

No	Issue/Action	Federal Register Version	Summary of Comments	Clarification	Revised Text
Section: Patient Cohorting and Isolation Precautions					
1	Review proposed revised recommendation	1.A.1. Avoid exposure to vomitus or diarrhea. For a recognized outbreak, use Contact Precautions for patients with symptoms consistent with norovirus gastroenteritis. Sporadic cases of norovirus can be managed under Standard Precautions with provisions to reduce staff, visitor, and patient exposures to vomitus or diarrhea. (Cat. IB)	1) Use of standard precautions with sporadic cases of norovirus may not be sufficient to control the onset of an outbreak due to delays in receiving confirmation of norovirus 2) May put HCP at risk because must rely on others to determine when to change precautions	Revised language. Proposed change to use contact precautions for sporadic cases. This is different than 2007 Isolation Guideline where standard precautions for both sporadic cases and outbreak control	1.A.1 Avoid exposure to vomitus or diarrhea. Place patients on Contact Precautions if they present with symptoms consistent with norovirus gastroenteritis. (Category IB)
2	Minor change to include "young children"	3.A.1: Consider extending the duration of isolation or cohorting precautions for outbreaks among infants, even after resolution of symptoms, as there is a potential for prolonged viral shedding and environmental contamination. Among infants, extending contact precautions for up to 5 days after the resolution of symptoms is suggested. (Category II)	Consider changing infants to pediatrics or defining age of 'infants.' Also, while likely outside the dates of the initial literature search, there is additional evidence that shedding of virus is also prolonged for other extremes of age.	The definition of infants is standard (<1 year) but in reconsidering the 2 studies with data, will revise to include "young children" because older individuals may also demonstrate prolonged shedding	3.A.1 Consider extending the duration of isolation or cohorting precautions for outbreaks among infants and young children (e.g., under 2 years), even after resolution of symptoms, as there is a potential for prolonged viral shedding and environmental contamination. Among infants, extending contact precautions for up to 5 days after the resolution of symptoms is suggested. (Category II)

3	Minor change to clarify recommendation	3.C.4.a - During outbreaks, patients with norovirus gastroenteritis should be cohorted or placed on Contact Precautions for a minimum of 48 hours after the resolution of symptoms to prevent further exposure of susceptible patients (Category IB) (Key Question 3C)	Establishing a cohort does not obviate the need for contact precautions for symptomatic individuals.	Removed cohorting text from this rec because is covered in 3.C.4.b	3.C.4.a - During outbreaks, place patients with norovirus gastroenteritis on Contact Precautions for a minimum of 48 hours after the resolution of symptoms to prevent further transmission. (Category IB) (Key Question 3C)
4	Review reorganization of 3.C.4.b recommendations.	3.C.4.b During suspected or confirmed outbreaks, preferentially place patients with norovirus gastroenteritis on Contact Precautions and into private rooms equipped with at least one dedicated handwashing sink and toilet or commode. If these provisions are not available, patients may be cohorted into groups of those who are symptomatic, exposed but asymptomatic, and unexposed with access to separate toilets or commodes for each group. Alternatively, all patients within a hospital unit or section may be placed under Contact Precautions. (Category IB) (Key Question 3C)	Additional guidance is needed for monitoring symptom development of the group (exposed but asymptomatic) or consider the option of cohorting only infected vs. noninfected groups.	This suggestion addresses the need to continually assess the evolution and incidence of new cases or exposure status; however, there were no studies that directly addressed the process of monitoring cases outside of general case finding. Some redundancy with recommendation 3.C.4.a. Proposed changes that retain the definitions of cohorting but remove the rest of the language which is similar to 3.C.4.a.	3.C.4.b - When symptomatic patients cannot be accommodated in single occupancy rooms, cohort patients in multi-occupancy rooms under Contact Precautions (e.g., grouped among those who are symptomatic, exposed but asymptomatic, and unexposed). Symptomatic patients within an entire hospital unit or section can be placed on Contact Precautions (e.g., unit-level isolation). (Category IB) (Key Question 3C)

