

PANDEMIC INFLUENZA

Preparedness, Response, and Recovery

GUIDE FOR CRITICAL INFRASTRUCTURE AND KEY RESOURCES



Homeland
Security

Annex:
Railroad Sub-Sector
Pandemic Guideline



ANNEX: Railroad Sub-Sector Pandemic Influenza Planning Guideline

Purpose: This Sector-specific guideline is an annex to the *Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources (CIKR Pandemic Influenza Guide)* and intends to assist owners and operators within the Freight and Passenger Railroad Sub-Sector of the Transportation Sector with planning for a catastrophic pandemic influenza. Organizations that fail to prepare for such a prolonged catastrophic event may find themselves without the staff, equipment, or supplies necessary to continue providing essential transportation services for their customers and the nation. For a copy of the complete CIKR Pandemic Influenza Guide, please see www.pandemicflu.gov/plan/pdf/cikrpandemicinfluenzaguide.pdf.

How to Use Guidelines: The guidelines serve as a non-prescriptive reference for owner-operators and a practical tool that emergency planners can use to augment and tailor their existing emergency response plans given the unique challenges an influenza pandemic presents. **It is important to integrate this influenza pandemic planning with your organization's existing business continuity and emergency response plans and/or the CIKR Pandemic Influenza Guide's comprehensive framework for influenza pandemic catastrophic planning.** This annex addresses the major challenges the Railroad Sub-Sector may face and should assess in its pandemic influenza planning within the seven key areas of vulnerability highlighted in blue boxes in the Guideline. While not necessarily applicable to all organizations in a given sector, each relevant *Action*, *Supporting Action*, and *Question* in this Guideline can be integrated and managed as a separate checklist item during the planning process.

- **Actions:** These are primary checklist items with numerous related supporting actions and questions to consider.
- **Supporting Actions:** Expanding on the overarching action, these supporting actions offer specific suggestions for further study.
- **Questions to Consider:** These questions are designed to focus on the main and supporting actions. The questions are not comprehensive; they are designed simply to represent a starting point to stimulate thinking about further actions and options.

Planning Assumptions: Influenza pandemics are unpredictable events; it is impossible to forecast their characteristics or severity accurately. The Centers for Disease Control and Prevention define a severe pandemic influenza as a Category 4 or 5 with case fatality ratio of 1 percent or higher. Given today's highly mobile population, if a severe pandemic influenza emerges, outbreaks may occur nearly simultaneously across the country making reallocation of resources more difficult than in other emergencies. Therefore, each sector must rely primarily on its own internal resources and workers, for protection (including security) and response. While an influenza pandemic will likely affect a given community for six to eight weeks, nationally a wave may linger for up to 12 weeks. Thus, even though a community outbreak may have subsided, businesses in those communities that depend on a national supply chain may find themselves without the necessary materials, supplies, and workforce because other communities across the country may still be affected by an outbreak. The guidance, which is based on disease impact assumptions (pandemicflu.gov/plan/pandplan.html) from the CDC, includes the following:

- *Susceptibility to the influenza pandemic virus will be universal.*
- *Once sustained person-to-person transmission begins, the disease will spread rapidly around the globe.*
- *The clinical disease attack rate will likely be 30 percent or higher in the overall population during the influenza pandemic.*
- *Rates of absenteeism will depend on the severity of the influenza pandemic. In a severe influenza pandemic, absenteeism attributable to illness, the need to care for ill family members and fear of infection may reach 40 percent during the peak weeks of a community outbreak.*
- *Epidemics will last 6-8 weeks in affected communities.*
- *Multiple waves (periods where community outbreaks strike across the country) will likely occur with each lasting 2-3 months.*

For detailed information on the complete set of planning assumptions and the influenza pandemic context, see Section 3 of the *CIKR Pandemic Influenza Guide* and other Federal guidance at www.pandemicflu.gov.



