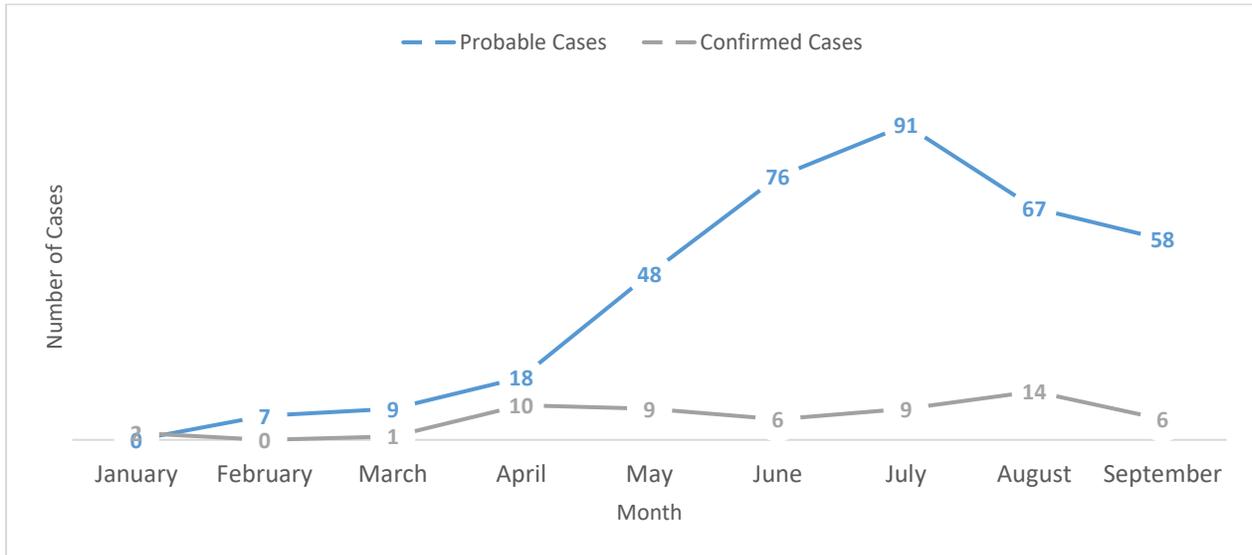


## Human Cutaneous Anthrax cases in the sentinel sites in Bangladesh from January to September 2022: An update of Anthrax surveillance at IEDCR



N:B: The cases that had epidemiological link and one or more symptoms but no sample has been collected for them, are classified as probable case.

The cases that had been confirmed by laboratory test are classified as confirmed cases.

All reported cases are classified as the suspected cases.

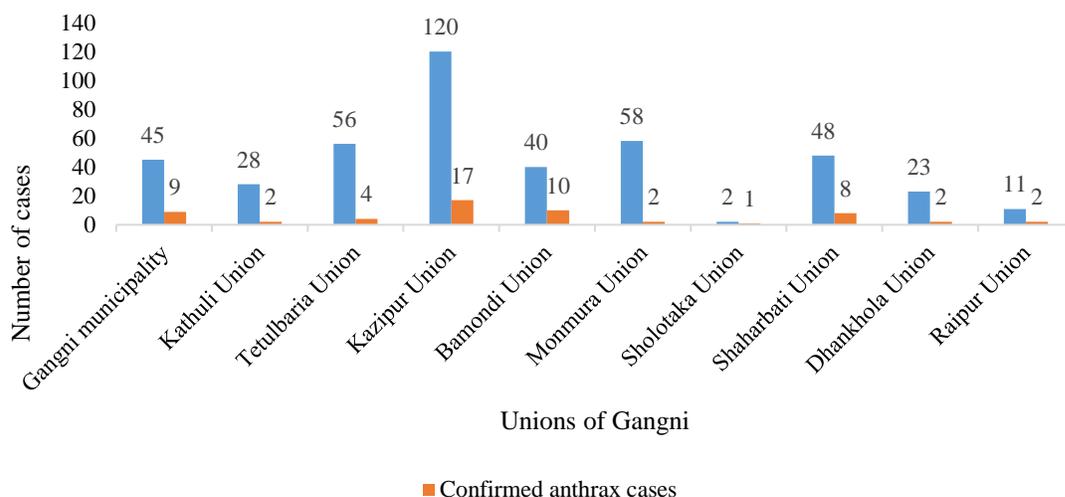
**Fig 1. Distribution of human cutaneous anthrax cases in the sentinel sites in Bangladesh from January to September 2022 by case classification.**

Reported cases of human cutaneous Anthrax steadily increased till July, then started to decrease. Similar trend is visible in the confirmed and probable cases too.