5	Review proposed revised recommendation (split from a single recommendation)	3.C.4.c Minimize patient movements within a ward or unit. Symptomatic and recovering patients should not leave the patient-care area unless it is for essential care or treatment, to reduce the likelihood of environmental contamination and transmission of norovirus in unaffected clinical areas. (Category II) (Key Question 3C)	Clarify wording that this recommendation applies to those with suspected norovirus infection.	During outbreaks, all unit-level activities are affected and require amendments to daily activities by all patients, particularly in circumstances where there may be a greater burden of environmental contamination	3.C.4.c Minimize patient movements within a ward or unit during norovirus gastroenteritis outbreaks. (Category II) (Key Question 3C) NEW 3.C.4.c.1 It is not recommended that symptomatic and recovering patients leave the patient-care area unless it is for essential care or treatment to reduce the likelihood of environmental contamination and transmission of norovirus in unaffected clinical areas. (Category II) (Key Question 3C)
6	Minor change to text to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.C.4.d Suspend group activities (e.g., dining events) during an uncontrolled outbreak of norovirus gastroenteritis. (Category II) (Key Question 3C)		Changed the strength of the language to reflect the Cat II level of evidence	3.C.4.d Consider suspending group activities (e.g., dining events) for the duration of a norovirus outbreak. (Category II) (Key Question 3C)
7	Minor change to text	3.C.5.b Staff who have recovered from recent suspected norovirus infection associated with this outbreak may be best suited to care for exposed or symptomatic patients. (Cat. II)	Add a statement “until the outbreak is resolved.”	Added clarification	3.C.5.b Staff who have recovered from recent suspected norovirus infection associated with this outbreak may be best suited to care for exposed or symptomatic patients until the outbreak resolves.

(Cat. II)(Key Question 3C)

Hand Hygiene

8	Rearranged order of 3.C.1 recommendations as they pertain to hand hygiene				3.C.1.a. Actively promote adherence to hand hygiene among healthcare personnel, patients, and visitors in patient care areas affected by outbreaks of norovirus gastroenteritis. (Category IB) (Key Question 3C)
9	Review for restricted activities where hand washing with soap and water AFTER contact with symptomatic patients	3.C.1.a Perform handwashing, using soap and water, according to Standard Precautions (i.e, prior to contact with patients, medication preparation, preparation or consumption of food, insertion of invasive devices, after touching contaminated equipment, removing personal protective equipment [PPE; e.g., gloves], or toileting activities with patients with symptoms of norovirus infection). (cf: http://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf). (Category IB) (Key Question 3C)	1) Hand Hygiene: change the term “handwashing” to hand hygiene as standard precautions include either technique. Reinforce the recommendations in the CDC’s Hand Hygiene Guideline, 2002, that emphasize handwashing if hands are visibly soiled. It is also unclear as stated that this is intended to be directed solely to care of patients with suspect/proven norovirus infection. 2) Can use alcohol hand sanitizer prior to contact with patients, med prep, food prep, insertion of invasive devices; list other activities	1) Clarified the language in the recommendation to promote the use of soap and water after contact with patients experiencing symptoms of norovirus. 2) Add "after contact with norovirus patients"; Removed the statement on the use of soap and water (redundant to 3.C.1.a) and retained only the statement on alcohol hand sanitizer for the new 3.C.1.b.1	3.C.1.b. During outbreaks, prioritize hand hygiene with soap and water after providing care or having contact with patients suspected or confirmed with norovirus gastroenteritis based on the possible benefits of mechanical removal of infectious material. (Category IB) (Key Question 3C)

