# Supply-Side Action Protocol

**Purpose of Document**

- To clearly communicate to Stakeholder Relations and Supply-Side team members all the actions required to identify and resolve supply-side and stakeholder relations cases.
- To outline those responsible for all the stages of case identification and resolution and the reporting format.
- To delineate the use and maintenance of documentation maintained by the team.

## Supply-Side Team Members

<table>
<thead>
<tr>
<th>Position</th>
<th>Supply-Side Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Relations Director (SRD)</td>
<td>Conducts department-level oversight to ensure that vaccine supply is maintained through quality reporting, data quality management, and stakeholder engagement with internal and external supply-chain officials. Supports the resolution of escalated unresolved cases at the highest level. Responsible for conducting or delegating bi-weekly States Stock Status checks.</td>
</tr>
<tr>
<td>States Partnerships Manager (SPM)</td>
<td>Responsible for ensuring consistent vaccine supply and prompt action for supply-side issue resolutions through ownership and implementation of the Supply-Side Protocol. Operates as the primary supervisor of the Supply-Side Officers and liaises between the Supply-Side team and Stakeholder Relations Unit leadership for information sharing and issue resolution. Attends supply-related meetings at all levels as needed and represents NI-ABAE to external stakeholders for supply-related content. Conducts data quality control checks of supply-side related data, dashboards, and databases. Supports escalation of internal and external issues from within the Supply-Side team for resolution.</td>
</tr>
<tr>
<td>Stakeholder Relations Manager (SRM)</td>
<td>Provides integral Stakeholder Relations Unit support to the SPM in ensuring high-quality program implementation related to vaccine supply. As the supervisor of the SROs, supports escalation and transition of supply-side issues from SSOs to SROs, as well as resolving assigned escalated issues at the appropriate levels. Supports SRD in vaccine supply oversight when assigned.</td>
</tr>
<tr>
<td>Supply-Side Officer (SSO)</td>
<td>Responsible for the enactment of the Supply-Side Action Protocol through diligent data review, transfer to appropriate logs, follow-up, and issue resolution. SSOs maintain relationships and contact information for stakeholders and Field Officers to conduct investigations in stockout and ranout instances. Conducts calls with State Cold Chain Officers (SCCO), and Local Cold Chain Officers (LCCO), and officers in Apex facilities for information gathering regarding vaccine availability and preparedness. Maintains data in logs and records, and conducts weekly tally and transfer of their assigned state’s data into the Week Stockout % tab. SSOs have primary responsibility for case ownership from origination to resolution.</td>
</tr>
</tbody>
</table>
**Stakeholder Relations Officer (SRO)**
Supports supply-side operations through resolution of escalated cases and relationship management with stakeholders. Reports stockout incidents they identify through their work to SSOs for logging and resolution.

## Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</table>
| Stockout              | ‘Stockout’ indicates the lack of presence of an antigen for use at the facility during a disbursement activity. An antigen is tagged as ‘stockout’ when the Field Officer is not able to make any disbursement for administration of that antigen at any point during the session.  
Note 1: ‘Stockout’ as per New Incentives refers to antigen availability at the facility level, regardless of antigen availability at the apex, LGA or other levels.  
Note 2: Stockout of other supplies, such as diluents or syringes, should be referred to as ‘Other’, while antigen stockouts should be tagged by the specific antigen name. A stockout of BCG diluent while BCG antigen is present in the facility is an ‘other’ stockout, not BCG stockout. |
| Runout                | ‘Runout’ occurs when the facility begins the disbursement activity with the antigen present but the available antigen is insufficient to meet the demand of all infants attending the session on that date. |
| Infant Not Served (INS)| ‘INS’ refers to any incident in which a caregiver wished to obtain a disbursement but was turned away. This can be due to many factors: vaccine stockout or runout, infant ineligibility, facility closure, etc.  
Note: In the case of vaccine stockout or runout, the FO should ensure that the stockout or runout is reported, then report the INS in addition, clearly indicating the reason for the majority of INS on that date, and any other information in the comments. |
| False Alarm           | A ‘false alarm’ is any incident in which the stockout, runout, or INS was found to be reported for any reason contrary to the definitions above. |