ESSENTIAL SERVICES, FUNCTIONS, AND PROCESSES

More than a century ago, freight and passenger railroads drove the Nation’s economy. Today, rail remains a vital link in our national transportation network. Disruption to the continuous operations of these essential services may generate severe challenges to local, regional, and national economic and social stability. Proactive planning with emergency management and safety officials, and other government, leaders will help integrate railroad operations into Federal, State, and local emergency response planning. Primarily a service provider, the Railroad Sector’s function is transporting goods/products and people. Specific functions and processes include: *receiving, holding, securing and managing passengers and goods; providing customer service support; managing rail terminal and intermodal transfer operations; providing control center functions; coordinating scheduling and dispatch; collecting revenue and paying accounts; providing HR support; sustaining business operations; maintaining critical equipment; and ensuring passenger-, worker-, and operational-safety and security.*

ACTION Identify and assess essential services, functions, and processes.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	Prioritize and maintain the essential services, functions, and processes required to sustain essential business operations.	<ul style="list-style-type: none"> • What potential impacts on demand from your most critical passenger/customers will a severe influenza pandemic create? How would these impacts affect your operations? For example, disease containment strategies and public fear may substantially lower demand and/or constrain the numbers of passengers you can safely transport. • Are the businesses and other destinations where your passengers typically travel likely to continue operating during an influenza pandemic? How might this impact passenger demand levels, especially for regional passenger railroads? • How might geographic and population differences affect passenger and freight demand? For example, differences in demand based on rural versus suburban/urban areas and more reliance in large less populated regions on trains as a key mode of transportation? • Will your major customers continue to operate during an influenza pandemic? If so, at what level will they operate? How might changes impact freight operational requirements? For example, what are the impacts if “non-essential” labor-intensive businesses that are major rail transportation customers reduce operations or close temporarily during an influenza pandemic wave? Are there differences in impacts for Class 1 vs. regional? What occurs if key international producers and shippers are affected by worker absenteeism and/or travel restrictions? • If an influenza pandemic reduces the numbers of available workers to operate trains, is there a way to prioritize the cargo to ensure the most essential goods/products (e.g., coal for electrical plants, chemicals for water treatment facilities) are transported first? • How might normal services be adapted to support the community, region, or nation during a severe influenza pandemic? For example, in response to public health guidance on protection measures, could trained staff be assigned to assess rail passengers’ health, provide masks and hand cleaning supplies, and/or ensure social distancing measures are followed in seating arrangements? Can cars be added so there would be fewer passengers per car? Could passenger trains be reconfigured or employed as is to haul specific freight such as smaller packages of critical goods, medical supplies and vaccines? In collaboration with community, public health and railroad emergency operations personnel could train stations be used as emergency shelters or medical triage sites temporarily?
<input type="checkbox"/>	Identify and assess critical customers given their value to sustaining the organization and the community.	
<input type="checkbox"/>	Prioritize services/functions given their value to essential customers and community.	
<input type="checkbox"/>	Identify potential “non-essential” services, functions, and processes that can be suspended or adapted to other more essential uses.	
<input type="checkbox"/>	Communicate with critical customers and local emergency response officials the need to jointly plan and prepare for an influenza pandemic.	
<input type="checkbox"/>	Coordinate in advance with critical supporting organizations to plan for ways to continue essential business operations and support workers if revenue flows are substantially impacted (e.g., insurance carriers, lending institutions, government officials).	



ESSENTIAL ASSETS AND EQUIPMENT

Unlike other disasters, an influenza pandemic will not directly damage physical assets and infrastructure. However, emergency planners should assess the indirect impact absenteeism could have on essential equipment operations and maintenance, and on other physical assets such as essential primary and supporting facilities. High absentee rates will not only make it difficult to operate all equipment at normal levels but will also delay in-house maintenance and repair of assets and equipment, including engines, cars, communications, electronics, signals and rails. A pandemic's impact on the supply chain could substantially limit or delay the availability of essential "just-in-time" replacement parts and supplies. Essential assets and equipment include: *locomotives; freight, passenger and specialty cars; rail and rail yard maintenance, repair and safety equipment; refueling storage and transfer equipment; customer ticketing; signal houses; electronic computers and internet interface; security assets; and wireless and wired telecommunications for coordination and movement monitoring, dispatch and safety.*