10	Minor change to language to include "FDA-compliant" terminology (vs. approved); removed blood as an exposure risk; reworded the prioritization of soap and water	3.C.1.b.1 During outbreaks, use of soap and water is the preferred method of hand hygiene. Consider FDA-approved alcohol-based hand sanitizers as a supplemental method of hand hygiene during outbreaks of norovirus gastroenteritis when hands are not visibly soiled and have not been in contact with diarrheal patients, contaminated surfaces, or blood or other body fluids. (Category II) (Key Question 3C)	Recommend "FDA compliant (monograph or NDA)" Clarify that products marketed in compliance with the OTC drug review or healthcare antiseptic monograph are acceptable in addition to products marketed under an NDA	Change made.	3.C.1.b.1. For other hand hygiene indications, use Standard Precautions to guide practice, including the use of FDA-compliant alcohol based hand sanitizer (e.g., when hands are not visibly soiled and have not been in contact with diarrheal patients, contaminated surfaces, or other body fluids). (Category IB) Refer to the 2002 HICPAC Guideline for Hand Hygiene in Health-Care Settings: http://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf .
11	Minor change to text to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.C.1.b.3 Ethanol-based hand sanitizers (60-95%) are preferred as a supplemental method of hand hygiene compared to other alcohol or non-alcohol based hand sanitizer products during outbreaks of norovirus gastroenteritis. (Category II) (Key Question 3C)		Changed the strength of the language to reflect the Cat II level of evidence	3.C.1.b.2. Consider ethanol-based hand sanitizers (60-95%) as the preferred active agent for hand hygiene compared to other alcohol or non-alcohol based hand sanitizer products during outbreaks of norovirus gastroenteritis. (Category II) (Key Question 3C)

Patient Transfer and Ward Closure

12	Review major change to the wording of this recommendation, maintained as a Cat II rec	3.C.11 During outbreaks, patients on Contact Precautions for norovirus can be transferred or discharged to skilled nursing facilities as needed. If receiving facilities are unable to provide adequate cohorting or isolation provisions, it may be prudent to postpone transfers until arrangements are made for appropriate isolation or cohorting. Expedite the discharge of symptomatic or recovering patients who are medically suitable for discharge to their place of residence. (Category II) (Key Question 3C)	Concerns about transfer and interfacility spread; This can safely be accomplished for patients who have recovered from acute illness but the intent should not be to shift risk for ongoing transmission from one setting to another. The wording of this needs to emphasize communication and collaboration between facilities when caring for sporadic or cluster/ outbreak of possible norovirus. Suggest elimination of last statement.	Several studies cite the benefits of delaying transfer unless medically urgent. Changed the recommendation to reflect the evidence we reviewed	3.C.11 Consider urgent transfers only if receiving facilities are able to maintain contact precautions; otherwise, it may be prudent to postpone transfers until patients no longer require Contact Precautions. During outbreaks, medically suitable individuals recovering from norovirus gastroenteritis can be discharged to their place of residence. (Category II) (Key Question 3C)
13	Minor changes to wording for clarity and to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	(No key question) Implement systems to designate patients with symptomatic norovirus and to notify receiving healthcare facilities or personnel prior to transfer of such patients within or between facilities. (Category II)		Clarified the language to reflect the strength of the recommendation	(No key question) Consider implementing systems to designate patients with symptomatic norovirus and to notify receiving healthcare facilities or personnel prior to transfer of such patients within or between facilities. (Category II)
Indirect Patient Care Staff - Food Handlers in Healthcare					
14	Review change to Cat IC from IB in keeping with the 2009 FDA Food Code	1.C.3.a To prevent food-related outbreaks of norovirus gastroenteritis in healthcare settings, food handlers should perform hand hygiene prior to contact with or the preparation of food items and beverages.		Changed language and Category to IC to reflect FDA Food Code	1.C.3.a To prevent food-related outbreaks of norovirus gastroenteritis in healthcare settings, food handlers must perform hand hygiene prior to contact with or the

