The following are examples of major actions, issues, and supporting actions businesses should incorporate during the planning phase in concert with the initial WHO and USG pandemic alert phases/stages. Given the variety of CI/KR business types, these are not exhaustive of all possible actions. *The checklist should afford a reasonable start, and, at a minimum, should help the planner raise awareness and sensitivity to issues and actions not previously considered.*

PLANNING PHASE			
	Identify overall lead pandemic coordinator and/or team	Identify and include in all planning processes, a pandemic coordinator and/or team with defined roles and responsibilities.	• Designate a pandemic coordinator(s). • Assign members to the team and train for the tasks.
	Integrate planning input from inside and outside the business	Seek input and support from all employees, supply chain businesses, key supporting businesses (e.g., insurers, clients, and customers), and, when appropriate, the public.	• Conduct meetings and exercises with all internal and external stakeholders. • Establish a Web site, email, or telephone pandemic information sharing and concerns input center. • Conduct town hall meetings with employees, customers, and the public.
	Define "essential"	Defining what's "essential" may be the most important and most difficult task for planners. It first demands a truly comprehensive review of all functions and all obvious first order functions, as well as those less obvious second and third order ones. Also, it requires a frank assessment of what is really essential and what may be "simply" critical or useful.	• Define "essential" functions, goods, and services a business requires to sustain its own operations and survive as an economic entity. • Define those essential goods and services it provides that are vital to sustain the national, regional, and local communities. • Define the changes and implications of these changes for what is "essential" for each COP-E scenario as impacts become worse and goals shift.
	Identify and prioritize specific impacts on the business	For each COP-E scenario, identify the impacts from disruptions to essential functions, services, and goods. Assess these impacts in terms of priorities, time and "breaking points".	• Identify the prioritized effects on the business and the community, specifically noting what it means at each level when they are unavailable. • Identify how long a business can expect to continue providing essential functions, goods, and services in total or reduced quantities.

PLANNING PHASE			• Identify breaking points when outside resources can no longer provide essential functions, goods, and services.
	Prioritize devolving essential functions	Devolution is the capability to transfer authority and responsibility for essential functions from an organization's primary operating staff and facilities, to other employees and facilities, and to sustain operational capability under devolved authority for an extended period. Because local outbreaks will occur at different times, have variable durations, and may vary in their severity, devolution planning may need to consider rotating operations between regional/field offices as a pandemic wave moves throughout the United States.	• Identify primary and supporting functions based upon their impacts on providing essential goods and services for the business and the community. • Prioritize actions to support the "devolution of normal, critical, and essential functions."
	Delegate authorities and orders of succession	"Delegating authorities" is a formal chain of authority for business operations.	• Develop formal protocols for implementing "Delegations of Authority." • Develop and implement formal processes for "Orders of Succession" for all essential personnel. • Define the changes and implications of these changes for what is "essential" for each COP-E scenario as impacts become worse and goals shift.
	Identify/prioritize workers, supplies, equipment, and second/third order support	For the essential functions, identify those personnel, supplies, and equipment vital to maintain the business' essential internal and external functions, services and goods.	• Uncover potential second and third order impacts on workers, supplies, equipment, and supporting functions. • Assess unforeseen supporting interdependencies of "non-essential" functions. • Examine essential internal functions for other challenges, including work outsourced or performed by temporary, part-time, or contract employees.

PLANNING PHASE			
	Forecast worker absences	Forecast absences during a pandemic based on factors such as worker or family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.	• Meet with community health and emergency personnel to gather information on potential health impacts and disease containment strategies. • Monitor Federal, State, local, and tribal pandemic information sites for information on containment strategies. • Meet with workers and their families to assess specific impacts based on worker concerns and needs.
	Sustain essential functions, supplies, material, and equipment	Identify and propose actions to protect and sustain essential functions, supplies, materials, equipment, and systems support. Develop prioritized actions to promote "roster depth" for all essential functions and personnel and to ensure sufficient stocks and/or rapid, reliable re-supply processes for all essential materials and equipment for each COP-E scenario.	• Cross-train non-essential backup workers to perform essential functions. • Retrain and update recently retired essential and non-essential workers. • Train new reserve workers and appropriate worker family members. • Coordinate with like sector businesses to consolidate essential functions and workers at critical pandemic trigger points. • Propose cost-effective and efficient preparedness actions to stockpile strategic reserves for all essential supplies, material, and equipment. • Propose cost-effective and efficient preparedness actions to sustain supporting systems for essential functions, such as periodic maintenance, repair, and emergency replenishment.
	Sustain essential workers	Assess and propose pandemic response policies and actions to initially protect and sustain all business workers, family members, customers, clients, and the public, and then more specifically for the business' essential workers.	• Ensure availability of medical consultation and advice for potentially ill workers and their families and for emergency response. • Encourage and track annual influenza vaccination for employees. • Train new reserve workers, and appropriate worker family members.

		Establish flexible worksite (e.g., telecommuting) and work hour policies.
		• Establish policies to limit influenza spread at the worksite.
		• Establish infection control policies (e.g., immediate mandatory sick leave) for sick employees, and reassign personnel who are at high risk to develop influenza-related complications.
		• Establish policies restricting travel to affected domestic and international areas, evacuating employees working in or near affected areas, and providing guidance to employees returning from affected areas (see CDC travel recommendations).
		• Exercise and test policies and procedures.
		• Train managers and educate employees on policies and procedures.
Identify and assess workers' family care requirements	Whenever possible and with appropriate privacy protections, identify and assess issues for supporting worker family care. Under such extreme conditions, a worker's family becomes an essential supporting or risk element for the worker and the business. Better understanding the particular needs of workers' families allows for focused actions in developing and implementing a business "family care plan."	• Develop pandemic education and information sharing processes targeted for worker families. • Integrate protocols and technologies into emergency communications. • Ensure sensitivity to worker privacy on any information gathered. • Identify essential workers who are dual-income working parents or single, head of household parents. • Assess the number of workers with school-age children or other dependents at home. • Review the number of workers and families who rely solely on public transportation.

