will be provided to staff free of charge when the vaccines are available for distribution.

Staff will also be given instruction on the Pandemic Plan for their Facility including the establishment of Influenza Assessment Sites in each Health Centre.

Absenteeism

It is predicted by the Public Health Agency of Canada that from 15 to 25% of the workforce could be absent from work due to their own illness, and/or caring for family members who are ill. HHR has developed trigger points for all programs where reductions in the workforce will result in a reduction in the service. When triggers are reached, workload will be adjusted so that workers may not be required to work extra hours. See Section 9B: Health Services and Business Continuity Plans.

Also, training will be provided to workers who are assuming different workloads than they normally do, but are still within their scope of practice e.g. Community Mental Health Nurses who give injections to Mental Health clients will be provided training to give vaccinations. HHR will be adhering to the terms of the Collective Agreements regarding deployment of staff.

Occupational Health & Safety Committees

Each facility in HHR has an Occupational Health & Safety Committee to help oversee workplace/units and to assist in the performance of on-going risk assessments that identify the necessary training and preventative measures. The committees will be consulted as the pandemic progresses and changes to risks occur.

Workers Responsibilities

Workers must take reasonable care and co-operate with the employer to ensure the health and safety of themselves and others. Workers will be expected to use best practice for:

- Hand Hygiene, a critical control measure for limited the spread of pandemic influenza
- Respiratory Hygiene
- Utilizing appropriate Personal Protective Equipment
- Social Distancing from patients, clients and other workers who are exhibiting the symptoms of pandemic influenza by keeping a distance of 2 metres or more from others when coughing or sneezing.
- Staying home when they are exhibiting any influenza symptoms.
- Obtaining vaccinations when provided by the employer, unless medically contraindicated.

Annex 9N

- SK Workplace Pandemic Plan Aug 20 Draft

Chapter 0: First Nations and Inuit Health

In Regional Health Authorities that have First Nations reserves within their boundaries, RHA plans and pandemic plans developed by First Nations must be integrated seamlessly into the provincial health care system.

Although Heartland Health Region does not have any First Nations reserves within its boundaries, there are two First Nations reserves and a Band Council which are in close proximity to HHR in the northwest part of the Region: (See Annex 9 O)

Although the reserves are not within HHR's boundaries many of their residents access health services in the community of Cando through the Public Health program. Immunizations will be provided through the Region's Mass Immunization Plan for students at the Cando Community School and the residents of the Cando area.

Discussions will be held with those First Nations to ensure that other sections of the HHR's Pandemic Plan are complementary to their plans.

Annex 90:

- List of First Nations within HHR

Chapter P Communications

A community that is well-informed about pandemic and infection control is an empowered community. It is one that is less likely to panic, and more likely to take constructive, self-protective action in the face of any communicable disease outbreak, including pandemic influenza.

The key communication challenge, therefore, is to provide effective information about influenza pandemic and to distribute that information widely *before* a pandemic influenza occurs, and to continue to provide relevant and dependable information during and after the pandemic outbreak.

Overall Communication Objectives

The overall objectives of the communications plan are:

- To provide effective, appropriate and timely information to internal and external stakeholders during all pandemic phases.
- To build and maintain the public's confidence in the Heartland Health Region's ability to deliver the basic health care services required during a pandemic.
- To minimize any negative reactions or messages that the public may be exposed to and put the best possible light on every development during the pandemic.
- Ensure management, staff, physicians, and community volunteers are well informed about and understand the processes of dealing effectively with the pandemic prior to, during and after the event.

Internal Stakeholders – Objectives

Communication to staff and other health care workers involved in the pandemic response will:

- Allow staff to understand their role in the pandemic response;
- Ensure staff know how to protect themselves, their families and their patients, clients or residents;
- Provide accurate information regarding the pandemic;
- Address concerns in a timely manner.

External Stakeholders – Objectives

Communication to external stakeholders, including the public and the media will:

- Provide instructions for those who may have the illness, contacts, and family members regarding prevention and treatment;
- Clearly describe the Heartland Health Region's planned pandemic response at each stage; and
- Tell the public what to expect next.

Coordinating Communications

Heartland Health Region's Communications Coordinator will coordinate the Region's internal and external communications during a pandemic. The Communications Coordinator will coordinate all communications with the Medical Health Officer, Ministry of Health, Public Health Agency of Canada and the Chief Executive Officer of Heartland Health Region.

The Heartland Health Region Communications Coordinator assumes the lead responsibility for preparing and coordinating public communications within the Regional Health Authority. The Communications Coordinator will manage the release of all information to the media; ensure key messaging is consistent with the Ministry of Health and coordinate all communication releases in a timely manner with provincial and national ministries as well as civic authorities.

Saskatchewan Health will develop a communications network with all Health Regions throughout all phases of the pandemic.

Spokespersons

The President/Chief Executive Officer, or designate, will be the primary spokesperson on behalf of the Heartland Health Region and will speak to operational issues specific to Heartland Health Region during a pandemic. The Medical Health Officer, or designate, will be the official spokesperson for Heartland Health Region on medical issues related to a pandemic, and with respect to Public Health response to a pandemic.