ACTION Review all equipment critical to support each essential function.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Identify assets, and equipment that must operate continuously and/or at key periods to sustain essential functions processes.</p> <p>Plan to rely on in-house or available local maintenance and repair/replacement support for 2-3 months during an influenza pandemic wave.</p> <p>Review the primary and supporting assets to identify potential single-point failures and possible cascading consequences.</p> <p>Consider how each action relates to those developed to address other emergencies in existing Railroad business contingency plans, and in the Transportation Sector-Specific Plan to the National Infrastructure Protection Plan (NIPP). See: www.dhs.gov/xlibrary/assets/Transportation_Base_Plan_5_21_07.pdf.</p>	<ul style="list-style-type: none"> Can you modify typical processes temporarily to sustain essential assets and equipment? For example, can you use essential railroad equipment in a less demanding manner (reduce travel speed, suspend less essential routes) to decrease maintenance/repair requirements? Can you close non-essential facilities and consolidate operations and supplies? For example, can you operate fewer rail maintenance sites and consolidate dispatch centers? What are the recurring maintenance requirements of the facilities/structures used to house equipment, passengers, freight and employees? Do they demand a continuous level of operations, maintenance and repair? What backup options exist in cases such as HVAC breakdowns during times of reduced worker availability and extreme weather? Have you considered all possible primary/supporting asset/equipment challenges (e.g., operator and maintenance availability; fuel/electricity availability and security; emergency repair; repair part accessibility; security/safety equipment availability; <i>Railinc</i> data management; telecommunications for scheduling and control; and dispatch resilience across all railroad companies controlling the different railways)? Have you developed standard operating and emergency procedures for your essential processes and equipment? If so, have you distributed them broadly to managers and staff? Have you assessed all primary and supporting rail systems with your contractors and other key stakeholders to identify potential single-point failures in that network? For example, assessments with your contractors working intermodal transfer site and operational support equipment, food and catering suppliers, and independent wreck clearance crews.

ACTION Prepare to sustain essential equipment for a wave lasting up to three months.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/> <input type="checkbox"/>	<p>Prioritize the options available to support demands on your resources.</p> <p>Assess recurring and preventative maintenance requirements.</p>	<ul style="list-style-type: none"> Is there excess operational capacity available in your essential assets to sustain functions and reduce demand on equipment and workers? For example, sufficient numbers of locomotives and/or freight/passenger cars to rotate into service to sustain essential operations if equipment failures occur and repair parts are unavailable?



<ul style="list-style-type: none"> <input type="checkbox"/> Assess implications if essential assets fail early on during the influenza pandemic outbreak. <input type="checkbox"/> Consider establishing an influenza pandemic mutual aid program among similar small/medium and even large organizations to assist each other with sustaining essential assets. 	<ul style="list-style-type: none"> • If you deem a mutual aid program may be useful, who would you collaborate among regional or smaller Class 3 railroads or with Class 1 railroads to share a maintenance site stocked with adequate repair equipment/supplies and shared key workers? • What is the frequency for routine maintenance on essential primary/secondary assets and equipment? How critical is it to perform on this schedule? Can you defer or accelerate essential equipment scheduled maintenance on short notice? • What is the frequency and labor-intensive nature of all types of typical safety inspections (e.g., engines, rails, brakes, etc.)? Can you safely defer any of these with appropriate waivers and safety oversight to reduce impacts on other essential equipment and workers? • Do you have updated emergency operating plans for all assets/equipment to address pandemic conditions? For example, are you prepared to incorporate controlled social distancing strategies, disciplined personal hygiene, personal protective equipment, and equipment and environmental decontamination into your operations?
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ESSENTIAL RAW MATERIALS AND SUPPLIES

A severe influenza pandemic may disrupt access to suppliers and to a supplier's manufacturer of essential materials for up to three months, much longer than with other disasters. The negative effects on individuals, businesses, and the nation from the virus directly, and disease mitigation strategies indirectly, may affect the production and delivery of all types of materials and supplies. Passenger and freight railroad entities should, where possible, explore and assess their supply chain networks from their in-house storage capacity through all 1st, 2nd, and beyond distributor levels. Given the significant reliance on "just-in-time" delivery and other potential impacts that could shut down your supply chain, you may want to consider stockpiling essential items such as fuel, lubricants, filters, electronics as well as worker protection and environmental cleaning material (e.g., masks, gloves, hand sanitizer and surface disinfectants).