PLANNING PHASE

	Action	Issues to Consider	Supporting Actions
PLANNING PHASE			• Consider availability of social and community services support. • Plan for grief counseling and psychiatric care. • Account for language issues and barriers. • Identify other special family support needs.
	Prioritize support requirements	Prioritize the business' essential functions, personnel, and material needs for initial distribution of limited medical resources and for Federal, State, local, and tribal non-healthcare support. Federal prioritization schemes for vaccines, antivirals, and other medical countermeasures will be based on functional catagories or occupational types. The business will need to identify and prioritize their specific essential workers within these federal categories and types.	• Prioritize personnel for receipt of vaccines and antiviral medications. • Prioritize personnel for receipt of other types of medical countermeasures and personal protective equipment. • Identify and prioritize essential functions and equipment requiring municipal infrastructure support (water, elect, gas, etc.), essential supplies, and/or dedicated security support.
	Examine the business' inbound supply and support chain	Identify and prioritize critical interdependencies along the entire supply chain, especially noting part-time and outsourced contract support, and other second and third order relationships.	• Review all in-house supply requirements. • Meet with suppliers to identify the supply chain through each level of supply and delivery. • Meet with inbound distributors and transporters. • Examine all second and third tier relationships and other contract arrangements.
	Explore and assess the business' outbound supply chain	Assess interdependencies for essential functions, goods, and services that the business provides along the supply chain. Take special note of part-time and temporary support, outsourced contract support, and other important second and third order relationships.	• Review all in-house products and services distribution requirements. • Meet with outbound retailers, distributors, and transporters to examine issues with delivering the business' goods and services.

PLANNING PHASE		
Action	**Issues to Consider**	**Supporting Actions**
		• Examine all second and third tier relationships and other contract arrangements.
Examine national, regional, and local supply chain interdependencies and impacts	Assess and prioritize impacts from potential disruptions to national, regional, and local supply chains.	• Assess the business' supply chain for potential impacts from movement disruptions. • Prioritize operational impacts.
Investigate international interdependencies and impacts	Assess and prioritize impacts from disruptions in business travel and material movement for international workers/offices/plants/affiliates and across supply chains.	• Assess implications for the business' international workers/offices/affiliates. • Assess supply chain requirements involving international suppliers. • Prioritize all impacts by affects on the business' essential, critical, and normal operations.
Model interdependencies	Map and model the network of essential intra- and inter-sector, cross-border, and cross-jurisdictional interdependencies between the business and its supply chain and all government partners.	• Identify the network of supporting interdependencies. • Model these interdependencies to uncover any critical cross-dependencies.
Connect with Federal, State, local, and tribal government agencies	The business cannot stand alone; during a pandemic the business and the community will need to work closely as a supporting team to ensure success.	• Collaborate with State, regional, local, and tribal health departments, emergency response, and municipal infrastructure managers to ensure they identify your business as an essential supplier of functions, goods, and services. • Coordinate potential support requirements in advance, such as healthcare, municipal infrastructure, movement, and security. • Identify the assets and services your business could offer to the community.
Connect with insurers, health plans, and major healthcare facilities	Consider essential actions to ensure your workforce and their family's protection and assure them of plans for their medical support.	• Collaborate with insurers, health plans, and healthcare facilities. • Share pandemic plans and integrate plan with theirs.

PLANNING PHASE (vertical side label)

PLANNING PHASE

	Action	Issues to Consider	Supporting Actions
PLANNING PHASE	**Coordinate risk communications protocols and communications capabilities**	Effective, consistent, and timely risk communication is essential to inform and assure internal and external stakeholders during a disaster. Coordinate and support risk communications and information sharing initiatives for pandemic surveillance and detection within the business, across the supply chain, across all interdependent sectors, and with all appropriate government partners.	• Assess and prioritize the business' normal and emergency communications protocols, processes and capabilities for rapid information sharing with all relevant stakeholders. • Meet with all internal and external stakeholder groups to identify concerns and support needs. • Where practical, pre-package risk communications message options. • Coordinate with the local public health and emergency management teams on message and information sharing initiatives. • Develop information sharing processes and protocols tailored for each audience group.
	Provide for communications technologies and protocols	Provide for appropriate information technology, support, and protocols to ensure effective and efficient information sharing and risk communications consistent with the business' pandemic preparedness, response, and recovery needs. Establish tailored business emergency communications and information protocols that address differing requirements across all pandemic phases.	• Identify and assess current and available communications technologies in the business, in the community, and from Federal/State government. • Develop a plan for enhancing, procuring, leasing, or sharing necessary communications technologies. • Establish emergency and information sharing communication protocols for different technologies. • Ensure sufficient redundancy in technologies are available and planned.
	Public and media relations	Public and media relations will be critical to ensuring the business maintains community support, that its workers and customers/clients are consistently and factually informed, and to rapidly dispel any misinformation about the business.	• Meet with local and regional media staff and coordinators to discuss processes and shared support. • Assess requirements for public relations, likely target audiences, potential messages, and various mediums for delivering the messages.