## Documentation Library

1) Supply-Side Dashboard  
2) Field Manager Check-in Dashboard  
3) VVM and Expiry Review Sheet  
4) Fortnightly call with SCCO and LCCO Log  
5) Fortnightly Call to Apex Clinics Log  
6) Stakeholder Relations & Supply-side Case Log  
7) States Vaccine Stock
**Introduction**

- The supply of vaccines and Child Health Cards (CHC) is key to NI-ABAЕ’s program. In order for a caregiver to receive a conditional cash transfer (CCT), required vaccines must be given and the CHC verified. Therefore, a stable and available supply of vaccines for routine immunization is imperative to NI-ABAЕ’s successful operations.
- Managing and maintaining strong relationships with stakeholders is a key process in community-based public health interventions, and the Stakeholder Relations department endeavors to ensure these relationships are maintained.
- The SRSS team is responsible for minimizing the stockout and runouts of vaccines and CHC through proactive actions and resolution of identified cases. This role requires clear steps on how to identify and deal with these cases.
- This role is also part of the greater stakeholder relations as stakeholders need to be contacted and relationships need to be leveraged to resolve these cases and ensure successful general program implementation.
- **This Supply-Side Action Protocol provides clear steps and delineates responsible persons for the identification and resolution of supply-side cases that affect vaccine supply at NI-ABAЕ affiliated clinics.**
- It also explains the utilization of the following documents and tools:
  - Stakeholder Relations & Supply-Side Case Log
  - Fortnightly call with SCCO and LCCO Log
  - Fortnightly Call to Apex Clinics Log
  - Supply-Side Dashboard with the attached VVM and Expiry Review Sheet
- This document contains both condensed (pg. 3) and expanded (pg. 4) protocol descriptions for ease of review.

### Monthly Task Timeline

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
<th>Person Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the Supply-Side Dashboard</td>
<td>Daily</td>
<td>SSO</td>
</tr>
<tr>
<td>Transfer cases from the Supply-Side Dashboard to</td>
<td>Daily</td>
<td>SSO</td>
</tr>
<tr>
<td>Vaccine Supply Case Log</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compile and distribute daily Supply-Side digest</td>
<td>Daily</td>
<td>SSO (assigned)</td>
</tr>
<tr>
<td>email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review cases and escalate unresolved cases to</td>
<td>Ongoing</td>
<td>SSO</td>
</tr>
<tr>
<td>SROs, SPM, SRM, and SRD according to the escalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>protocol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor unresolved cases and continue resolutions</td>
<td>Ongoing</td>
<td>SSO, SRO</td>
</tr>
<tr>
<td>Compile and distribute weekly Supply-Side digest</td>
<td>Weekly (Monday)</td>
<td>SSO (assigned)</td>
</tr>
<tr>
<td>email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer cases to [Archive] Clinic Level Case Log</td>
<td>Close of Quarter</td>
<td>Program Associate</td>
</tr>
</tbody>
</table>
The Supply-Side Protocol: Condensed

CASE IDENTIFICATION AND MANAGEMENT

1. IDENTIFY CASES: SSOs conduct case identification through daily review of the Supply-Side Dashboard, ongoing communication with stakeholders, and internal communication with NI-ABAE staff
2. TRANSFER CASES: SSOs transfer cases from dashboards to SRSS Case Log on a daily basis, filling in the log completely and fully tagging cases according to their appropriate status
3. INVESTIGATE CASES: SSOs investigate each case of stockout/runout through phone calls placed to NI-ABAE field staff, clinic staff, Cold Chain Officers, or other stakeholders to gather information about the stockout incidents
4. CASE RESOLUTION: SSOs seek to resolve each case fully and completely through the creation and implementation of an action plan, after which the case status of each case is updated
5. CASE ESCALATION: Cases that are the result of issues at elevated vaccine distribution levels, such as Apex, LGA, State, or Zonal, are escalated using the Escalation Protocol in this document (pg. 8)
6. FOLLOW-UP: SSOs retain ownership of unresolved cases and conduct daily follow-up reviews of cases that are unresolved
7. STOCKOUT PREVENTION: The SSO team supports vaccine stability by engaging in stockout prevention efforts. These include denoting clinics or LGAs with frequent stockouts and pre-empting their vaccine needs through contact with the clinic or escalation procedures, as well as conducting frequent calls to LCCO, SCCO, and other stakeholder to ensure stock status is sufficient for their clinics.