		(Category IB) (Key Question 1C)			preparation of food items and beverages. (Category IC) (Key Question 1C)
15	Minor changes to wording for clarity and to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	1.C.3.b Personnel who prepare or distribute food or work in the vicinity of food should be excused from work if they develop symptoms of acute gastroenteritis consistent with norovirus infection. Personnel should not return to these activities until a minimum of 48 hours after the resolution of symptoms or longer as required by local health regulations. (Category IB) (Key Question 1C)	Food handlers "must be excluded", remove "consistent with norovirus infection"; should this be a Cat IB? (regulation)	The 2009 FDA Food Code specifies that food employees with norovirus be excluded from work for 48hrs from the time they were became asymptomatic. Changed to a Category IC to reflect this regulation (http://www.fda.gov/Food/FoodSafety/Regulatory/RegulatoryInformation/2009/ucm181242.htm)	1.C.3.b Personnel who prepare or distribute food or work in the vicinity of food must be excluded from duty if they develop symptoms of acute gastroenteritis. Personnel should not return to these activities until a minimum of 48 hours after the resolution of symptoms or longer as required by local health regulations. (Category IC) (Key Question 1C)
16	Minor changes to wording for clarity and to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.B.2 All shared food items for patients or staff should be removed from clinical areas for the duration of the outbreak. (Category IB) (Key Question 3B)	Recommend providing some example of this or define shared food items.	No change. Potentially any expose food can become a reservoir for norovirus during an outbreak. The emphasis is on the "shared" nature of the food versus the actual food source or individual patient meals in an effort to prevent further transmission.	3.B.2 Remove all shared or communal food items for patients or staff from clinical areas for the duration of the outbreak. (Category IB) (Key Question 3B)

Diagnostics

17	Minor changes to wording for clarity and to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	1.C.1 Develop and institute facility policies to enable rapid clinical and virological confirmation of suspected cases of symptomatic norovirus infection and promptly implement control measures to reduce the magnitude of outbreaks in a healthcare facility (Category II) (Key Question 1C)			1.C.1 Consider the development and adoption of facility policies to enable rapid clinical and virological confirmation of suspected cases of symptomatic norovirus infection while implementing control measures to reduce the magnitude of a potential norovirus outbreak (Category II) (Key Question 1C)
18	Minor change to wording for consistency with Category of evidence	2.C Facilities should follow up-to-date and local laboratory protocols for testing clinical specimens for suspected cases of viral gastroenteritis. Refer to the Centers for Disease Control and Prevention (CDC) for the most current recommendations for norovirus diagnostic testing (http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus-factsheet.htm). (Category IB) (Key Question 2C)		Changed language of the recommendation to reflect the strength of the evidence	2.C Use effective protocols for laboratory testing suspected cases of viral gastroenteritis (e.g., refer to the Centers for Disease Control and Prevention (CDC)'s most current recommendations for norovirus diagnostic testing at http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus-factsheet.htm). (Category IB) (Key Question 2C)

Personal Protective Equipment

19	Review modification to exclude visitors from specific reference to needing to wear PPE	1.C.4 If norovirus infection is suspected, healthcare personnel and visitors should wear PPE to reduce the likelihood of exposure to, or contamination by vomitus or fecal material when caring for patients with symptoms of norovirus infection. Gloves and gowns are recommended for the care of patients on Contact Precautions and according to Standard Precautions for any contact with body fluids, non-intact skin, or contaminated surfaces. (Cat. IB)	Recommend adopting statement 1.C.4 with elimination of the reference to visitors. Concerns about ability of visitors to use PPE correctly and improper usage could contribute to transmission. Also specific recommendation may vary by facility, unit, or situation (e.g., norovirus patient with TB). Also limited evidence for visitors.	Change made to be consistent with 2007 Isolation guideline. "Family members or visitors who are providing care or having very close patient contact (e.g., feeding, holding) may have contact with other patients and could contribute to transmission if barrier precautions are not used correctly. Specific recommendations may vary by facility or by unit and should be determined by the level of interaction."	1.C.4 If norovirus infection is suspected, individuals entering the patient care area are recommended to wear PPE according to Contact and Standard Precautions (i.e., gowns and gloves, and among vomiting patients, face masks) to reduce the likelihood of exposure to infectious vomitus or fecal material. (Category IB) (Key Question 1C)
20	Minor change to wording to include "anticipated" risk	3.C.2.a Use a surgical or procedure mask, and eye protection if there is an anticipated risk of splashes to the face during the care of patients, particularly among those who are vomiting. (Category IB) (Key Question 3C)	Suggestion to use of Droplet precautions (vs contact): Use droplet precautions with a face mask with a shield at all times within 3-6 feet of the patient. Routine Contact Precautions seem unreasonable except as stated in the recommendations for an outbreak/cluster situation.	No evidence to suggest that routine use of droplet precautions demonstrate additional protections from norovirus. Contact Precautions + Standard Precautions (use of mask when prudent) are sufficient to prevent transmission	3.C.2.a Use a surgical or procedure mask, and eye protection if there is an anticipated risk of splashes to the face during the care of patients, particularly among those who are vomiting. (Category IB) (Key Question 3C)