PLANNING PHASE			
	Action	**Issues to Consider**	**Supporting Actions**
PLANNING PHASE			• Develop messages and prioritized actions for sharing information with the media. • Identify and mitigate challenges to supporting public and media relations. • Exploit opportunities to inform suppliers, customers, workers, and the public.
	Identify, document, coordinate, and test "trigger points" and resultant actions	A "triggering event" occurs when something in the external or internal environment changes and forces a business to respond. Identify and assess "triggering events" for each potential action, such as changes in the WHO and the USG pandemic alert matrix; Federal, State, tribal, and local government direction; and resource availability.	• Assess what triggers a change in the international pandemic alert status. • Assess what triggers a change in the Federal, State, and local pandemic alert. • Identify and assess what these triggers mean to the business' preparedness and response actions. • Establish authorities, triggers, and procedures for activating and terminating the business' response and recovery plans. • Establish formal mechanisms for altering business operations and transferring business knowledge to key employees. • Establish procedures to monitor the internal and external environment to respond to triggering events.
	Consider essential business support for the community and nation	Consider creative opportunities to adapt the business' essential and non-essential product lines and services to optimize availability of the most essential goods and services (e.g., a soft drink bottler could shift to bottle potable water).	• Assess current product lines and services for alternative uses. • Coordinate with local public health and emergency managers on potential critical shortage needs. • Identify costs and actions necessary to rapidly adapt products and services.

PLANNING PHASE

	Action	Issues to Consider	Supporting Actions
PLANNING PHASE	**Identify direct and indirect costs**	Costs and resource availability are key considerations in determining what can be afforded and how long preparedness actions may take to accomplish. Develop actions to identify and track all pandemic specific resource costs for each disaster phase to facilitate decision making concerning prioritizing and allocating limited business resources.	• Assess resource implications associated with each action to aid in prioritizing actions and in obtaining outside support. • Assess costs in developing reasonable implementation milestones and timelines. • Develop processes to monitor costs during pandemic phases both to reprioritize resources, and to validate costs for later reviews and possible compensation.
	Assess and incorporate actions developed for each disaster and COP-E phase	Pandemic impacts will evolve and requirements will alter dramatically based upon changes at each disaster phase.	• Identify and examine the assessments, processes, and actions developed for each disaster implementation phase (prepare, respond, and recover). • Review in light of both the business and the greater good.
	Identify metrics, milestones, and timelines	Identifying both external and internal metrics and milestone aids to ensure the business' planning expectations and preparedness horizons are achievable and practical.	• Assess each action to identify sub-actions and tasks. • Identify specific measurable processes or outcomes for each action. • Assess potential milestone and timeline implications based on best available time projections and WHO/CDC information on the pandemic. • Assess the time required to implement a potential action (e.g., one month vs. three years).
	Assess and develop exercise and training options	Exercises and training sessions are powerful tools for preparing the participants and the planners. Involving both internal and external business stakeholders in focused pandemic exercises and training sessions are critical components of any pandemic plan.	• Assess requirements for pandemic scenario-driven exercises with groups consisting of the business' managers and workers, as well as key suppliers, customers, and government emergency managers.

PLANNING PHASE			
	Action	**Issues to Consider**	**Supporting Actions**
PLANNING PHASE			• Develop scenario-driven exercises to test planning actions and involve internal and external stakeholders. See business specific scenario input above and Section 9-Appendix in the reference Guide for examples of pandemic scenarios and exercises. • Develop training programs for all personnel on personal, workplace and family protection protocols, and actions to take for each phase of a pandemic. • Assess and prioritize costs and available resources.
	Monitor actions and milestones	Develop a monitoring process and instrument sensitive to business privacy issues.	• Identify and develop a monitoring tool/instrument for use with the business' pandemic preparedness, response, and recovery actions. • Assess costs to develop and implement monitoring processes. • Develop, where practical, sharing agreements with similar businesses. • Coordinate with Federal, State, and local public health and emergency management officials to share monitoring capabilities and real-time status information.
	Finalize, implement, and review periodically	Finalize and implement the business' pandemic influenza plan(s) in a rational and timely way in order to ensure the business is fully prepared to respond and recover from a potentially severe pandemic influenza. Review all planning actions and processes periodically.	• Implement initial appropriate actions for the pandemic phase and external trigger point. • Continuously monitor and assess implementation actions to ensure staying on target. • Adjust plans as necessary to ensure a flexible, effective, and successful implementation. • Review plans periodically; at least every 90 days initially and more frequently as the pandemic evolves.

5.6.2 COP-E Preparedness Phase

Businesses vary greatly in their ability to plan for, respond to, and ultimately recover from a major disaster like a pandemic. How these differences are managed within a business, between businesses, and across sectors will be crucial to overall economic success.

The first implementation section from the business' Pandemic Plan incorporates specific assessments and actions needed to prepare the business to respond and recover from a pandemic influenza. The Preparedness Phase relates to the WHO Pandemic Alert Phases 1-4 and USG Stages 0-1; at Phase 5 and Stage 2 the time remaining to prepare for response is minimal. To succeed, preparedness demands involvement and support from all business echelons, ranging from CEOs to frontline workers and their families. Pandemic preparedness-specific processes and challenges are listed in the checklist below.