DATA QUALITY MANAGEMENT

1. OWNERSHIP: Data in the Clinic Level Case Log and all other Supply-Side documentation is managed and quality-controlled by the States Partnerships Manager
2. CASE RECONCILIATION: On Monday of every calendar week, SSOs tally the content of their state’s cases by antigen, and transfer that data into the Week Stockout % tab
3. DATA AUDIT & ARCHIVING: SPM conducts weekly audits of data in the Clinic Level Case Log, tagging outstanding cases for resolution and ensuring data is clean, organized, and properly formatted
4. DATA TRANSFER: By close of business Friday of every calendar week, the SPM transfers data from the Week Stockout % tab to the YTD ABAE Stockout % tab and calculates the stockout percentage

COMMUNICATION

1. DIGEST EMAILS: The Supply-Side team shares daily and weekly digest emails to relevant internal and external stakeholders with stock status information.

The Supply-Side Protocol, Expanded

CASE IDENTIFICATION AND MANAGEMENT

STEP 1. IDENTIFY CASES:
The Supply-Side team’s primary mandate is to identify cases of stockout at any NI-ABAE affiliated facility. The primary cases of concern are any incident of stockout or runout of vaccines of any type, stockout or runout of CHCs, or an incident in which eligible children were not served by the facility. Further issues of concern are delineated in Appendix B.

Sources of case identification include:

- Review of the Supply-Side Dashboard
- Phone calls to ZCCO, SCCO, LCCO or officers in Apex facility
• Significant cases identified during review of the VVM and Expiry Review Sheet
• Information from other units like audit findings
• Informal or formal conversation during other discussions or meetings (This is adhoc and would be carried out mainly by the SROs, SRM, and SRD)

Note: In general, the content of the Field Check-In Dashboard mirrors that of the Supply-Side Dashboard. Both Dashboards should be reviewed on a regular basis to ensure any outliers are identified.

**STEP 2. TRANSFER CASES:**

Clinic Level Case Logs
After ongoing review is conducted, SSOs transfer the content of their identified cases into the Clinic Level Case Log. This log is the primary database used to maintain stockout records. All cases from the Supply-Side Dashboard are transferred to the Clinic Level Case Log tab.

To transfer from the Supply-Side Dashboard or FM Check-in Dashboard, navigate to page 1 (Vaccine Stockouts & Ranouts) and select your state, LGA, month, and week of interest from the drop-down menu. If you would like to export the files to Excel, select anywhere on the page and right click to download a CSV version. Otherwise, you can work directly in the tool.

Transfer the following information into the log:
• Clinic (e.g. 1234: Clinic Name)
• Date of Event
• Type of Event
• Antigen
• Case Data Source
• Why did this event occur (if known)?
• Current Status of Event
• SSO

The following data will auto-populate based on the name and code of the clinic:
- LGA
- State

Transfer of the data from the case data source into the log constitutes opening a case. Each case should be marked ‘Open’ immediately upon transfer. When data is reported from sources other than the Supply-Side or FM Dashboards, the same procedure is followed. The remaining columns will be filled during the investigation stage.

Fortnightly Call Logs
As team members conduct routine calls to SCCOs, LCCOs, Apex clinics, and other data sources, the content of those calls is recorded in the corresponding logs. Undesirable answers from the Fortnightly call with SCCO and LCCO Log or Fortnightly Call to Apex Clinics Log are transferred to the LGA or apex clinic level case log (3rd tab in the Stakeholder Relations & Supply-side Case Log).

When filling the call logs, an undesirable answer is when a YES answer is obtained for questions about vaccine expiration or a NO answer to questions of enough vaccines or collection of VM1 forms in either the Fortnightly call with SCCO and LCCO Log or Fortnightly Call to Apex Clinics Log.

