

2023 Changes to the Invasive Group A Streptococcus (iGAS) Toolkit

Document Name	2018 version (archived)	2023 version (current)
Updated GAS Antibiotic Recommendations for Decolonization	<ul style="list-style-type: none"> • Susceptibility wording not included • Benzathine Penicillin + Rifampin described together based on weight • Benzathine Penicillin dose for patients ≥ 27 kg lacked clarity (1 vs 2 doses) • First generation cephalosporin dosage listed as 500 mg PO twice daily for 10 days • GAS antibiotic resistance data not included • No contact information provided for BOE contact with the decolonization of pregnant or lactating women footnote 	<ul style="list-style-type: none"> • Wording added to indicate that GAS is universally susceptible to beta-lactam antibiotics • Benzathine Penicillin + Rifampin described separately to clarify that Rifampin dose is not based upon patient weight • Wording added to clarify that Benzathine Penicillin is given in a single dose, regardless of patient weight • First generation cephalosporin dosage changed to 25-50 mg/kg/day (maximum daily dose 1000 mg/day) in 2-4 divided doses for 10 days • Wording added to include antibiotic resistance data from 2020 • Added BOE main number in the decolonization of pregnant or lactating women footnote • Added CDC LTCF toolkit reference
Transmission-based Precautions for Group A Streptococcal infection in Long-term Care Facilities	<ul style="list-style-type: none"> • Titled “Transmission-based Precautions for Group A Streptococcal infection in Long-term Care Facilities” • Wording about enhanced barrier precautions not included • No differentiation between infection and asymptomatic colonization • Standard precautions for wounds that can be contained by dressings • Precautions for wounds without dressing end after 24 hours of antimicrobial therapy 	<ul style="list-style-type: none"> • Titled “Transmission-based Precautions for Residents in Long-term Care Facilities with Group A Streptococcal (GAS) Infection or Colonization” • Wording added to clarify use of enhanced barrier precautions • Separated into 2 sections; one for infections and one for asymptomatic colonization with PPE recommendations based on infection site or specimen source respectively • Contact, standard, and droplet precautions for wound, burn, skin infections and wound, ostomy, device-insertion site specimen sources • Precautions for wounds, burns, skin infections and wound, ostomy, device-insertion site specimen

		sources end after 24 hours of antimicrobial therapy and until any wound drainage stops or can be contained by a dressing.
<p>GAS Investigation Algorithm: Investigation of One Culture-Confirmed Invasive Group A Streptococcus (GAS) Infection</p>	<ul style="list-style-type: none"> • Isolate to be saved at least 3 months in testing lab or shipped to Bureau of Laboratories <p><u>Identification of additional cases</u></p> <ul style="list-style-type: none"> • Monitor residents daily for symptoms of invasive OR noninvasive infection for 3 months from onset of most recent GAS case • No recommendations to culture symptomatic residents, treat positive cultures as clinically indicated, or use transmission-based precautions • No recommendation to exclude healthcare providers (HCP) from workplace until antibiotic administered for ≥ 24 hours <p><u>Identification of potential carriers</u></p> <ul style="list-style-type: none"> • Sites to culture include pharynx, skin lesions & indwelling catheter sites (only if red/signs of infection) <p><u>Infection control</u></p> <ul style="list-style-type: none"> ▪ Only includes recommendations to review hand hygiene, and wound care aseptic technique with facility staff and to encourage facility hand hygiene in-service 	<ul style="list-style-type: none"> • Isolate to be saved at least 4 months in testing lab or shipped to Bureau of Laboratories <p><u>Identification of additional cases</u></p> <ul style="list-style-type: none"> • Monitor residents daily for symptoms of invasive OR noninvasive infection for 4 months from onset of most recent GAS case • Includes recommendations to culture symptomatic residents, treat positive cultures as clinically indicated, and place infected residents on appropriate transmission-based precautions • Includes recommendation to culture-positive HCP from workplace until antibiotic administered for ≥ 24 hours <p><u>Identification of potential carriers</u></p> <ul style="list-style-type: none"> • Sites to culture include pharynx, skin lesions, gastrostomy & nephrostomy sites. Other insertion sites (i.e., tracheostomy) should only be include if red/signs of infection <p><u>Infection control</u></p> <ul style="list-style-type: none"> • Includes recommendation to clean and disinfect environmental surfaces and reusable wound care equipment • Includes recommendation to dedicate multidose medication containers to a single resident whenever possible • Includes recommendations to educate HCP on signs and symptoms of GAS infection and the importance of not working while ill • Includes recommendation to encourage facility to review sick leave policies