PREPAREDNESS PHASE

	Action	Issues to Consider	Supporting Actions
PREPAREDNESS PHASE	**Empower a pandemic preparedness and response team**	The pandemic planning coordinator and team may also serve as the lead preparedness and response team.	• Identify and assign pandemic emergency operations leadership and support team. • For larger businesses, establish an emergency operations center to manage response and recovery operations during outbreaks. • Leverage personnel and functions already established for other disaster contingency requirements.
	Incorporate disaster phases and COP-E scenarios for the pandemic periods	Planning and preparedness are not end-states. All actions necessary during response and recovery must have corresponding planning and preparedness actions.	• Businesses should track changes in the WHO and USG pandemic alerts to define objective "trigger points" when their preparedness activities should shift to the next level. • Integrate all the critical actions for the response and recovery disaster phases to ensure preparedness activities are focused and timely. • Successful preparedness necessitates prioritizing and implementing actions based on a full understanding and integration of requirements across each pandemic period and disaster phase.

PREPAREDNESS PHASE		
Action	**Issues to Consider**	**Supporting Actions**
PREPAREDNESS PHASE		• Refine and focus prioritized actions with respect to sustaining essential business, community and national functions, goods and services and achieving success under the three worsening scenarios.
Sustain essential functions	The bottom-line for preparedness is to support sustaining essential functions during response and recovery. Incorporate and prioritize all preparedness actions to ensure this primary outcome.	• Preparedness actions should concentrate on resolving potential weaknesses in these networks before their failure causes an entire function to fail. • Plan for scenarios likely to result in increased or decreased demand for goods and services (e.g., hand washing disinfectants and protective gloves) during a pandemic.
Prepare to sustain essential workers	• Reduce risk and protect workers and their families.	Implement actions and policies to reduce overall and specific "risk" and protect the workforce from internal and external contacts.
	• Improve the numbers of available essential workers.	One essential worker should not be the only employee able to perform a specific essential function. Implement preparedness actions to improve the roster depth of numbers for essential workers available for each function.
	• Auxillary workforce	Train and prepare an auxillary workforce to assume particular roles in helping to sustain essential functions (e.g., contractors, part-time employees, and family members).
	• Virtual operations	To build a more flexible worksite, establish and implement creative policies and actions, including promoting telecommuting; providing "batch-loading" tasks; and installing remote handling and delivery capabilities (i.e., drive-up windows).

PREPAREDNESS PHASE

Action	Issues to Consider	Supporting Actions
PREPAREDNESS PHASE	• Information technology support	Implement preparedness actions to enhance IT support for telecommuters to provide sufficient computer and telephone equipment, lines, and bandwidth at the business and at intermediary telecommunications systems.
	• Manage worker shifts	Practice "ghost-shift changes" wherever possible, with workers going off duty leaving the workplace before the new shift enters.
	• Create worker "shifts"	Consider expanding the normal one-shift workday to one with multiple shift periods to minimize worker contact.
	• "Safe" workers	Set up a process to track and deploy workers recovering from influenza to perform high-risk, essential services.
	• Home care options	Establish and test home care options for workers from single-parent and dual-income worker families. Home care options may include employing non-essential workers to help care for essential worker families.
	• Dedicated transportation	Identify worker transportation requirements. For those essential workers without options or for those who rely solely on public transportation, establish a means of dedicated transportation to/from work while maintaining necessary infection control processes (e.g., social distancing and surface cleaning).
	• Business and worker insurance	Review, revise, and implement insurance for workers, including providing adequate health insurance, business interruption insurance, and liability insurance for home care or dedicated transportation.

PREPAREDNESS PHASE		
Action	**Issues to Consider**	**Supporting Actions**
	• Worker leave	Implement policies and funds to pay for extended sick and family care leaves, worker furloughing, and "snow days."
	• International workers	Take measures to support workers at international sites and ensure the safety of returning U.S. workers and their families.
Ensure essential supplies, material, equipment and support systems	• Prioritized actions	Implement prioritized actions to ensure adequate reserves in a timely manner for all essential supplies, material, equipment, and systems support.
	• Reserve duration	Ensure pandemic reserves are sufficient to endure the initial 6-8 week wave, and to replenish rapidly during the first recovery period and subsequent waves.
	• Just-in-time requirements	Ensure businesses can maintain existing just-in-time supply and maintenance arrangements, or ensure sufficient reserve stockpiles are on-hand.
	• Equipment maintenance schedules	Review all equipment standard maintenance and repair schedules, maintenance history, and equipment life expectancy to ensure all essential and critical pieces are capable of sustained operation with the supply and maintenance resources available on-site or in reserves.
	• 2nd/3rd order effects	Target possible second and third order effects, such as "who supplies the suppliers" and identify their potential weaknesses.

(Vertical label: PREPAREDNESS PHASE)