The relevant logs are:
- Fortnightly call with SCCO and LCCO Log
- Fortnightly Call to Apex Clinics Log
NOTE: Throughout the process of conducting calls, SS team members should ensure diligent documentation of these communications is maintained. SR unit members working in call logs should ensure the call log is open and active as they conduct their calls. All calls should be documented either during the call or shortly after the call is completed. All work in logs should be according to the instructions delineated in the Read.me tabs of each sheet. The content of call logs may be assessed against staff Daily Time Logs to ensure accuracy and prompt reporting.

STEP 3. INVESTIGATE CASES:
Case investigation is conducted by SSOs to follow up on each identified case in the Clinic Level Case Log, identify its root cause, and identify initial steps forward toward resolution. Investigations generally take the following steps:
- Clinic-level cases: SSO contacts the FO for information on the stockout on the date in question. In case additional information or corroboration is needed, SSO follows up with the FM.
  - SSO may also contact members of the clinic’s staff to obtain additional information, corroborate or investigate the FO’s response
- Apex-level cases: SSO contacts the FM, Apex clinic In-Charge, or other relevant contacts
- LGA-level cases: SSO contacts the LCCO, or other relevant contacts
Findings from these calls are promptly recorded in the Clinic Level Case Log or LGA and Apex Clinic Level Case Log.

STEP 4. CASE RESOLUTION:
SSOs hold primary ownership of creating an action plan for the resolution of each assigned case, monitoring the case’s progress, and transitioning it between statuses. Actions towards resolution could include: providing suggestions, advice, reminders, and transportation support provisions during calls and meetings to ABAE staff, clinic staff, officers at the Apex facilities, LCCO, ASCCO, SCCO, ZCCO, or other relevant stakeholders.

Common steps towards resolution are:
- Conducting follow-ups, reminders, or placing subtle pressure on stakeholders across all levels to carry out their responsibilities. This can include utilization and request forms, signing off on distributions, or pulling vaccines down the supply chain.
- Advising and reminding LCCOs to pick up vaccines from the State store
- Providing transportation support to the LCCO to pick up vaccines from the State or Zonal stores
- Request to the LCCO to allocate reserved vaccines to our clinics
- Advising FO or LCCO to retrieve stocked out vaccines from neighboring apex facility, LGA cold store, or State cold store
- FOs cross check the clinic daily record with the clinic daily summary and the vaccine monitoring form (VM1 and VM2) at the health facility to improve supply-side data quality which feeds into the monthly report that the clinic sends to the LGA. This information is then used to fill the vaccine utilization and vaccine request required to receive vaccines from the national level.
- Conduct weekly phone calls to the Apex facility, SCCOs, and LCCOs to identify stockouts at these levels as well as incidents of vaccines that are expiring soon. Also check to see if they have received the monthly report from the health facility to use in filling the vaccine utilization and vaccine request required to receive vaccines from the national level.
- Reminder to the LCCO and SCCO to start this process of developing the vaccine utilization and vaccine request on time and then follow up to ensure early submission. In the past, when we were not reminding and following up with them, delays in vaccine utilization and vaccine request submissions have led to delays in vaccine distribution to our states and widespread stockouts.
• Attend Logistics Working Group Meetings at the State, Zonal, and National levels where supply-side agenda setting, discussion, and decisions are made. This also provides an opportunity to obtain information and address issues that require policy-level decisions.

After investigating and implementing an action plan for each case, report additional information in the Clinic Level Case Log in the subsequent columns:
- Action Taken
- If Resolved, How Do You Know?
- Comment

Then, update the status of the event to the appropriate status. Case status types and procedures are described in the below table.