Key Messages

In a sincere, honest, and timely manner, the Heartland Health Region will focus on developing key messages that will reinforce messaging from the Saskatchewan Ministry of Health, the Public Health Agency of Canada and the World Health Organization.

Heartland Health Region is committed to ensuring that its citizens have access to the best available information, programming and/or care needed to prevent and protect against infection with pandemic influenza, or to mitigate and provide appropriate treatment in the event of infection. Key messaging will always include reference to the following resources:

For more information contact **HealthLine at 1-877-800-0007**, or access one of the following websites:

www.health.gov.sk.ca/influenza-monitor

www.phac-aspc.gc.ca/index-eng.php

www.fightflu.ca

Annex 9P

- HHR Pandemic Communications Plan

Chapter Q: Management of the Deceased

The mortality rate in past natural epidemics or pandemics has been estimated to be 15% to 20%. Thus, in an outbreak, an increase in the number of deaths would be expected and plans must be in place to ensure that good public health practices are followed from death to disposal of bodies.

Handling of the Deceased

The bodies of those dying of influenza should be handled using universal precautions currently employed by health care professionals and the funeral home industry. The actual risk of spread of influenza from a deceased individual is minimal. Procedures relating to the handling of the deceased for staff of health care facilities in the Heartland Health Region are in the *HHR Infection Prevention and Control Manual*. (See Annex 9G)

Pronouncement of Death

There are several procedures for pronouncement of death:

- **Death in Health care facilities** - 75% of deaths occur as a result of natural disease processes, where the individual is well known to a physician, and that physician is able to sign the Medical Certificate of Death indicating a reasonable cause of death. If the death occurs in

hospital, the body is held at the hospital until the family has made arrangements. As the HHR Facilities have little or no space for storage, families will be expected to make arrangements quickly.

- **Death at Home** - If the death is expected and occurs at home, a funeral home can pick up the body from the home or from a hospital if the body is moved there for storage while a family makes arrangements.
- **Services Required by Coroner** - The majority of deaths caused by influenza will not occur under circumstances that involve the Coroner because the physician will know the cause of death. However, in approximately 25% of deaths, a physician does not know the underlying cause or if the individual died as a result of unnatural causes. These deaths must be reported to a Coroner, who is responsible for conducting an investigation (which may include conducting an autopsy) and certifying the cause of death. HHR does not have the capacity to perform autopsies so the body will have to be sent to Saskatoon. The funeral home or representative arranged for by the family then picks up the body after the autopsy.

The Office of the Chief Coroner of Saskatchewan has established a toll free number to contact a Coroner if there has been an attempt to contact a local coroner and one is not available. The toll-free contact numbers are:

Office of the Chief Coroner
Headquarters: 1-866-592-7845
Northern Regional Office: 1-888-824-0491

Death Registration

Death registration is a provincial responsibility, and each province has its own laws, regulations, and practices of pronouncing and certifying a death. In Saskatchewan, physicians and coroners are legally responsible for completing all **Medical Certifications of Death**, which form part of the complete death registration. The completed certification of death must be made available to the appropriate funeral director, who requires it to obtain a burial permit.

Body Transportation

In most circumstances, bodies are transported from the place of death to the funeral home of the family's choice. Body transportation is done by funeral homes themselves. HHR will not be transporting bodies by ambulances during a pandemic influenza outbreak given that their services will be in constant demand by living patients.

No special vehicle or driver license is needed for transportation of a body; therefore, there are no restrictions on families transporting bodies of family members if they have a death certificate.

Funeral Homes

The Heartland Health Region has contacted all the funeral homes in the RHA to ensure that they have a plan in place for the following:

- Sufficient morgue capacity including temporary morgue arrangements in the event that not all bodies can be stored in the morgue;
- the speed or capacity of their embalming process and their cremation process to meet increased demand;
- a stockpile of supplies such as body bags, embalming fluid, etc,
- an Infection Control Plan for handling of diseased bodies.

Funeral Homes in the Region have responded that they have the resources to meet the increased demand for services. In normal circumstances, memorial services and funerals can be held within 2-5 days of death. In a pandemic influenza setting, the funeral service industry will suffer the same increased demand for services and the same staff and supply shortages that other industries will be experiencing. As a result, it should be anticipated that the time from death to final

disposition of the body could take weeks as opposed to days, particularly during the most acute phases of any of the influenza waves. This will be disturbing to next-of- kin, particularly whose religious beliefs place strict timelines on carrying for the dead; however, these delays may be unavoidable.

Annex 9Q

- Funeral Homes & Crematoriums within Heartland Health Region
- PROVINCIAL PANDEMIC INFLUENZA PLAN - Caring for the Dead May 15, 2009

Chapter R: Continuing Care Facilities

Continuing Care Facilities such as personal care homes and group homes are not owned or operation by the Heartland Health Region; however they rely on HHR to provide health care services to their residents. Therefore, during a pandemic they will have an impact on the services that HHR will need to provide.