PREPAREDNESS PHASE

	Action	Issues to Consider	Supporting Actions
PREPAREDNESS PHASE	**Address other interdependent systems**	For the business to be fully prepared, it must ensure all its essential interdependent in-house sub-contractors, and external suppliers, deliverers, and other connected systems are equally well prepared.	Implement actions to help prepare other essential interdependent support systems, including those performed by various onsite contractors and sub-contractors (e.g., security and food operations), and by outsourced off-site contractors (e.g., hazardous waste removal, physical, IT security, and emergency response).
	Implement internal surveillance and detection	Monitoring the environment to detect disease occurrence and outbreaks and the evolution from animals to humans affords the veterinary and human public health teams their best opportunity to swiftly interdict the disease and potentially contain its spread. Businesses play a critical role in supporting and conducting surveillance and detection, and monitoring their situational awareness.	• Different hospitals and health centers treating patients may not detect an outbreak immediately. The business suddenly experiencing greater than normal numbers of workers with flu-like symptoms may be first to alert the community and nation. • To assist Federal, State, tribal, and local public health officials, businesses should implement internal surveillance protocols and processes to monitor the health status of all workers, contractors, and family members. • Coordinate with local public health officials to develop a surveillance plan. • Collaborate with local public health officials to establish the best methods to report potential illness and outbreak information.
	Where available, utilize occupational health and medical teams	Typically, large- and medium-sized businesses have extensive in-house occupational health teams available for surveillance and response phase for health support.	• For businesses with in-house occupational health and medical staff, implement and share surveillance information with government public health officials. • Smaller business should explore sharing surveillance information and resources with larger businesses in their supply chain and the community. • Regardless of size, businesses should contact state and local public health offices to coordinate sharing expertise and disease surveillance strategies.

PREPAREDNESS PHASE		
Action	**Issues to Consider**	**Supporting Actions**
Exploit external surveillance and detection	Exploit international, national, state and local public health surveillance resources (e.g., international and national health surveillance Web sites; local emergency operations centers; and public health offices academic institutions) for monitoring disease progress externally to provide important insights into potential pandemic timing, impacts, and trigger points.	Visit these Web sites: • (HHS/CDC) http://pandemicflu.gov • (WHO) www.who.int/csr/outbreaknetwork/en • (Pan American Health Organization) www.paho.org/english/ad/dpc/cd/influenza.htm • (European Union) www.eu.int/comm/health/index_en.html
Monitor and coordinate changes in trigger and breaking points	Businesses that monitor external surveillance efforts and implement internal surveillance programs will be better informed and prepared to adjust key actions for their own pandemic preparedness and response and recovery trigger points. Coordinate and update government and local emergency response units and essential points of contact concerning changes to the business' response and recovery trigger and breaking points.	• Monitor and adjust business trigger points and actions from changes in international, national, and local pandemic phases. • Large businesses should share their external surveillance information and insights on trigger points with smaller businesses in their supply chain and community. • Identify key points of contact at all government and emergency services providers on preparedness actions and support requirements. • Ensure they are aware and able to respond to changes in the business' critical trigger and breaking points.
Implement risk communications and information sharing	Implement risk communications and information sharing protocols to ensure an open, consistent two-way information flow with suppliers, customers, workers, families and all appropriate government and emergency response agencies.	• Implement risk communications and information sharing protocols and technologies. • Train all appropriate internal and external stakeholders on communications systems. • Test communications effectiveness under exercise conditions.

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PREPAREDNESS PHASE

PREPAREDNESS PHASE

Action	Issues to Consider	Supporting Actions
Coordinate business and public relations	Implement a business and public relations strategy that allows for the dissemination of programs and materials on business preparedness and pandemic fundamentals. As businesses become more expert at tracking and understanding international, national and local surveillance actions, they will be better able to assure internal and external stakeholders and manage misinformation about the pandemic and their operations.	• Provide overview information on symptoms of influenza, modes of transmission, etc. • Provide information on personal protection and response strategies (e.g., hand hygiene, sneezing etiquette, and PPE). • Provide information on disease containment strategies (e.g., social distancing and snow days). • Provide updated business planning and preparedness information. • Share information on trigger point and phase changes and implications for the business with all internal and external stakeholders. • Coordinate with public and media relations points of contact to ensure they are aware of changes and any impacts on the business.
Share and compare best business practices	Many preparedness actions are common across various businesses and community agencies, by sharing and comparing best practices the business can not only improve its own preparedness but save resources on less effective actions.	• Share best practices with other businesses in your community, chambers of commerce, and associations to improve community response efforts. • Participate in business and community working groups to share information about interdependent and essential functions, develop supporting relationships, and ensure visibility for all business preparedness, response and recovery plans.
Implement exercises, education, and training	Implement and test preparedness exercise, education, and training programs for in-house workers, their families, contactors, suppliers, and customers as well as for appropriate external businesses and community support.	• Implement scenario-driven exercises to test planning actions and involve internal and external stakeholders. • Train all personnel on personal, workplace, and family protection protocols, and actions to take for each phase of a pandemic.

PREPAREDNESS PHASE			
	Action	**Issues to Consider**	**Supporting Actions**
PREPAREDNESS PHASE	**Refine costs and resources**	Refine and reprogram initial planning "costs" associated with pandemic preparedness and reprioritize implementation based upon available resources.	• Assess all costs based upon actual preparedness expenditures and update estimates for response and recovery. • Reprioritize all actions based upon any changes in pandemic timing, costs, and available resources.
	Adjust actions	Rapidly and effectively adjust actions based upon changes in the operational environment.	• Continuously assess ongoing preparedness activities to adjust objectives, effects, and actions based upon changes in the business and greater economic and social environments. • Continuously assess planned response and recovery actions to ensure they remain the best actions to achieve success.

5.6.3 COP-E Response Phase

WHO Alert Phase 5 and USG Stage 2 describe an evolving pandemic with confirmed but not sustained human-to-human outbreaks at one or more sites. At this stage, there will be little or no time remaining before communities and businesses in the United States begin reacting. Thus, final preparations and initial response actions should be implemented now. Actions taken in the response phase should exploit the solid foundation constructed during preparedness. However, what is planned and what actually occurs as the pandemic unfolds may be quite different. Businesses should train workers to adjust from planned actions as pandemic impacts materialize in order to contain any new challenges before their localized impacts and implications can produce cascading effects with potentially catastrophic outcomes. Response phase actions are listed in the checklist below.