21	Proposed combining with 1.C.4 and removal of 3.C.2.b	3.C.2.b Clinical and environmental services staff, as well as visitors, should wear gloves and gowns when entering areas under isolation or cohorting. (Cat. IB)	Recommend clarifying this – actual patient rooms or otherwise define what is meant by “areas under isolation or cohorting”	Changed language to distinguish between isolation rooms and cohorted regions; also broadened environmental services to all personnel	Collapsed with recommendation 1.C.4 (redundant)
22	Proposed consideration; not associated with any key question;		Consider included universal gloving for norovirus outbreaks	No direct evidence for norovirus. Could include as no recommendation.	Consider the implementation of Universal Gloving (e.g., routine use of gloves for all patient care) during norovirus outbreaks. (No recommendation/unresolved issue)

Environmental Cleaning

23	Review minor wording change	<p>3.B.1 Perform routine cleaning and disinfection of frequently touched environmental surfaces and equipment in isolation and cohorted areas, as well as high traffic clinical areas. Cleaning should include, but is not limited to, commodes, toilets, hand/bedrailing, faucets, telephones, door handles, computer equipment, and kitchen preparation surfaces. Staff should adhere to established healthcare facility policies, which guide effective cleaning and disinfection of patient equipment using EPA-registered cleaning and disinfecting agents with activity against norovirus or norovirus surrogates (http://www.epa.gov/oppad001/ist_g_norovirus.pdf).</p> <p>(Category IB) (Key Question 3B)</p>		<p>Removed the last statement in the recommendation as it is redundant</p> <p>3.C.12.a</p>	<p>3.B.1 Perform routine cleaning and disinfection of frequently touched environmental surfaces and equipment in isolation and cohorted areas, as well as high traffic clinical areas. High touch surfaces may include, but is not limited to, commodes, toilets, hand/bedrailing, faucets, telephones, door handles, computer equipment, and kitchen preparation surfaces. (Category IB) (Key Question 3B)</p>
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24	Review recommendation, propose split into 2 recommendations to reflect best practice (IB) and regulatory (IC) statements	3.C.12.a Clean and disinfect shared equipment with an appropriate EPA-registered product between patient uses, and follow the manufacturer's recommendations for contact times and application. Consider using a chlorine-based agent like sodium hypochlorite, but other agents like hydrogen peroxide, citric acid, quaternary ammonium, and chlorine dioxide products have also been approved. The EPA lists registered products with activity against norovirus on their website (http://www.epa.gov/oppad001/ist_g_norovirus.pdf). Ensure that EPA-labeled products are approved for use in healthcare settings. (Category IB) (Key Question 3C)		Split recommendation to reflect 2 actions: cleaning and disinfection of shared equipment, and adherence to EPA and manufacturer's guidance as part of the cleaning and disinfection process (regulatory)	3.C.12.a Clean and disinfect shared equipment with an appropriate EPA-registered product between patient uses. (Category IB) (Key Question 3C)
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25	Proposed new recommendation originally part of 3.C.12.a, inclusion of sterilants (e.g., vapor phase sterilant products) approved by EPA		Expand to include EPA registered sterilants on EPA approved products list A. Pointing the user to only those products that are registered as disinfectants may inadvertently exclude a number of products that have value in sterilizing surfaces and equipment	Addressed in new recommendation 3.C.12.a.1	3.C.12.a.1 Follow the manufacturer's recommendations for contact times and application. The EPA lists registered disinfectant as well as sterilant products with activity against norovirus on their website (http://www.epa.gov/oppad001/chemregindex.htm). Ensure that EPA-labeled products are approved for use in healthcare settings. (Category IC) (Key Question 3C)
26	Review minor wording change	3.C.12.b.1 Increase the frequency of cleaning and disinfection of patient care areas and frequently touched surfaces during outbreaks of norovirus gastroenteritis. Unit level cleaning may be increased up to twice daily, with frequently touched surfaces cleaned and disinfected up to three times daily using EPA-approved products for healthcare settings. (Category IB) (Key Question 3C)	Consider increasing frequency of cleaning (no specification of freq), and increase to maintain cleanliness	Would like to reflect the interventions cited in the literature review (eg. 2 and 3 times the typical frequency)	3.C.12.b.1 Increase the frequency of cleaning and disinfection of patient care areas and frequently touched surfaces during outbreaks of norovirus gastroenteritis (e.g., increase unit level cleaning up to twice daily to maintain cleanliness, with frequently touched surfaces cleaned and disinfected up to three times daily using EPA-approved products for healthcare settings). (Category IB) (Key Question 3C)