ACTION Identify materials and supplies to sustain essential functions and equipment for up to 12 weeks.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
	<ul style="list-style-type: none"> <input type="checkbox"/> Identify critical material and supplies (e.g., fuel, lubricants, refrigerants, filters, repair parts) necessary to maintain essential assets and equipment. <input type="checkbox"/> Prioritize essential material and supplies necessary to operate equipment and sustain essential functions. <input type="checkbox"/> Identify options to reduce demand for essential supplies and materials. <input type="checkbox"/> Assess all internal and external supply-chain support operations and contracts. <input type="checkbox"/> Explore ways to reduce the need to stockpile expensive supplies or hazardous materials on-site. 	<ul style="list-style-type: none"> • How much of which materials/supplies (e.g., #2 diesel for locomotives, support vehicle gasoline, lubricants) are required to sustain essential operations for up to three months? • How many days supply do you stock onsite for all essential fuels and supplies? If supply chain disruptions occur, how will you ensure availability of adequate types and quantities beyond stocked levels for the duration of an influenza pandemic wave? • Are there options to obtain essential materials/supplies elsewhere during an outbreak? For example, are similar type supplies available in Fed/State/local government stockpiles, from mutual assistance business stockpile, or as excess capacity in "non-essential" businesses (e.g., motor carrier buses not being driven that also normally use #2 diesel)? • What available supplies (e.g., other appropriate types of fuels and lubricants) might you substitute as backups temporarily for preferred essential ones (e.g., other dyed diesel, synthetic lubricants)? • Are there operations/maintenance processes you could modify to reduce demand to stock supplies (e.g., could you extend the period between lubricants and filter replacement)? • How might small/medium-sized regional railroads collaborate to reduce their risk and



<input type="checkbox"/>	<p>Assess costs to procure, stock, and/or ensure delivery of essential materials.</p>	<p>vulnerability for access to essential operational supplies and materials?</p> <ul style="list-style-type: none"> • Are there new or additional procedures and supplies necessary to ensure passenger and worker areas are cleaned and disinfected between trips/shifts and load changes (e.g., review the latest OSHA www.osha.gov/Publications/influenza_pandemic.html and NIOSH www.cdc.gov/niosh/ guidance on cleaning materials and procedures)? For example, do you have sufficient and appropriate cleaning solutions and trained cleaning crews to disinfect the interior of railroad passenger cars? • What can you afford to stockpile; what must you stockpile? How do you fund these costs (e.g., retained earnings, special disaster fund, and other government support)?
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ACTION	Determine the most effective ways to ensure an adequate supply of essential materials.
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✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	<p>Identify physical/safety limitations in stocking sufficient essential supplies/materials locally.</p>	<ul style="list-style-type: none"> • Is there adequate space on-site at such as maintenance and rail yard support areas to safely and practically expand storage of fuels and supplies temporarily? • Are open warehouses and lots or storage containers available locally on short notice to serve as temporary storage sites? • Can these essential materials and supplies be safely, legally, and practically stored at local/regional distribution centers or at dispersed sites along travel routes? • Have you authorized essential workers to expedite critical purchases of supplies and materials via credit card or purchase order when the supervisors may not be available? • To improve availability options, do you have pre-established contracts with multiple vendors of essential supplies (e.g., multiple sources for the special batteries required as backup power for crossing signals)? • What happens if your supply chain cannot provide critical materials or supplies? How quickly would that affect your ability to provide essential services? How will you notify customers, vendors, and government emergency response officials on potential impacts? • Have you integrated your planning with your local/regional suppliers and other railroads to promote priority support for your essential requirements (e.g., ensuring a level of priority for fuel distribution; utilizing others' repair sites and fueling stations)? • Are there vulnerabilities in the support to your primary suppliers and supply sites (e.g., how resilient are those businesses upon which you rely; and those businesses which support and supply your essential first tier suppliers)? • How can you provide incentives for your essential suppliers and support contractors to become better prepared? For example, can you collaborate with contractors on pandemic planning, integrate preparedness training and exercises, provide mutual aid on key shared equipment and supplies, and potentially stipulate pandemic certification and validation in all supply contracts?
<input type="checkbox"/>	<p>Identify a formal chain of command to ensure someone is available to authorize major emergency procurements.</p>	
<input type="checkbox"/>	<p>Identify additional security needs for expanded and newly created high-value or at-risk material stockpiles.</p>	
<input type="checkbox"/>	<p>Identify potential risk through 1st/2nd/3rd-order vulnerabilities or unintended effects to supply chain (i.e., who supplies your suppliers?).</p>	
<input type="checkbox"/>	<p>Coordinate with all supply-chain vendors and normal support sites.</p>	