RESPONSE PHASE			
	Action	**Issues to Consider**	**Supporting Actions**
RESPONSE PHASE	**Assess swiftness of the pandemic outbreaks**	The speed with which pandemic outbreaks may appear and spread across the nation will severely challenge typical Federal, State, and private sector disaster response capabilities and capacities.	• Monitor international, national, State, and local pandemic outbreak reports. • Assess and adjust actions based on potential implications for the business as it spreads. • Assess implications on all business locations. • Assess supply chain impacts on the business due to outbreaks.
	Employ risk management strategies at the workplace	There are two basic categories of risk management intervention: transmission interventions (i.e., cough etiquette and hand hygiene) and contact interventions (i.e., social distancing techniques and the implementation of liberal leave policies).	• Implement specific strategies to protect employees from getting or spreading influenza on the job, including instituting processes that request and enable employees with influenza to stay home at the first sign of symptoms. • After assessing workers, the business should tailor interventions to the particular needs of individuals or of the business.
	Manage and track individual worker risk for complications	Individuals at high risk for severe and fatal infection cannot be predicted with certainty but will likely include: • Pregnant women • Persons with compromised immune systems • Persons with underlying chronic conditions	• Identify and assess implications for those at-risk workers and family members. • Provide additional protections for employees falling into at-risk categories. • Track the health status of these high risk workers and their families.

RESPONSE PHASE		
Action	**Issues to Consider**	**Supporting Actions**
	• Persons age 65 or older.	• Coordinate with local public health and healthcare delivery sites to report incidents and prioritize care.
Recommend worker family protection strategies	Share with workers and their families personal and home protection measures and social distancing strategies similar to those employed in the workplace or in public.	For additional guidance on individual and family care pandemic planning, visit www.pandemicflu.gov/planguide/checklist.html
Enforce worker protection strategies	In concert with their fellow workers, workers should pursue individual protective strategies while at the worksite. Businesses should publish these strategies for use by all workers.	• Implement personal social distancing strategies: where practical maintain three feet spatial separation between workers. • Avoid crowded places and heavily populated gatherings. • Avoid face-to-face meetings—use teleconference calls, videoconferencing, and the Internet to conduct business. • Avoid public transportation or avoid rush hour crowding on public transportation. • Avoid workplace cafeterias and introduce staggered lunchtimes. • Avoid congregating in break rooms. • If a face-to-face meeting with people is unavoidable, minimize the meeting time, choose a large room, and sit at least one yard away from each other.
Consider use of PPE	If symptomatic persons cannot stay home during the acute phase of their illness, require them to wear a surgical/procedure mask or N95 respirator in public places.	• Although officials have not documented the efficacy of surgical/procedure masks or N95 respirators, workers may wear one as part of an individual protection strategies.

RESPONSE PHASE

RESPONSE PHASE

Action	Issues to Consider	Supporting Actions
		• Even with proper PPE and training, and employing all other appropriate infection control procedures, symptomatic workers should only be allowed in the workplace under the most extreme circumstances to sustain essential business continuity. • Visit www.hhs.gov/pandemicflu/plan/sup4.html#ppestan for more information and updates on PPE.
Enforce worksite protection strategies	Basic worker protection strategies should be incorporated in business pandemic plans and preparedness actions.	• Implement relevant social distancing policies, including furloughing non-essential workers and employing "snow days." • Promote hand hygiene and cough etiquette in workplace. • Develop policies for financially assisting furloughed workers. • Modify office and plant layouts and workstation arrangements. • Set up pick-up or delivery systems where clients and customers can pre-order and/or request information via telephone/email/fax. • Provide sufficient and accessible infection control supplies. • Evaluate worker access to and availability of healthcare services during a pandemic.
Publish and encourage individual protection strategies	Implement the CDC recommended personal health protection strategies at www.cdc.gov/flu/protect/stopgerms.htm.	• Avoid close contact. • Stay home when sick. • Cover your mouth and nose. • Clean your hands. • Avoid touching eyes, nose or mouth.

RESPONSE PHASE

RESPONSE PHASE

Action	Issues to Consider	Supporting Actions
Restrict workforce travel	Establish policies for restricting travel to affected geographic areas, evacuating employees working in or near affected areas, and providing guidance for employees returning from affected areas (refer to CDC travel recommendations). Organizations should anticipate how such measures might further substantially aggravate staffing shortages.	• Monitor worker travel plans. • Monitor U.S. government health and travel Web sites (www.cdc.gov/travel/index.htm and www.state.gov/travel). • Cancel trips based on travel advisories issued by the USG. • Conduct business using teleconference, conference calls, or other means.
Clean facilities and equipment	Given that influenza can spread through contaminated objects and surfaces, additional protection measures may be required to minimize the transmission of the virus through environmental surfaces such as sinks, handles, railings, and counters. Transmission from contaminated hard surfaces is unlikely but influenza viruses may live up to two days on such surfaces.	• The CDC recommends cleaning worksite surfaces with soap and water or a detergent/disinfectant, depending on the nature of the surface and the type and degree of contamination. • Clean surfaces touched with hands, at least daily. • HHS will develop additional guidance regarding cleaning procedures and handling of potentially contaminated waste in non-healthcare settings such as the workplace.
Ensure social and psychological support	Experiences with disaster relief efforts suggest enhanced workforce support activities help workers remain effective during emergencies. During a pandemic, the occupational stresses will likely differ from those faced by relief workers in the aftermath of a natural disaster. The severity and duration of illness along with potentially high numbers of deaths will add considerably to personal and social stress.	• Monitor worker and worker family social and psychological concerns. • Create alliances with community-based, government and non-governmental organizations with expertise in providing psychosocial support services. • Visit www.hhs.gov/pandemicflu/plan/sup11.html for updated information.
Conduct training and exercises in workplace and personal protection	The protocols employed are usually not part of normal business operations, and employers must train workers on them under actual work conditions and settings.	• Exercise and train pandemic response teams on protection protocols periodically during preparedness phase and actively in response.