27	Review minor wording change	3.C.12.c.1 Discard disposable patient-care items from patient rooms after patients on isolation for norovirus gastroenteritis are discharged or transferred to a healthcare facility. Unused linens remaining in a patient room should be laundered before use on another patient. (Cat. II)	Please clarify whether this refers only to linen that is not packaged or is free linen that has possibly been contaminated by staff when obtaining laundry or bedding materials previously. Also add here, or in a separate statement, examples beyond laundry: "Consider discarding other items that cannot be appropriately cleaned such as....."	This recommendation refers to all linens and all disposable patient care items, regardless of package integrity. Made minor amendment to recommendation, sentence #2	3.C.12.c.1 Consider discarding all disposable patient-care items from patient rooms after patients on isolation for norovirus gastroenteritis are discharged or transferred. All unused linens remaining in a patient room should be laundered prior to use on another patient. (Category II)
28	Proposed split of recommendation.	3.C.12.c.2 No additional provisions for the use of disposable patient service items such as utensils or dishware are required for patients with symptoms of norovirus infection. Silverware and dishware may undergo normal processing and cleaning using standard procedures. Staff handling soiled patient-service items should use Standard Precautions. (Category II) (Key Question 3C)		Removed "Staff handling soiled patient-service items should use Standard Precautions" and made a separate recommendation 3.C.12.c.3	3.C.12.c.2 No additional provisions for using disposable patient service items such as utensils or dishware are suggested for patients with symptoms of norovirus infection. Silverware and dishware may undergo normal processing and cleaning using standard procedures. (Category II) (Key Question 3C) NEW 3.C.12.c.3 Use Standard Precautions for handling soiled patient-service items or linens which includes the appropriate use of PPE (Category IB) Key Question 3C)

29	Proposed wording change.	3.C.12.d.2 Steam cleaning of upholstered furniture present in patient rooms is suggested upon discharge. Consider discarding items that cannot be appropriately cleaned. (Category II)	This is a Category II recommendation, and the citation (Johnson CP, 2007) does not provide information regarding why cleaning and disinfection was ineffective, nor does it provide examples of items that couldn't be cleaned beyond furniture. Recommendation to categorize as no recommendation and needing research and not as a Cat. II.	There is a need to better define porous surfaces incompatible with standard cleaning and disinfection. Increasing the understanding of environmental cleaning and disinfectant agents are included in the Recs for Further Research	3.C.12.d.2 Steam cleaning of upholstered furniture present in patient rooms is suggested upon discharge. Consult with manufacturer's recommendations for cleaning and disinfection of these items or consider discarding items that cannot be appropriately cleaned/disinfected. (Category II) (Key Question 3C)
30	Minor change to text to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.C.12.d.3 Change privacy curtains when they are visibly soiled and upon patient discharge or transfer. (Category II) (Key Question 3C)	Please clarify this recommendation for changing the curtains 'when the patient is discharged or transferred'. Is this meant to be implemented in an outbreak situation or anytime a norovirus patient is present in the healthcare setting?	This recommendation should be applied to all patient care, but this guideline is specific to the care of patients with norovirus (cases and outbreaks); minor changes to wording	3.C.12.d.3 During outbreaks, consider changing privacy curtains routinely and upon patient discharge or transfer. (Category II) (Key Question 3C)
31	Minor change to text to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.C.12.d.4 Handle soiled linens carefully, without agitating them, to avoid dispersal of virus. Wear appropriate PPE, such as gloves, to minimize the likelihood of personal contamination. (Category IB) (Key Question 3C)	Why IB? Could this be a II?; suggest use of both gloves and gowns (vs. just gloves)	This recommendation was supported by literature as well as Standard Precautions where a risk of contamination informs prudent use of PPE	3.C.12.d.4 Handle soiled linens carefully, without agitating them, to avoid dispersal of virus. Use Standard Precautions which include the use of appropriate PPE (e.g., gloves and gowns) to minimize the likelihood of personal contamination.