In HHR, continuing care facilities such as personal care homes, provide a wide variety of services ranging from meal provision and security services to full personal care for clients requiring light to heavy care needs. Nursing services in these facilities are typically provided by Home Care nursing staff. Many of the residents in these facilities suffer from diseases that will increase their risk for complications from influenza.

Group Homes provide residential services for challenged individuals. As their residents generally have a normal health status, they have less of an impact on HHR's health services.

Both personal care homes and group homes are required to have a pandemic plan which is coordinated with Heartland's to ensure that their residents receive the services they need.

Annex 9R

- Checklist for Pandemic Plans for Personal Care Homes and Group Homes
- List of Personal Care Homes in HHR
- Addresses for Personal Care Homes in HHR

TERMINOLOGY

Additional Precautions

Infection Prevention and Control measures, above and beyond routine practices that should be taken, based on the mode of transmission of the pathogen causing infection (airborne, droplet or contact).

Adjuvant

An adjuvant is an agent that acts to accelerate, prolong, or enhance antigen-specific immune responses when used in combination with specific vaccine antigens.

Airborne

Spread through the air, by droplet nuclei (small airborne particles, < 5 um). Communicable diseases remain suspended in the air for long periods of time.

Antivirals

Antiviral drugs are a class of medications used specifically for treating infections caused by virus. Unlike antibiotics, antiviral drugs do not destroy their target pathogen, they only inhibit their development. Neuraminidase Inhibitors are a class of antiviral drugs that targets influenza A and B viruses by blocking the function of the viral neuraminidase protein. This action prevents the virus from reproducing. M2 Ion Channel Inhibitors is effective for only influenza A viruses.

Colonization

The presence of microorganisms in or on a host with growth and multiplication in the absence of signs and symptoms of disease or deep tissue invasion

Contact (Direct) Transmission

Transfer of microorganisms from direct physical contact between an infected or colonized individual and a susceptible host (body surface to body surface).

Contact (Indirect) Transmission

Passive transfer of microorganisms to a susceptible host via an intermediate object, such as contaminated hands that are not washed between patients, or contaminated instruments or other inanimate objects in the patient's immediate environment.

Droplet Transmission

Large droplets ($\geq 5\mu\text{m}$ in diameter) are generated from the respiratory tract of the source patient during coughing, sneezing, talking or during procedures such as suctioning or bronchoscopy and may be propelled a short distance (up to 2 m).

Epidemiology

The science concerned with the study of the factors determining and influencing the frequency and distribution of disease, injury and other health-related events and their causes in a defined human population for the purpose of establishing programs to prevent and control their development and spread.

Infection

Invasion and multiplication of microorganisms in body tissue, causing a disease process.

Influenza

An acute respiratory disease caused by influenza viruses A and B. Symptoms are characterized by sudden onset, chills, fever, severe prostration, headache, muscle aches, and a cough that is usually dry. The disease commonly occurs in epidemics, which develop quickly and spread rapidly. The most common complication from influenza is pneumonia.

Influenza-like-illness

Acute onset of respiratory illness with fever ($>38^{\circ}\text{C}$) and cough with one or more of the following: sore throat, arthralgia, myalgia, and/or prostration, could be due to influenza virus.

Isolation

Separation of infected ill persons from others through placement, use of barriers (mask, gloves, etc.) and in some cases special ventilation for the pertinent period of communicability.

Localized Activity

Outbreaks affecting a single geographic area within the service area jurisdiction (e.g. an outbreak in a nursing home, school or work site).

Routine Practices

A set of practices to be implemented for routine care and treatment of all patients, and includes Standard/Universal Precautions. Additional precautions are described under Transmission Based Precautions.

Standard/Universal Precautions

A method of infection control and is the practice of treating *all* blood and body fluids, and all surfaces as potentially infectious so as to prevent personal contact with them.

Surge Capacity

Is a health care system's ability to respond effectively to a sudden rise in demand for services.

Widespread Activity

Outbreaks affecting multiple and non-adjacent geographic areas within the service area jurisdiction such as two or more regional health authorities, two or more municipalities, etc.

ANNEX LIST

Chapter 9A

- RHEOC Activation Chart & Outbreak Control Team Org Chart

Chapter 9B

- Algorithm – Adjustments to Delivery of Services
- Triggers - Service/program Specific Business Continuity Plans
- HHR Acute and LTC bed capacity
- Situation Report Forms

Chapter 9C

- List of stockpiled supplies

Chapter 9E

- Surveillance

Chapter 9F

- Heartland Health Region Laboratory Preparedness Plan

Chapter 9G

- HHR Infection and Prevention Control Guidelines

Chapter 9I

- Maps of IAS Sites for each Facility.
- IAS GENERAL GUIDELINES FOR OPERATION

Chapter 9J

- SK Clinician Advice
- Appendix 9K Antiviral Management and Distribution
- Annex 9L – HHR Vaccine and Mass Immunization Plan

Chapter 9M

- Utilization of Health Professionals for Mass Immunization
- Volunteers for Housekeeping and Laundry

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- SK Workplace Pandemic Plan Aug 20 Draft

Chapter 9O

- List of First Nations

Chapter 9P

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Chapter 9Q

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Chapter 9R

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