RESPONSE PHASE

RESPONSE PHASE

Action	Issues to Consider	Supporting Actions
		• Train workers on personal and worksite protection strategies. • If PPE is used, ensure all workers have been thoroughly trained and where appropriate fitted for use according to CDC, OSHA, and manufacturer's guidance.
Implement protection strategies and actions and monitor completing milestones	Planners and pandemic response teams should include deliberate methods to measure, monitor, and adjust actions to changing conditions and improved protection strategies.	• Implement a formal worker and workplace protection strategy with metrics for assessing worker conformance and workplace cleanliness. • Monitor and periodically test protection methods. • Track and implement changes in approved or recommended protection measures.
Assess and coordinate impacts on disaster response support	Shifting resources geographically from a safe zone to an impacted one will be a limited option for government and private sector businesses. Businesses will initially rely solely on their own pre-positioned, on-site resource reserves.	• Pre-position material and equipment onsite. • Ensure essential personnel are at the primary worksite. • Reaffirm that essential suppliers have their material and personnel on-hand and are able to respond and support as planned. • Coordinate with local public health and emergency response points of contact to ensure open, adequate communications.
Manage compounding impacts, business "breaking points," and cascading effects	The diverse stressors on critical infrastructures may be compounded by the sheer scope and severity of pandemic impacts, which may cause businesses to exceed system breaking points faster than predicted. Businesses must be prepared to efficiently respond and contain these local and perhaps seemingly minor breakdowns before they cause major cascading effects.	• As pandemic impacts mount, closely monitor all essential functions to ensure sustained operations. • Monitor potential weaknesses in the system that may fail faster than planned.

RESPONSE PHASE		
Action	**Issues to Consider**	**Supporting Actions**
		• Rapidly adjust actions to address any normal, critical, or essential system disruptions or failures in order to correct for the loss and to mitigate and contain any potential cascading effects on essential systems.
Monitor and adjust for cross-sector and international interdependencies and cascading effects	National cross-sector support challenges and international supply chain interdependencies may cause catastrophic cascading effects due to reliance on essential "unknown" second and third-order supplies and suppliers.	• Assess the supply chain and all supporting businesses to ensure essential functions are sustained. • Coordinate with supporting businesses to ensure no previously "unknown" challenge has arisen. • Monitor international, national, State, and local information channels for new impacts and implications.
Ensure response support risk communications and technologies	Response personnel at all levels must have a common operating picture for unfolding events to prioritize and allocate support resources. Given the sheer scale and numbers involved, however, current communications systems may prove ineffective and incapable of supporting information sharing within and across sectors.	• Re-test all internal and external business emergency, risk, and information sharing communications systems and protocols. • Re-test all community-based emergency and information sharing communications systems. • Ensure and re-test options for work-around opportunities when primary communications systems fail.
Coordinate government direct and indirect support	Direct support may be in the form of vaccines, antiviral drugs, and personal protection supplies for essential workers, priority and clearances for a business' supply deliveries, on-site public safety and physical security augmentation, and specific material from government stockpiles. Support that is more indirect may come from governmental relief with waivers for key regulatory and jurisdictional restrictions specific to an essential sector or particular business.	• Re-affirm contacts and planned actions with government and community emergency management personnel. • Track availability of government direct and indirect support. • Assess and project support needs to inform and coordinate with government and community teams. • Coordinate with all supporting businesses to assess their needs and timing for government support.

RESPONSE PHASE

	Action	Issues to Consider	Supporting Actions
RESPONSE PHASE	**Exercise media and public relations**	Controlling misinformation and rumors will remain a critical function for government and businesses during times of extreme stress.	• Re-affirm contacts and planned actions with public and media relations points of contact. • Assess pre-planned message and adjust for changing conditions. • Monitor and forecast potential public and media relations issues. • Quickly address rumors and misinformation. • Keep all internal and external stakeholders informed in a timely manner.
	Anticipate economic and social disruption	Potential shortages and disruptions to the delivery of provisions of basic commodities and maintenance of municipal infrastructure during the peak pandemic times may result in public safety and physical security challenges at the local and national level.	• Adjust business actions based on any unfolding economic and social disruptions. • Coordinate closely with local government and community emergency response personnel to stay abreast of localized disruptions. • Affirm all business plans and actions to maintain security for the workplace and workers. • Coordinate with local community and other businesses to assist where possible in helping to maintain economic and social order.
	Monitor and rapidly adjust	The ability to continuously monitor all business activities and then affect rapid adjustments based upon observed and anticipated changes and impacts will be the hallmark of the business that successfully copes during the pandemic response phase(s).	• Implement the business response plan. • Continuously monitor and assess response actions. • Rapidly adjust actions as required to sustain essential functions and ensure success.