					(Category IB) (Key Question 3C)
32	Minor change to wording; redundant language in 3.C.12.d.4 which was removed here (re: use of Std Precautions)	.3.C.12.d.4 Handle soiled linens carefully, without agitating them, to avoid dispersal of virus. Wear appropriate PPE, such as gloves, to minimize the likelihood of personal contamination. (Category IB) (Key Question 3C) and 3.C.12.d.5 No additional provisions, such as the practice of double bagging, incineration, or modifications for laundering are recommended for linen. Staff handling soiled linens should adhere to Standard Precautions. (Category II) (Key Question 3C)	Merge recommendations	The recommendations 3.C.12.d.4 and d.5 differ in their strength of the evidence; made amendments to the strength of the wording and removed the statement of how linens should be handled	3.C.12.d.5 No additional provisions, such as the practice of double bagging, incineration, or modifications for laundering are suggested when handling or processing linen. (Category II) (Key Question 3C)
33	Proposed change from Cat IB to Cat IC recommendation	3.C.12.e.1 Clean surfaces and patient equipment prior to the application of a disinfectant. Presence of residual organic and protein loads on surfaces reduces the overall effectiveness of disinfectants. Follow manufacturer's recommendations for optimal disinfectant dilution, application, and surface contact time. (Category IB) (Key Question 3C)	Should be IC not IB; remove "presence of residual organic"	Made amendments as suggested and added in an EPA statement to support the IC recommendation	3.C.12.e.1 Clean surfaces and patient equipment prior to the application of a disinfectant. Follow the manufacturer's recommendations for optimal disinfectant dilution, application, and surface contact time with an EPA-approved product with claims against norovirus. (Category IC) (Key Question 3C)

Staff Leave and Policy

34	Review proposed recommendation split 3.C.3.a and 3.C.3.b; changes to recommendation wording to for consistency among categories (e.g., cat I vs cat II)	3.C.3 Facilities should develop and adhere to sick leave policies for healthcare personnel symptomatic with norovirus infection. Ill staff members should be excluded from work for a minimum of 48 hours after the resolution of symptoms. Once staff return to work, adherence to hand hygiene must be maintained. (Category IB) (Key Question 3C)	Recommend stating that adherence to hand hygiene must be monitored to assure compliance. Change staff to personnel, highlight the importance of HH must be reinforced	This suggestion was not made in any of the research we evaluated, nor mentioned as a feasible option that was directly related to secondary transmission of norovirus; separated this recommendation into 2. Made amendments as suggested but without a process for reinforcing HH behavior wording was altered to say "strict" adherence be followed (but not monitored)	3.C.3 Develop and adhere to sick leave policies for healthcare personnel symptomatic with norovirus infection. (Category IB) (Key Question 3C) NEW 3.C.3.a Exclude ill personnel from work for a minimum of 48 hours after the resolution of symptoms. Once personnel return to work, strict adherence to hand hygiene must be maintained. (Category IB) (Key Question 3C)
35	Minor clarification added to defining patient cohorts	3.C.5.a Establish protocols for staff cohorting in the event of an outbreak of norovirus gastroenteritis, where staff care for one patient cohort on their ward and do not move between patient cohorts.(Cat. IB)	Clarify whether the staff cohorting is limited to the shift worked or to the entire length of the outbreak.	This suggestion cannot be fixed to a single interpretation of staff cohorting since it will also depend on numerous other factors such as census, discharges, ward closures, and patient acuity. The studies we evaluated did not	3.C.5.a Establish protocols for staff cohorting in the event of an outbreak of norovirus gastroenteritis. Ensure staff care for one patient cohort on their ward and do not move between patient cohorts (e.g., patient cohorts may include symptomatic, asymptomatic exposed, or asymptomatic unexposed patient groups).