<table>
<thead>
<tr>
<th>Case Status</th>
<th>Description</th>
<th>SOP</th>
</tr>
</thead>
</table>
| Open                             | Case has been entered into the SRSS Case Log for resolution                 | 1. Denote new case as “Open” immediately after entering the case into SRSS Case Log  
2. Case should remain as “Open” for a maximum of 2 business days, during which appropriate investigation should be done |
| Being Investigated               | Case has been entered into the SRSS Calls or other actions have been taken in regards to this case | 1. Update case status as “Being Investigated” immediately after taking any action on the case  
2. “Being Investigated” cases shall be reviewed frequently and updates made |
| False Alarm                      | Case has been identified through follow-up as an incident in which stockout was falsely reported or there was a technical error resulting in stockout report when in fact no stockout existed | 1. Cases identified through follow-up as False Alarms shall be adjusted to this status and considered as resolved  
2. False Alarm cases should be considered carefully by SSOs against field protocols. Suspicious incidents should be escalated to SRM for further action. |
| Action Taken but Unresolved      | Follow-up calls regarding this case have been made to appropriate team members The case remains a situation in which stockout negatively impacts NI-ABAE programming | 1. Adjust case status to “Action Taken But Unresolved” after an action plan has been created and implemented towards resolving the case  
2. Aging cases (with this case status exceeding 10 days) are reviewed weekly by SPM  
3. Aging cases should have extensive, clear, and concise |
| Pending: Zonal/National Stockout | Case in which an action plan cannot be developed due to large-scale (zonal or national) stockout | 1. After identifying through investigation that this case is part of a large-scale stockout, SSO marks this case for escalation  
2. Staff to whom this case is escalated is notified via escalation procedure (pg. 8)  
3. SSO continues to follow up on this case status and resolves all outstanding incidents once zonal/national level stockout is resolved. |
| Resolved | Case which has been verified that the case is closed and no longer impacts programming  
Verification has been affirmed by an external source | 1. After verification by an external source of resolution, fill column H to validate and add additional information if available.  
2. To confirm that the case no longer impacts programming, the SSO verifies that most (<80%) of infants returned and were immunized. |

**STEP 5. CASE ESCALATION:**

Standard investigations involving stockouts at the clinic-levels are resolved laterally through investigation procedures described in STEP 4. CASE INVESTIGATION, above, via communication to the NI-ABAE Operations team members or clinic staff.

Some situations involving higher-level facilities or resolution failures require escalation. These may be cases in which the clinic is affected by a large-scale stockout, the clinic or Apex staff is unresponsive, there is data mismanagement or fraud, repeated inquiry is not achieving results, or other circumstances resulting in unresolved cases. In such a circumstance, the SSO is responsible for first doing their best to resolve the issue and if needed, then initiating the below Case Escalation Protocols.

Case Escalation Protocol:
1. Tag the case: When a case is identified as requiring escalation, the SSO responsible tags the case in the Clinic Level Case Log under the column, “Escalated To.”
2. Identify the escalation level: SSO should identify the level to which this incident should be escalated based on the below table:

<table>
<thead>
<tr>
<th>Apex Clinics, Main Clinics</th>
<th>SRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td>SRO</td>
</tr>
<tr>
<td>State</td>
<td>SPM</td>
</tr>
</tbody>
</table>
3. Incidents being escalated to SROs are managed by SSOs through the issuance of a task related to the incident. SSOs issue a task via myDay to the SRO assigned to the region with the following information:
   a. Direct link to the stockout incident in the Clinic Level Case Log
   b. Background information on the case and a history of the investigations conducted to date
   c. A suggested action plan
   d. A suggested reconciliation time window

4. Incidents being escalated beyond SROs (SPM, SRD) are managed through the SPM. In these circumstances, SSO shares the incident of concern with the SPM for management. The SPM may choose to pursue a resolution, or it may be further escalated to the SPM or SRD. In the case of upward resolution, SPM issues a task via myDay to the person of interest with the information outlined in step 4.

5. In all circumstances, SSOs conduct ongoing follow-up and review of their unresolved cases on a weekly basis at a minimum. This follow-up must be demonstrable through email, chat, or task communication.

**STEP 6. FOLLOW-UP:**
SSOs conduct daily reviews of the Clinic Level Case Log to identify which of their cases are unresolved and conduct continuous follow-up of these cases. Cases that are resolved can be marked as such using the above table, Case Status Types and Procedures (pg. 6.) As described in the above table, the following timelines apply to cases:
- Open: maximum 3 business days in this status
- Being Investigated: maximum 1 business week in this status

Aging cases must be escalated after one week as 'Action Taken But Unresolved' unless the SSO demonstrates clear evidence that they expect the case to resolve without escalation.