Table 1 shows that, more cases are reported among the female population. More than 50% cases are reported within the 30-59 age group. Monthly expenditure of the cases were mostly between 10,000-15,000 BDT. By occupation, most of the cases has been housewife.

**Table 1. Socio-demographic characteristics of suspected human cutaneous anthrax cases in the sentinel site (Gangni Upazilla) of Anthrax surveillance in Bangladesh from January to September 2022**

| <b>Characteristics</b>      | <b>Frequency (%)<br/>(N=431)</b> |
|-----------------------------|----------------------------------|
| <b>Gender</b>               |                                  |
| Male                        | 199 (46.1)                       |
| Female                      | 232 (53.8)                       |
| <b>Age groups</b>           |                                  |
| 0-17                        | 45 (10.4)                        |
| 18-29                       | 85 (19.8)                        |
| 30-39                       | 102 (23.7)                       |
| 40-59                       | 158 (36.7)                       |
| 60+                         | 41 (9.5)                         |
| <b>Monthly Expenditures</b> |                                  |
| >10000                      | 154 (35.8)                       |
| 10,000-15,000               | 256 (59.5)                       |
| >15,000                     | 20 (4.7)                         |
| <b>Occupation</b>           |                                  |
| Housewife                   | 203 (47.1)                       |
| Farmer                      | 111 (25.8)                       |
| Student                     | 50 (11.6)                        |
| Not known                   | 20 (4.6)                         |
| Businessman                 | 18 (4.2)                         |
| Service holder              | 10 (2.3)                         |
| Day Laborer                 | 8 (1.9)                          |
| Butcher                     | 6 (1.4)                          |
| Farm worker                 | 1 (0.2)                          |
| Other                       | 4 (0.9)                          |



**Fig 2. Suspected and confirmed human cutaneous anthrax cases in the sentinel site (Gangni Upazilla) of Anthrax surveillance in Bangladesh from January to September 2022 by union.**

Figure 2 shows that most suspected human cutaneous anthrax has been reported from Kazipara union, almost 25% of all the reported cases.

Table 2 shows that, most of the cases has reported lesions in the fingers (56.6%) and the hands (23%)

**Table 2. Position of lesions of suspected human cutaneous anthrax cases in the sentinel site (Gangni Upazilla) of Anthrax surveillance in Bangladesh from January to September 2022**

| Lesion position       | Frequency (n=431) | Percentage |
|-----------------------|-------------------|------------|
| Finger                | 244               | 56.6       |
| Hand                  | 100               | 23.2       |
| Face                  | 16                | 3.7        |
| Lower arm             | 10                | 2.3        |
| Leg                   | 10                | 2.3        |
| Backside              | 6                 | 1.4        |
| At Upper arm          | 4                 | 0.9        |
| Thigh                 | 3                 | 0.7        |
| Toes                  | 3                 | 0.7        |
| Belly                 | 3                 | 0.7        |
| Foot                  | 2                 | 0.5        |
| Chest                 | 2                 | 0.5        |
| Neck                  | 1                 | 0.2        |
| At two or more places | 17                | 3.9        |
| Missing observations  | 10                | 2.3        |
| <b>Total</b>          | <b>431</b>        | <b>100</b> |

Table 3 shows that, most of the samples could not be collected (374 out of 431). The major reason of failure to collect samples from the lesion was dry wound (87%). That means, there is a major delay between infection and reporting to the surveillance capture site in most of the cases.

**Table 3. Reason of failure to collect samples of lesions of suspected human cutaneous anthrax cases in the sentinel site (Gangni Upazilla) of Anthrax surveillance in Bangladesh from January to September 2022**

| <b>Reasons for failure to collect samples</b> | <b>Frequency (%)<br/>(n=374)</b> |
|---|----------------------------------|
| Dry wound                                     | 324(86.6)                        |
| Did not visit medical center at due time      | 23(6.1)                          |
| No swab                                       | 14 (3.8)                         |
| Medical technologist was absent               | 13 (3.5)                         |
| <b>Total</b>                                  | <b>374</b>                       |