				describe this level of detail, but presumably staff cohorting would be on a shift-by-shift basis.	(Category IB)(Key Question 3C)
Visitors					
36	Minor change to text to ensure consistency of wording of recommendations within a Category (e.g., I vs II)	3.C.7.a Visitor policies should be established for acute gastroenteritis (e.g., norovirus) outbreaks. (Category IB) (Key Question 3C)		Changed language in recommendation to reflect Cat IB	3.C.7.a Establish visitor policies for acute gastroenteritis (e.g., norovirus) outbreaks. (Category IB) (Key Question 3C)

37	Review proposed recommendation split from 3.C.7.b to include 3.C.7.b.1	<p>3.C.7.b Restrict non-essential visitors from affected areas during outbreaks of norovirus gastroenteritis. For those facilities that proceed with continued visitor privileges, screening visitors for symptoms consistent with norovirus infection is encouraged. (Category IB) (Key Question 3C)</p>	Concerns about visitor policy and defining what is non-essential. Consider defining non-essential.	No significant change to the recommendation. Split recommendation from 3.C.7.b for clarity. While the evidence was very low quality (descriptive) and was one strategy of many implemented during outbreaks of norovirus, we know this infection can spread very easily and often originates in the community. Therefore, importation of norovirus from community through visitors is possible. There is no definition for non-essential vs essential visitor. This was done deliberately to allow for flexibility depending on specific care settings (e.g. pediatrics, BMT) and situations (e.g., end of life).	<p>3.C.7.b Restrict non-essential visitors from affected areas during outbreaks of norovirus gastroenteritis. (Category IB) (Key Question 3C)</p> <p>3.C.7.b.1 For those facilities where it is necessary to have continued visitor privileges, screen and exclude visitors with symptoms consistent with norovirus infection and those unable to comply with Contact Precautions. (Category IB) (Key Question 3C)</p>
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Education					
38	Review minor wording change	3.C.8.a Healthcare facilities should provide education to staff, patients, and visitors about symptoms preventing infection, and modes of transmission of norovirus at the start of and throughout the duration of an outbreak. (Category IB) (Key Question 3C)		Changed wording to reflect strength of recommendation; clarified the use of outbreak to norovirus outbreaks	3.C.8.a Provide education to staff, patients, and visitors about symptoms preventing infection, and modes of transmission of norovirus at the start of and throughout the duration of a norovirus gastroenteritis outbreak. (Category IB) (Key Question 3C)
Communication and Notification					
39	Minor change to wording	3.C.9.b Notify appropriate local and state health departments, as required by state and local public health regulations, if an outbreak of norovirus gastroenteritis is suspected. (Category IC) (Key Question 3C)	remove "norovirus gastroenteritis"	As this guideline is specific to norovirus, the pathogen name was retained in order to focus the need to report norovirus outbreaks specifically	3.C.9.b As with all outbreaks, notify appropriate local and state health departments, as required by state and local public health regulations, if an outbreak of norovirus gastroenteritis is suspected. (Category IC) (Key Question 3C)
40	Major change: addressing the notification of patients/visitors; expert consensus not linked to a key question	NEW recommendation	For essential visitors, inform of outbreak	This comment is most useful under the communication section of the recommendations; evidence does specify that personnel be updated and notified of outbreak activities	New: 3.C.10.a Provide timely communication to personnel and visitors when an outbreak of norovirus gastroenteritis is identified and outline what policies and provisions need to be followed to prevent further transmission (Category IB)