**STEP 7. STOCKOUT PREVENTION:**
SSO Team Steps:
In addition to routine stockout identification and resolution, NI-ABAE has a vested interest in ensuring vaccine supply stability through stockout prevention. SSOs are encouraged to continue the following activities to prevent stockouts as further nationwide vaccine supply structural support is sought:
- **Day-Of Stockout Incidents:** In the event that a clinic has noted impending stockout on distribution day, FOs are encouraged to reach out to SSOs for support. In such a circumstance, SSOs can communicate to Apex clinics for a same-day ‘top-up’ disbursements that RI providers may access.
- **Ongoing Stockout Incidents in High Consumption Facilities:** SSOs are uniquely suited to support LGAs to identify and prevent stockout in high-consumption facilities due to their knowledge of stockout patterns. SSOs can proactively notify and coach LGAs on vaccine allocation strategies to prevent stockout through under-disbursement.

The SSO team continues to seek additional stockout prevention strategies to support the mission of NI-ABAE.

States Vaccine Stock Sheet:
The States Vaccine Stock sheet reports the stock status, estimated consumption and distribution dates of each antigen on a biweekly basis. SPM is responsible for conducting calls (or delegating when appropriate) to relevant stakeholders requesting physical stock counts to confirm actual stock on hand at state-level facilities. The information on stock status is distributed appropriately internally and externally.
DATA QUALITY MANAGEMENT

STEP 1. OWNERSHIP:
The States Partnerships Manager (SPM) has primary ownership of data quality for all documents and tools related to this document, including those in the Document Library section (pg. 2.) The SPM conducts frequent data quality investigations in each sheet to ensure the documents are functioning and being used correctly, formulas are working, there are no data gaps, and formatting is uniform.

Weekly data quality check includes:
- Updating data validation and checking for validation errors

STEP 2. CASE RECONCILIATION
On a weekly basis, cases are reconciled and consolidated from the Clinic Level Case Log to the Week Stockout % tab. To do so, each SSO tallies his or her own cases by consolidating the data from the calendar week (Sunday through Saturday) prior. The data for consolidation is the number of stockout incidents by antigen, broken down by incentivized and non-incentivized. These are reported in the appropriate rows and columns on the Week Stockout %, after which the SPM inputs the number of clinic days for the state for that week. This will return a weekly stockout percentage broken down by incentivized and non-incentivized vaccines, helping to track vaccine status in the state by week and providing valuable data for future reference.

This consolidation is conducted by close of business every Monday for the preceding week. The SPM will review the data weekly for completeness and flag any visible errors or incomplete information for immediate resolution by the relevant SSO.

STEP 3. DATA AUDIT
The SPM conducts a weekly data audit of the Stakeholder Relations & Vaccine Supply Case Log, with a focus on the Clinic Level Case Log. The SPM tags issues for resolution by the SSO responsible.

Data archiving is conducted on a quarterly basis by the SPM. At the end of each quarter, all cases should be transferred from the Clinic Level Case Log to the [Archive Date] Clinic Level Case Log tab. The complete data for the quarter should be transferred as a whole. Unresolved cases should not be transferred, therefore, if there are any unresolved cases from the quarter the quarter’s data cannot be transferred. Archiving is imperative to ensuring the case logs remain usable. Data should be moved very carefully. When moving, double and triple-check to ensure nothing was missed and that all rows were marked resolved before moving them.

STEP 4. DATA TRANSFER TO YTD ABAE STOCKOUT % TAB
The primary tab of the Stakeholder Relations & Vaccine Supply Case Log is the YTD ABAE Stockout % tab. This tab uses the consolidated and reconciled data maintained by SSOs in the Clinic Level Case Log to create a calculation of the primary indicator of interest: the percentage of disbursement days with directly incentivized vaccine stockouts.

On a weekly basis, the SPM will link the percentage of directly incentivized stockout as presented by week and by state (green box) in the Week Stockout tab to the appropriate state and week in the YTD ABAE Stockout % tab. Column D, “ABAE %” calculates an average of the percentage, which should be approximately equivalent to the organization-wide data. The process of detailed consolidation across levels should support the SSO team to maintain high-quality, detailed records despite an abundance of data.