ESSENTIAL WORKERS

A severe influenza pandemic may cause extended absences for essential workers with workforce absenteeism approaching 40 percent. Complicating matters, the disease will strike randomly among employees from the boardroom to the mailroom. Implementing disciplined workplace personal hygiene and social distancing strategies may help reduce absentee rates for illness and other related reasons. Organizations may also consider stockpiling certain medical (e.g., for antiviral medications, see www.pandemicflu.gov/vaccine/medantivirals.html) and non-medical countermeasures, such as hand and surface disinfectants, gloves, and masks. A list of essential workers may likely include: *locomotive engineers; railroad conductors/brakemen; central yard operations; dispatchers and crew callers; signal and switch operators; repair and maintenance technicians for fixed and mobile equipment, electronics, communications and railway; HR and other key business workers; health and safety personnel; security and police operations; operational supervisors; executive management.*

ACTION Identify the types and numbers of workers critical to sustain essential functions.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	Identify essential workers based on the position/skills necessary to sustain essential functions and equipment.	<ul style="list-style-type: none"> Have you identified the worker categories and specific workers who you need to operate and maintain essential functions and equipment necessary to sustain your most essential services? Have you communicated this to your workers, unions, and other appropriate organizations? Have you prioritized your essential workers to receive pandemic vaccine and other medical countermeasures as they become available? Are there constraints in employing union and non-union workers for specific tasks? For example, can skilled railroad maintenance technicians serve as engineers temporarily, or can non-union operators fill in for sick union operators? What different challenges do you face with full-time, part-time, or seasonal employees, and how will you address these in your planning and preparedness efforts? Are there differences in your workforce by age and/or family status? For example, a predominantly young workforce may have more school-age children, and would likely be affected more profoundly by school closures and family self-quarantine. Do contractors provide in-house services for business functions or passenger support (e.g., workplace/vehicle cleaning, equipment repair, computer support, and catering services)? What are the different workforce challenges for on-site vs. off-site and full-time vs. part-time contractors to perform critical functions? What essential operations might you need to maintain temporarily through new or expanded external contract support (e.g., passenger waiting and rail supply stocks security)?
<input type="checkbox"/>	Define the roles and responsibilities of employees, labor organizations, staff, supervisors, managers, and staff medical personnel during an influenza pandemic.	
<input type="checkbox"/>	Assess impacts from short-term and extended absences by essential workers.	
<input type="checkbox"/>	Assess requirements given differences in operational demands for essential workers (e.g., off-site locomotive engineers vs. office-based dispatchers).	
<input type="checkbox"/>	Assess the options to obtain contractor backup support on essential operations and determine how quickly that can be started.	

ACTION Identify policies and procedures to ensure a safe workplace.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	Emphasize worker/workplace disease control/protection. See: www.pandemicflu.gov/plan/workplace/planning/index.html .	<ul style="list-style-type: none"> Could and should you stockpile emergency supplies onsite (e.g., food, water) for sequestered workers? What may such as social distancing, equipment decontamination and enhanced personal protection for passengers have on efficiency and effectiveness of railroad operations? Should you alter/enhance your worksite and vehicle (operator, passenger and freight areas) cleaning procedures (www.osha.gov/Publications/influenza_pandemic.html)?
<input type="checkbox"/>	Implement process to screen employees and visitors at entrances to critical facilities.	