<p>GAS Investigation Algorithm: Investigation of Two Culture-Confirmed Cases of GAS Infection</p>	<ul style="list-style-type: none"> • Titled “Investigation of Two Culture-Confirmed Cases of GAS Infection” <p><u>Setting</u></p> <ul style="list-style-type: none"> • Identification of 2 invasive cases OR 1 invasive case + 1 noninvasive case. Does not explicitly state that individuals need to be symptomatic • Symptom onset of 2nd case occurs within 3 months of the first case <p><u>Identification of additional cases</u></p> <ul style="list-style-type: none"> • Monitor residents daily for symptoms of invasive OR noninvasive infections for 3 months from onset of most recent GAS case <p><u>Identification of potential carriers</u></p> <ul style="list-style-type: none"> • Culture all residents, including those beginning treatment ≥ 1 month ago. This wording is not consistent within the algorithm • Does not include recommendation to put colonized patients on transmission-based precautions • Does not include recommendation to consider culturing epi-linked HCP for carriage or recommendation to exclude HCP from workplace until antibiotic administered for 24 hours • Does not include test of cure recommendation • Footnote only includes mention of targeted screening for residents • Sites to culture include pharynx, skin lesions & indwelling catheter sites (only if red/signs of infection) 	<ul style="list-style-type: none"> • Titled “Investigation of Two Culture-Confirmed Symptomatic Cases of GAS Infection” <p><u>Setting*</u></p> <ul style="list-style-type: none"> • Identification of 2 symptomatic GAS infections with at least one invasive infection. Clarifies that new cases are in symptomatic individuals • Symptom onset of 2nd case occurs within 4 months of the first case <p><u>Identification of additional cases</u></p> <ul style="list-style-type: none"> • Monitor residents daily for symptoms of invasive OR noninvasive infections for 4 months from onset of most recent GAS case • Includes recommendation to follow all single case recommendations <p><u>Identification of potential carriers</u></p> <ul style="list-style-type: none"> • Culture all residents, except those on GAS treatment within last 14 days. Wording consistent throughout algorithm • Recommendation to place colonized residents on appropriate transmission-based precautions • Recommendation to consider culturing <i>epi-linked</i> HCP, except those on GAS treatment within last 14 days • Recommendation to exclude HCP from workplace until antibiotic administered for ≥ 24 hours • Includes recommendation to consider culturing epi-linked HCP, except those on GAS treatment within last 14 days • Includes recommendation to exclude HCP from workplace until antibiotic administered for ≥ 24 hours • Includes recommendation to re-culture GAS carriers 7-10 days after finishing treatment • Footnote includes mention of targeted screening for staff and/or epi-linked healthcare providers • Sites to culture include pharynx, skin lesions, gastrostomy & nephrostomy sites. Other insertion
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		sites (i.e., tracheostomy) should only be include if red/signs of infection
	<u>Infection control</u> <ul style="list-style-type: none"> Only includes recommendation to review hand hygiene, wound care, and respiratory care practices 	<u>Infection control</u> <ul style="list-style-type: none"> Includes recommendation to review and audit hand hygiene, wound care, and respiratory care practices
GAS Investigation Algorithm: Investigation of Three or More Culture-Confirmed Cases of GAS Infection	<ul style="list-style-type: none"> Titled “Investigation of Three or More Culture-Confirmed Cases of GAS Infection” <u>Setting</u> <ul style="list-style-type: none"> Identification of ≥3 invasive cases OR 2 invasive cases + 1 noninvasive case. Does not explicitly state that individuals need to be symptomatic Symptom onset of 3rd case occurs within 3 months of the first case <u>Identification of additional cases</u> <ul style="list-style-type: none"> Monitor residents daily for symptoms of invasive OR noninvasive infection for 3 months from onset of most recent GAS case <u>Identification of potential carriers</u> <ul style="list-style-type: none"> Re-culture all residents, treatment ≥14 days prior to identification of most recent case. This wording is not consistent within the algorithm Does not include recommendation to put colonized patients on transmission-based precautions Culture all healthcare workers, including those who completed treatment ≥14 days prior to identification of third case. Recommendation is more conservative Does not include footnote for healthcare worker screening Does not include test of cure recommendation 	<ul style="list-style-type: none"> Titled “Investigation of Three or More Symptomatic Culture-Confirmed Cases of GAS Infection” <u>Setting*</u> <ul style="list-style-type: none"> Identification of 3+ symptomatic GAS infections with at least one invasive infection identified. Clarifies that new cases are in symptomatic individuals Symptom onset of 3rd case occurs within 4 months of the first case <u>Identification of additional cases</u> <ul style="list-style-type: none"> Monitor residents daily for symptoms of invasive OR noninvasive infection for 4 months from onset of most recent GAS case <ul style="list-style-type: none"> Includes recommendation to follow all single case recommendations <u>Identification of potential carriers</u> <ul style="list-style-type: none"> Re-culture all residents, except those on GAS treatment within last 14 days. Wording consistent throughout algorithm Recommendation to place colonized residents on appropriate transmission-based precautions Recommendations for healthcare worker screening are less conservative Culture all epi-linked HCP, except those on GAS treatment within last 14 days. Consider culturing all HCP, except those on GAS treatment within last 14 days Includes footnote indicating that healthcare provider screening recommendations are made in consultation with BOE

	<ul style="list-style-type: none"> Sites to culture include pharynx, skin lesions & indwelling catheter sites (only if red/signs of infection) <p><u>Infection control</u></p> <ul style="list-style-type: none"> Includes recommendation to consider restricting visitors Includes recommendation to consider cohorting patients and staff 	<ul style="list-style-type: none"> Includes recommendation to re-culture GAS carriers 7-10 days after finishing treatment Sites to culture include pharynx, skin lesions, gastrostomy & nephrostomy sites. Other insertion sites (i.e., tracheostomy) should only be include if red/signs of infection <p><u>Infection control</u></p> <ul style="list-style-type: none"> Removes recommendation to consider restricting visitors Removes recommendation to consider cohorting patients. Includes recommendation to consider cohorting healthcare providers on affected units/floors
One Case iGAS LTCF Letter Updated		Incorporates all appropriate changes from the single case algorithm references above
Two case letter template FINAL	<ul style="list-style-type: none"> Includes recommendation to implement surgical mask use during all wound care Includes recommendation to improve influenza vaccine coverage 	<p>Incorporates all appropriate changes from the 2 and 3+ case algorithm references above</p> <ul style="list-style-type: none"> Includes recommendation to implement surgical mask use during all wound care activities and when handling invasive medical devices for the duration of the outbreak Includes recommendation to improve influenza and COVID-19 vaccine coverage

*Note: CDC's toolkit includes only resident cases when considering if a facility has 2+ cases of GAS in a 4-month window. PADOH has not implemented this change and will consider cases in residents or staff.