5.6.4 COP-E Recovery Phase

"Even if a 1918-like scenario unfolds, 98 out of every 100 people will still be alive at the end of the pandemic; how do we minimize their pain and suffering?.Hope and despair are not strategies…Comprehensive and serious planning is not optional…"

Michael T. Osterholm Ph.D., MPH
University of Minnesota
February 2006

Business contingency planners and response teams should assess how the different pandemic challenges in the response phase may affect their business and incorporate these into their plans and recovery actions. Furthermore, unlike nearly all other disasters, pandemic recovery duration and investments must be tempered by priorities for pandemic preparedness for follow-on waves. Examples of major recovery challenges are listed in the checklist below.

RECOVERY PHASE		
Action	**Issues to Consider**	**Supporting Actions**
Assess response impacts, little physical damage yet still costly and protracted	There may be little physical damage to municipal infrastructures, business facilities, and worker homes. Physical damage likely will result from equipment breakdowns from deferred maintenance and repair, and potentially from localized security and social disruptions. However, the recovery phase will likely still be lengthy and costly for most businesses.	• Assess all physical, economic, and social impacts. • Adjust recovery actions based upon actual impacts and circumstances. • Assess costs to prepare for next wave. • Implement all planned and adjusted recovery actions to restore the business to full, normal operations.
Prepare for next pandemic waves	Unlike most other natural and manmade disasters, a pandemic could linger for more than a year with multiple outbreaks.	• Monitor international and national health information sources for any updates on next pandemic waves. • Balance recovery actions with essential preparedness for next wave actions.
Address impacts from influenza related illness and deaths	Overcoming effects from worker and worker family illness and death will be a significant challenge for all businesses.	• Finding sufficient suitable replacements will be difficult.

RECOVERY PHASE

	Action	Issues to Consider	Supporting Actions
RECOVERY PHASE			• Skilled workers may take advantage of higher demand and compensation elsewhere. • There will be a substantial increase in single-parent families and orphans. • Widespread fear and grief will potentially cause long-term psychological trauma.
	Overcome impacts of skilled worker and essential material shortages and competition	Lost income and competition for available skilled workers and scarce materials favors larger businesses.	• Assess shortage impacts on the business. • Forecast costs and time to recover. • Implement options and actions to correct shortages.
	Examine competition impacts on small businesses	For small business, the competition for personnel and supplies will delay or even end their recovery opportunities.	• The business community as a whole should assist to mitigate the impacts of competition and recovery on smaller businesses. • Managing this competition through focused government interventions and/or business cooperation may prove vital to a national economic recovery.
	Mitigate impacts on worker lost income	Lower- and middle-income workers lacking sufficient reserves to weather extended unemployment will be hardest hit.	• Where practical develop internal programs to assist in assuring workers and their families will not face financial ruin. • Assess actual impacts on the business' workers and families. • Assist workers to access available business and government worker recovery support programs.
	Assess insurance and business impacts	Where plant shutdowns are required, "restarts" for critical infrastructure manufacturing plants may be extensive and problematic for the plant and other businesses.	• Assess impacts on insurance companies and self-insuring businesses.

RECOVERY PHASE		
Action	**Issues to Consider**	**Supporting Actions**
		• Mitigate impacts on the business from potential failures in their supporting insurance.
Examine impacts from production and other plant shutdowns	Lost income and competition for available skilled workers and scarce materials favors larger businesses.	• Assess and mitigate plant shutdown impacts. • Assess and mitigate impacts from shutdowns in plants owned by others that provide the business with essential supplies and equipment. • Communicate with customers, suppliers, and government recovery teams on potential challenges resulting from delayed plant restarts.
International recovery potentially lagging behind the United States	International raw material availability, manufacturing and assembly, supply chain support, as well as international purchases of U.S. goods may be delayed.	• Monitor international recovery operations and assess impacts from any delays. • Mitigate delays in international supply chain recovery.
Coordinate government and community support	In the recovery phase, numerous opportunities exist for direct and indirect governmental and community support and relief, which include direct personnel and material support, indirect regulatory and jurisdictional waivers, and tax and financial incentives.	• Re-affirm contacts and planned actions with government and community emergency management personnel. • Track availability of government direct and indirect recovery support. • Assess and project potential support needs to inform and coordinate with government and community teams.
Continue enhanced risk communications and information sharing	Honest, accurate, and timely risk communications and open information sharing within and across businesses and the community and government is critical to a successful recovery.	• Ensure communications and information-sharing channels remain open with all external stakeholders. • Provide continuous updates concerning business recovery and next pandemic wave preparedness efforts. • Share all information in an honest, consistent, and timely manner.

Sidebar label: RECOVERY PHASE

RECOVERY PHASE

	Action	Issues to Consider	Supporting Actions
RECOVERY PHASE	**Maintain public and media relations**	Information sharing within the business, between the business and its suppliers and customers, with other sector businesses, and for public and media relations will remain essential to control misinformation and rumors.	• Re-affirm contacts and planned actions with public and media points of contact. • Assess pre-planned message and adjust as necessary. • Monitor and forecast potential public/media relations issues. • Quickly address any rumors and misinformation. • Keep all internal and external stakeholders informed in a timely, consistent manner.
	Measure, monitor, and adjust	Implementing and measuring recovery actions, and monitoring to adjust these based on observed and anticipated changes and impacts will continue to be the hallmark of the business that successfully copes through a pandemic.	• Implement the business recovery and prepare for next wave plan. • Continuously monitor recovery and prepare actions. • Adjust actions to restore essential functions and ensure success for the next pandemic wave.