<input type="checkbox"/>	<p>Determine the types of Personal Protective Equipment (PPE) that may be best for various worker types and worksites. For information on suggested PPE use, see: www.osha.gov/Publications/influenza_pandemic.html.</p>	<ul style="list-style-type: none"> • How do you fund stocking worker and potentially passenger protection items such as masks and cleaning materials, and possibly, with appropriate medical oversight and support, such as antiviral medications? • What measures should be taken to protect passengers and other public interacting with rail operations both to reduce possible disease transmission among passengers and others and to protect rail workers from potentially ill passengers and others? • Have you reviewed and incorporated worker preparedness tasks for safety requirements like mask and respirator training and fit testing in your plans based on OSHA requirements (www.osha.gov/Publications/influenza_pandemic.html)? • What impacts will disease protection options have on worker productivity? For example, can workers use PPE for extended periods while operating a train? What are the impacts when performing heavy physical labor (i.e., baggage and freight handling) if wearing PPE? • Have you considered closing non-critical common areas, such as break and lunchrooms, and ensuring workers do not commingle during shift changes? • How can worker safety and protection be improved during times when they are being housed en route overnight and transported between train assignments?
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ACTION	Identify policies and procedures to protect and sustain workers during an influenza pandemic.
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✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Reduce demands on essential workers.</p> <p>Temporarily augment essential worker ranks.</p> <p>Coordinate with officials on using non-licensed workers during an influenza pandemic.</p> <p>Consider, where practical, plans to have an increased number of appropriate employees work from a safer off-site location (i.e., home).</p> <p>Develop protocols for employees to follow (i.e., seek medical attention, stay away from work, notify supervisor) if they contract the virus, show symptoms, or have ill family members.</p>	<ul style="list-style-type: none"> • Are there practical temporary options you can exploit to increase worker availability (e.g., extending shifts to 12 hours, adding focused overtime, and using other non-essential workers both as essential replacements and to augment essential workers)? • Can you send non-essential staff home to reduce disease transmission at the workplace? • Have you considered extreme measures, such as sequestering essential workers onsite (e.g., emergency operations, dispatch and essential repair personnel)? • Have you trained less essential workers (e.g., mailroom workers) to perform essential jobs (e.g., ticketing, dispatch) during an emergency? • Where practical have you cross-trained essential workers on other key technical functions such as having locomotive engineers oriented/certified on multiple critical routes? • Have you considered re-certifying and employing skilled supervisors to operate essential equipment, and other options to augment essential workers such as employing retired locomotive engineers, skilled trainees, workers from other railroads and contract engineers? • Could you exploit off-site work options for part of your staff (e.g., payroll, bookkeeping)? • How will you ensure IT systems can support any increases in employees working offsite using electronic systems and internet connections? • Have you established a process to actively monitor and support potentially and confirmed ill workers and their families?



		<ul style="list-style-type: none"> • Have you established policies and provided equipment and training for workers in contact with passengers to screen for and manage potentially ill passengers, along with procedures to protect all passengers and fellow workers from possible disease transmission? • Have you considered establishing locations to screen workers before they begin their shift? • Can you separate workers from passengers during all operations, such as expanding Internet and other electronic means for ticket purchases?
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ACTION Identify Human Resource (HR) and protective actions to sustain essential workforce.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	Assess standard business HR policies and procedures.	<ul style="list-style-type: none"> • Have you adapted existing and/or developed sick leave policies to support ill workers and ill worker family? (www.pandemicflu.gov/plan/community/commitigation.html)? • Have you met with unions and other worker groups about implementing temporary policies? • Can and should the organization add pandemic-related provisions to its union/labor contracts to support temporary suspension of certain collective bargaining agreement provisions? • Have you communicated the risk and your potential response (i.e., crisis hotline) with workers and their families about potential HR policy changes? • Have you identified possible actions to help reduce potential abuse of your leave policies? • Have you identified legal and business effects from employing emergency HR policies? • Have you assessed relevant Federal, State, or local laws (e.g., Federal Medical Leave Act, www.dol.gov/esa/whd/fmla/) governing extended emergency leave for employees?
<input type="checkbox"/>	Develop additional HR policies specific to pandemic response.	
<input type="checkbox"/>	Identify likely legal considerations that may arise from these new HR actions.	
<input type="checkbox"/>	Develop plans and procedures that provide support and assistance to employees' families.	
<input type="checkbox"/>	Provide regular communication to all staff on the latest pandemic recommendations.	

ESSENTIAL INTERDEPENDENCIES

When an influenza pandemic strikes, it will affect all sectors of society. Preparedness and response will require a coordinated nation-wide response, including Federal, State, and local governments and most importantly the private sector. To enable a swift pandemic response and recovery, the Railroad Sub-Sector must identify and be able to sustain the essential interdependencies it supports and relies upon within and across sectors. Interdependencies requiring advanced coordination include support from municipal utilities, businesses, government health, safety and emergency response agencies, as well as essential goods and services from others such as fuel, electricity, healthcare, telecommunications, and emergency first responders.

ACTION Identify the interdependent relationships and take actions to sustain this essential support.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/>	Assess sector and external cross-sector essential service support requirements.	<ul style="list-style-type: none"> • What Transportation sub-sectors (e.g., local and long-haul trucking and maritime) do you rely on most for sustaining the movement of essential products, and vice versa? How can you enhance resilience within those sub-sectors? • What other critical sectors (e.g., Communications, Emergency Services, Water, and Food) do you depend on most to sustain essential operations? What can you do to enhance resilience within those Sectors and at the interface points with those other Sector operations? • Have you coordinated your support priority from entities inside and outside of your Sector (e.g., hotels and taxis for deadhead crew support; <i>Railinc</i> operations; fuel suppliers, and contractor support for wrecking crews and intermodal operations)? • What critical customers (e.g., electrical generation plants and water treatment utilities)
<input type="checkbox"/>	Assess the capability of the sub-sector's associations and government alert networks, as well as other informal mutual aid and assistance networks to reduce vulnerabilities.	
<input type="checkbox"/>	Work with partners (e.g., public health officials, first responders), who support and rely on you.	



- What international regulatory issues should be addressed in advance especially for U.S., Canadian, and Mexican passenger and freight rail operations at national border crossing sites both for the passengers/cargo and for the train crews?

IMPACTS FROM COMMUNITY DISEASE MITIGATION STRATEGIES

To reduce health impacts from an influenza pandemic, Federal, State, local, and tribal government authorities, as well as private entities, may implement strategies, including: voluntary isolation, voluntary home quarantine, school closures, and social distancing of adults in the community and workplace. While these public health strategies should help to contain the disease and will reduce the risk of infection and death, they may also have potentially significant consequences for the Railroad Sub-Sector. For more information on specific recommended community mitigation strategies, please see CDC's *Community Mitigation Strategies* at www.pandemicflu.gov/plan/community/commitigation.html and the *CIKR Pandemic Influenza Guide*

ACTION Identify effects from mitigation strategies; take actions to reduce negative impacts.

✓	SUPPORTING ACTIONS	QUESTIONS TO CONSIDER
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Review guidance and calculate effects of Community Disease Mitigation Strategies (www.pandemicflu.gov/plan/community/commitigation.html) on your organization, workers, and community.</p> <p>Coordinate and identify the strategies the State and community may employ.</p> <p>Discuss the potential impacts from these strategies with workers, families, customers and supporting businesses.</p> <p>Familiarize yourself with your community's influenza pandemic planning trigger points and the CDC's Pandemic Severity Index to determine the timing and use of mitigation interventions. For more, see: www.pandemicflu.gov/plan/community/commitigation.html#IV.</p>	<ul style="list-style-type: none"> • What impacts will mitigation strategies have on worker absenteeism? For example, how will it affect workers and their families if schools/daycare facilities close for weeks at a time? • What will be the affects on rail passenger demand and on railroad responsibilities and actions to assist in protecting rail passengers and in reducing disease transmission? • What are the direct and indirect costs associated with expanding the organization's sick leave policies to support mitigation strategies like home isolation and family quarantine? • If the organization does not have adequate sick leave or other compensation options available for workers who are ill or furloughed, what are the near- and long-term impacts on the workforce (e.g., lower income) and the organization (e.g., lower revenue) if workers are absent for prolonged periods? • What workplace enhanced social distancing, personal hygiene and environmental cleaning measures (e.g., work-at-home options, split working/meal shifts, reduced non-essential travel, and physical separation throughout the passenger handling areas and other worksites) can and should the organization implement? • Has the organization met with the local government and emergency response officials on the timing of their measures, alerts, and implementation and on their specific response triggers? • What additional potential external demand changes for the organization could occur when these strategies are implemented? • The greatest percentage of workers absent during an outbreak may likely be other than those directly ill (e.g., absent due to fear, family support, mitigation strategies). Does your influenza pandemic plan integrate practical support options for workers and their families under all circumstances in order to directly and indirectly lower worker absenteeism?

For additional information, including a PDF copy of the complete ***Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources***, visit www.pandemicflu.gov or email your questions to dhspandemic@dhs.gov.